Chapter 12
Professional Development

Contents

Graduate education is designed to prepare students to become independent thinkers and researchers who will serve as the next generation of professional, scholarly, and educational leaders in the global society. As noted in "Best Practices: Core Expectations for Graduate Education at Duke," a successful graduate education encompasses at least four separate components: (1) development of an individual research agenda, (2) preparation for and experience in a variety of teaching roles, (3) opportunities for professional career development, and (4) active participation in a disciplinary or professional community. Faculty advisors provide critical academic training during the students' graduate career and introduce them to a professional society; however, students may or may not be interested in following in the footsteps of their advisors. Today's graduate students can pursue a wide range of employment opportunities–faculty member at a college or university, industry researcher, academic administrator, writer, government adviser, filmmaker, entrepreneur, and high school teacher, for example. While many of our alumni/ae pursue careers in academia, others choose career paths in business, government, and nonprofit institutions.

Professional development should be at the forefront of students' minds at every stage of their graduate careers. All students should seek professional development opportunities that complement their research training and augment their transferable skills. Development opportunities are available to Duke graduate students to advance their competencies in six key areas: teaching and mentoring, communication, leadership, self-awareness, professional adaptability, and professionalism and scholarly integrity. Graduate students who develop a broad range of transferable skills often have greater flexibility as they seek professional employment.

Professional development opportunities available through The Graduate School include one-time events, workshop series, peer-to-peer mentoring, formal coursework, and certificate programs. This variety of offerings is designed to allow students to develop a broad array of transferable skills as well as provide the chance to focus on particular skill sets of interest throughout the three stages of their graduate careers. Professional development opportunities are planned in a two-year cycle to comprehensively address the professional development needs of graduate students at each stage of their graduate career, with topics appropriate to their discipline, across the five major career sectors: academia, business, entrepreneurship, government, and nonprofit.

The Graduate School offers a variety of programs, events, and opportunities to help students achieve their career goals; several of them are highlighted in our professional development video. All Graduate School students participate in Responsible Conduct of Research (RCR) training. We also coordinate courses on college teaching and instructional technology in programs such as the Certificate in College Teaching, the Preparing Future Faculty program, and the Bass Instructional Fellowships as well as offering the Teaching Ideas workshop series. Students interested in preparing for a broad array of professional opportunities can take advantage of the Professional Development Series of one-time workshops as well as the more intensive, competitive-entry Emerging Leaders Institute. Online resources allow students to stay engaged in their professional development no matter their location: the Introduction to LinkedIn for Graduate Students Workshop helps students leverage LinkedIn as a career research tool, and Duke's subscription to Versatile PhD provides a resource for doctoral students exploring career options beyond the faculty path. All students are invited to share their professional development experiences with the wider Duke community through guest posts on the Graduate School's

professional development blog. To complement these offerings, The Graduate School offers a competitive Professional Development Grant to fund discipline-specific programming developed by programs and departments.

The Graduate School also works closely with many other units within and beyond the university—Duke's Career Center, the Office of Postdoctoral Services, the Center for Instructional Technology, the Office of Research Support, and the Council of Graduate Schools—to provide the best professional development resources to its students. The Graduate School staff will notify you about professional development events and resources throughout the year via our newsletter and our website. See the Professional Development section of our website for current events and additional resources.

A. Best Practices: Core Expectations for Graduate Education at Duke University

1. The Graduate Environment: An Overview

The primary mission of graduate education at Duke University is to prepare the next generation of professional, scholarly and educational leaders. In order to fulfill this mission, we seek to instill in each student an understanding of and capacity for scholarship, independent critical judgment, academic rigor, and intellectual honesty. It is the joint responsibility of faculty and graduate students to work together to foster these ends through relationships that encourage freedom of inquiry, demonstrate personal and professional integrity, and foster mutual respect. High quality graduate education depends upon the professional and ethical conduct of both faculty and students. The graduate education to which we are committed, moreover, encompasses at least four separate components: preparation for and experience in a variety of teaching roles, development of an individual research agenda, opportunities for professional career development, and active participation in a disciplinary or professional community. Each party in the graduate process—that is, the faculty, graduate students, the graduate department or program, and the Graduate School as an administrative unit—has particular responsibilities in ensuring the achievement of these primary goals.

2. Graduate Faculty Members/Advisory Committees

Members of the graduate faculty serve a variety of critical roles as model teachers and researchers, as well as graduate student advisors and mentors. These faculty—and the Master's or doctoral committees on which they serve—provide intellectual guidance in support of the scholarly and pedagogical efforts of graduate students, and are responsible for ongoing evaluation of graduate students' performances in academic and research activities. As mentors and advisors, faculty are responsible for assisting graduate students to discover and participate in appropriate channels of scholarly, professional and disciplinary exchange; and for helping students develop the professional research, teaching and networking skills that are required for a variety of career options, both within and outside academia.

3. Graduate Students

Graduate students are responsible for working towards completion of their degree programs in a timely fashion. It is expected that graduate students in all programs will gain expertise in a particular area of study and, especially in Ph.D. programs, seek to expand the knowledge of that disciplinary field by discovering and pursuing a unique topic of scholarly research. As professionals-in-training, graduate students should learn how to impart disciplinary knowledge through appropriate forms of instruction and publication, as well as learn how to apply that knowledge to particular business, industrial and social problems. Where appropriate for their career trajectories, graduate students should seek out and utilize in their own teaching the best pedagogical practices.

4. The Graduate Department/Degree Program

The graduate degree program bears primary responsibility for publicizing specific and accurate guidelines and procedures governing study in the discipline. It should provide all incoming and enrolled students with a clear structure of the expected stages of progress towards the degree(s); it should offer a curriculum and appropriate forms of instruction necessary to ensure timely completion of that degree; and it should provide specific details regarding likely career opportunities for those seeking the degree. The graduate department/program should also provide students with accurate information about the costs they will incur in graduate study and realistic assessments of future prospects for institutional and other forms of financial support. This information should be included in written guidelines that are given to all students in the program. These guidelines should also spell out normal departmental and university processes for dealing with student grievances, as well as processes for assessing students' satisfactory progress towards the degree.

5. The Graduate School

The Graduate School is responsible for general oversight of graduate programs: it must maintain, through periodic review and assessment, the highest standards of quality in all degree programs; it must evaluate graduate curricula to assure that they are equipping students with the knowledge and skills required for a broad array of post-graduate careers; it must provide resources to attract the very best graduate applicants; and it must provide both financial and other mechanisms to ensure that graduate student life is not one of ongoing struggle, isolation and penury. In its efforts, moreover, to ensure quality in all aspects of graduate education, the School should provide clear and appropriate avenues of redress wherever particular faculty or student experiences fall short of the expectations articulated in this document.

In the individual sections below, we have tried, in more itemized fashion, to specify particular expectations we believe appropriate for each component of the graduate community at Duke University. We have organized these expectations loosely under four general categories: graduate research, graduate teaching and/or training, the professional development/progress towards degree of graduate students, and the academic community.

B. Expectations of Graduate Faculty

1. Research
- to provide intellectual guidance and rigor on students' educational programs and specific research projects
- to provide students with knowledge of the current frontiers and opportunities in disciplinary and inter- or cross-disciplinary research
- to provide appropriate guidelines, including expected timetables, for completion of research projects
- to respect students' research interests/goals and to assist students in pursuing/achieving them

2. Teaching/Training
- to encourage and assist students in developing teaching and presentation skills, including course development, lecture preparation, classroom communication, examining and grading
- to provide sound intellectual guidance on disciplinary research methods and the historical knowledge bases of the discipline or the profession
- to evaluate student progress and performance in a timely, regular, and constructive fashion
- to serve, when requested, as an informed academic advisor and a nurturing professional mentor to graduate students in training, and, where appropriate and desirable, in students' post-Ph.D. careers

3. Professional Development/Program Progress
- to encourage student participation in scholarly activities, including conference presentations, publications, professional networking, grant writing, and applying for copyrights and patents
- to prepare students to enter the job market with requisite professional skills, with an appropriate range of professional contacts, and with a realistic view of the current state of that market, both within and outside of the academy
- to assist students, where appropriate, in joining collaborative projects in accordance with the accepted norms of the discipline
- to provide TA's and RA's with meaningful professional experiences
- to avoid assignment of any duty or activity that is outside the graduate student's academic responsibility or harmful to his or her timely completion of the degree

4. Community
- to be fair, impartial and professional in all dealings with graduate students in accordance with university policies governing nondiscrimination, harassment of all sorts, and normative standards of confidentiality
- to create, in the classroom or the laboratory, an ethos of collegiality so that learning takes place within a community of scholars

- to create an environment that openly discusses laboratory or departmental authorship policies and that prizes and acknowledges the individual contributions of all members of a research team in the publications or presentations of its research
- to avoid all situations that could put them or their students in positions of any conflicts of interest

C. Expectations of Graduate Students

1. Research
- to work responsibly toward completion of the degree in a timely fashion
- to learn the research methods and historical knowledge bases of the discipline
- to communicate regularly with faculty mentors and the masters/doctoral committees, especially in matters relating to research and progress within the degree program
- to discover and pursue a unique topic of research in order to participate in the construction of new knowledge in the chosen field and application of that knowledge to new problems/issues
- to exercise the highest integrity in all aspects of their work, especially in the tasks of collecting, analyzing and presenting research data

2. Teaching
- to receive appropriate training, compensation and evaluation for all instructional roles students are asked to take on
- to receive an appropriately sequenced variety of teaching opportunities relevant to their career expectations and likelihoods
- to devote the same seriousness to undergraduate instructional duties that they would expect from their own instructors

3. Professional Development/Program Progress
- to develop, to the extent possible, a broad network of professional relations
- to contribute, wherever possible, to the discourse of the scholarly discipline through conference presentations, publications, collaborative projects, and other means
- to seek out a range of faculty and peer mentors that can help them prepare for a variety of professional and career roles and responsibilities
- to take responsibility for keeping informed of regulations and policies governing their graduate studies and to complete all required paperwork and other degree obligations in a timely fashion

4. Community
- to create, in their own classrooms and laboratories, an ethos of collegiality and collaboration
- to realize their responsibilities as individual and professional representatives of both the university as a whole and the department or program in which they are studying
- to assist graduate student peers in their own professional and scholarly development

D. Expectations of Graduate Departments and Programs

1. Research
- to provide appropriate resources, both faculty and facilities, to allow students to complete their education and research in a timely and productive manner
- to ensure that faculty committees treat all students fairly and assess their work in thoughtful and informative ways consistent with the practice of the field
- to ensure the highest standards of academic quality in all aspects of the graduate program, from admission of new students to the quality of work accepted as fulfilling the requirements of the Master's or Ph.D. degrees

2. Teaching/Training
- to provide pedagogical training appropriate to and regular assessment of the TA assignments given to graduate students
- to provide clear expectations to students on their responsibilities as TA's or R.A.'s
- to provide all students with a thorough description of the requirements and qualifications necessary for academic employment, training, or financial support at the university
- to provide all students with accurate information about the costs they will incur during the course of their graduate study and realistic assessments of future prospects for financial support
- to provide a range of teaching opportunities relevant to likely career prospects
- to provide, where necessary, appropriate mechanisms to help acculturate international students to academic life in this country and at this university
- to ensure that TA's and RA's not doing work directly related to their theses or dissertations are not being asked to perform inappropriate academic chores or to work in service roles more than 19.9 hours per week averaged across the academic year
- to ensure that an appropriate range of introductory and advanced courses are offered at the graduate level for students in all disciplinary subspecialties
- to ensure that degree regulations and procedures, including those pertaining to required course work; qualifying, preliminary, and final examinations; and thesis/dissertation guidelines, are regularly published and made available to all program students and faculty
- to ensure that graduate students receive periodic and constructive assessment of their progress towards degree
- to ensure that all prospective and currently enrolled students are informed of normative time to degree and attrition rates within the program

3. Professional Development/Program Progress
- to provide all students with a range of activities—colloquia, seminar and guest lecture series, workshops, conference presentations, internships—that allow for their own professional development
- to provide constructive annual reports on the satisfactory progress of students towards the degree

- to provide all students with realistic and accurate statistics on placement of program graduates
- to encourage students in assessing career options and in preparing for a variety of job markets

4. Community
- to ensure a collegial learning environment in which faculty and students work together in mutual respect and collaboration
- to ensure appropriate levels of academic support for graduate students and faculty
- to provide specific mechanisms for appeal or complaint when standards of collegiality or fairness may have been violated.

E. Expectations of the Graduate School

1. Research
- to facilitate, where possible, promotion and publication of graduate student research through research grants, conference travel grants, and other centrally administered mechanisms
- to serve as the institutional site of periodic review of all academic units, particularly of the research they conduct and the knowledge they contribute to the discipline
- to facilitate, wherever possible, development of interdisciplinary research and training programs that push the boundaries of current disciplinary fields and agendas
- to develop graduate training programs at both the Master's and the Doctoral levels that best serve the interests of Duke faculty and prospective graduate students

2. Teaching
- to ensure that individual graduate programs offer a curriculum of graduate instruction that is both broad and deep enough to equip students with the knowledge and skills needed for the broad array of postgraduate careers they may wish to pursue
- to ensure that fair and reasonable guidelines are in place to regularize the assignment of graduate teaching and research assistantships
- to ensure that departmental recruitment and admissions policies are consistent with stated university goals of maintaining or improving the quality of graduate programs and increasing student diversity
- to ensure that appropriate mechanisms are in place, both centrally and within individual degree programs, to ensure successful acculturation of international students to academic life in this country and at this university
- to ensure, by tracking comparative data over time, that all aspects of the graduate programs conform to the highest academic standards and to provide mechanisms of redress when they fall below those standards
- to develop financial support systems that will assist students in their progress to a degree and to ensure that this support does not involve more than a minimal amount of work that draws them away from their graduate programs, that is irrelevant to their likely career trajectories, or that does not progress to greater levels of

responsibility and independence.

3. Professional Development
- to develop centralized training such as the Graduate School courses on college teaching, the Certificate in College Teaching, Teaching IDEAS workshops, and the English for International Students program, as well as support related to campus services offered by the Career Center, the Center for Instructional Technology, and the Office of Postdoctoral Services, which enhance the professional, academic, and scholarly interests of graduate students
- to maintain and publicize comprehensive data on student completion rates, time to degree, placement in at least first professional employment, and attrition. The Graduate School should also conduct exit surveys of graduating Master's and Ph.D. recipients to assess the performance of graduate programs and to modify them as warranted.

4. Community
- to maintain a comprehensive description of the goals and expectations of individual graduate programs and to periodically compare these descriptions against graduate program data
- to develop specific avenues for faculty and student appeals of existing policies or regulation, of perceived breaches of institutional standards of fair and reasonable practice, or of violations of honor or ethical codes. These avenues should be published regularly and provided to all graduate students and faculty.

F. Responsible Conduct of Research (RCR)
Responsible Conduct of Research Requirements

Master's degree and Ph.D. degree requirement
GS 705, 710 or 710A, GS711, GS712, GS713

1. Overview of Responsible Conduct of Research (RCR) training
Duke University Graduate School strives to promote responsible research and academic integrity by:
- engaging in strategic planning on RCR education
- providing training on RCR topics
- developing RCR educational resources
- evaluating RCR educational programs, and
- presenting key findings to the scholarly community.

RCR training is a formal academic requirement of the Master's degree or Ph.D. degree in every department and program of study at Duke Graduate School. This reflects our expectation that every graduate student will be well qualified to address the growing ethical challenges that arise when teaching or conducting research. We collaborate with faculty and staff across Duke University and Duke University School of Medicine, with experts from nearby institutions in the Research Triangle, and with national and federal

organizations including the [Council of Graduate Schools](#) and the [U.S. Office of Research Integrity to develop appropriate training](#).

Since the 1990s, Duke Graduate School has been at the forefront of the development of RCR training, and we have expanded RCR training to every Master's and Ph.D. student to ensure that all graduate students (including research master's degree students) who receive funding by federal agencies ([NIH](#), [NSF](#), etc.) are in compliance with federal guidelines and mandates for such training. The RCR training program for graduate students (and postdoctoral fellows as space permits) is designed to meet the requirements of the [America COMPETES Reauthorization Act of 2010](#) (H.R.5116). We work closely with the [Office of Research Support](#) at Duke to ensure that ongoing RCR training efforts fulfill the needs of graduate student researchers and that we provide education on current [RCR policies](#). The Graduate School's RCR program has developed from a modest orientation for certain biological science Ph.D. students to our current structure of face-to-face training offered via four RCR Orientation events for entering Master's degree students as well as Ph.D. students (grouped by academic division).   Beyond the RCR Orientation, Ph.D. students must complete additional two-hour RCR Forum workshops and/or department-specific training.

RCR training at Duke is an opportunity for professional development on a wide range of topics in which graduate students might encounter ethical dilemmas while conducting research or carrying out their responsibilities as a Research Assistant, Teaching Assistant or instructor. Topics range from data collection to authorship, animal care or use to human subjects, and promoting academic integrity in the classroom to mentoring relationships with faculty. We conduct all RCR training face-to-face (rather than using online modules) in order to promote a culture of openness and a dialogue surrounding the micro-ethical actions of an individual researcher, as well as the macro-ethical dimensions or potential downstream consequences of research on human health, society or the environment. The overall goal is to promote ethical decision-making skills, academic integrity, good scholarship, and a culture of open dialogue across the phases of proposing, performing, or presenting and publishing research results. RCR relates not only to the obligation of conducting research and teaching with integrity, but also to ensuring that the rights and interests of original sources, human subjects and/or animal subjects are protected. At Duke, RCR is framed as a positive obligation rather than as the avoidance of "misconduct."

2. Rationale for RCR training

Responsible conduct of research is foundational to the very nature of conducting good research that gains the public trust and contributes to the betterment of humanity and society. Good scholarship relies upon the honesty and integrity of individual researchers and the "community of scholars." Both U.S. federal government (NIH, NSF) and Duke University policies define research misconduct as "fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results." Beyond these clear violations identified as misconduct, recent national studies on the actual behaviors of scholarly researchers have identified "questionable research practices" that have the potential to lead toward misconduct. Graduate students

completing a research degree and preparing for scholarly careers must develop the knowledge and skills required to conduct research according to professional standards and to teach with integrity.

In 1994, the Executive Committee of the Graduate Faculty at Duke took a broad perspective and set a goal that RCR training would become a formal requirement of the Ph.D. degree in every Ph.D. department and program. This goal was met, and the formal requirement began with fall 2003 Ph.D. matriculants. Duke now requires every Ph.D. student to complete RCR training in order to ensure that all graduate students who receive funding by federal agencies (NIH, NSF, NEH, etc.) are in compliance with federal guidelines and mandates for such training. Moreover, the commitment of Duke faculty and administrators to RCR education has helped foster an institutional climate in which the ethical dimensions of research are taken seriously and academic integrity is promoted.

This proactive approach to institutionalize RCR training across Duke University took on more significance in January, 2010, since we had already developed the administrative infrastructure and training programs necessary to ensure that Duke University graduate students will meet the federal requirements of the America COMPETES Reauthorization Act of 2010 (H.R.5116). The Graduate School, with support from our Board of Visitors and Executive Committee of the Graduate Faculty, expanded RCR training as a formal academic requirement of the degree for all entering Master's degree students who matriculated in fall 2013. All entering master's degree students must complete a 4-hour RCR Orientation focused on academic integrity, the Duke Community Standard, avoiding plagiarism by proper citation, and learning about Duke campus resources to help them succeed in their academic programs and research endeavors.

3. RCR Topics and Policies
The Graduate School regularly offers RCR training in 12 core topics, and we continue to offer training in more diverse fields such as the digital humanities. These topics include and go beyond the nine core areas identified by the U. S. Office of Research Integrity (http://ori.dhhs.gov):
   a. Academic integrity and misconduct
   b. Conflict of interest or commitment
   c. Mentor/advisee responsibilities
   d. Harassment prevention and handling complaints
   e. Human subjects
   f. Animal subjects
   g. Data management
   h. Intellectual property
   i. Publication practices
   j. Collaborative research
   k. Fiscal responsibility
   l. Social impact of research

Duke University and/or federal policies on these and other topics are listed on the [Office of Research Support RCR website](#) regarding RCR training for postdoctoral fellows, graduate students and undergraduates who are supported by federal funding (NIH, NSF, etc.).

4. RCR Degree Requirement for Ph.D. Students

Since fall 2003, ALL matriculating Ph.D. students at Duke University are required to complete 12 or 18 hours of RCR training depending on their academic program. To accomplish this, each Ph.D. student must attend ONE of three Fall RCR Orientations (according to academic division, see #6 below) AND should complete six (6) additional RCR training hours for credit within the first three years of his/her program to meet the number of training hours required for the degree. Note that Ph.D. students in the Basic Medical Sciences must also attend a mandatory, follow-up RCR training after they complete Year-3 of their program. The School of Medicine with the Graduate School will offer a summer workshop to fulfill 4 of the 6 hours required beyond the RCR Orientation. This will meet NIH concerns that RCR training be updated approximately every three years during various phases of undergraduate, graduate, or postdoctoral training.

Basic Medical Science Track	18 hours total
Orientation	12 hours
Year-3 Follow up RCR Forum	4 hours
RCR Forum (within year 1-2)	2 hours
Natural Science and Engineering Track	12 hours total
Orientation	6 hours
Forums	6 hours
Humanities and Social Science Track	12 hours total
Orientation	6 hours
Forums	6 hours

NOTE: Medical Scientist Training Program (MSTP) students (combined M.D./Ph.D. degree) who begin their Ph.D program on or after fall 2003 must complete the 18 hour requirement of basic medical science students to include GS710A: Beaufort Retreat, and the Year 3 Follow up training along with one additional RCR Forum.

5. Types of RCR Training Provided

a. GS705: RCR Orientation for Master's degree students

Beginning in Fall 2013, The Graduate School now requires that all entering Master's degree students must complete a four (4) hour RCR Orientation during Orientation week. This training will be led by faculty and staff from Duke University and will focus attention on academic expectations, the Duke Community Standard, resources to ensure proper citation and to avoid plagiarism, and more discipline-specific training in small group breakout sessions. Details about the Fall RCR Orientation for Master's students will be posted on the Graduate School website.

b. S710 or GS710A: RCR Orientation Events
Each Ph.D. student must attend ONE (1) of the Graduate School's mandatory Fall RCR Orientation programs (GS710 or GS710A) as determined by department or program (see departmental list below). The campus programs are similar to an all-day professional conference. The "Beaufort Retreat" or RCR Orientation for basic medical science Ph.D. students is a weekend event (Friday-Sunday) at Duke Marine lab in Beaufort, NC. Students will be contacted via email and requested to pre-register for each RCR Orientation. Students can NOT pre-register in ACES.

c. GS711: RCR Forum events
Beyond the appropriate RCR Orientation, each Ph.D. student should complete six (6) additional hours of RCR training during his or her first three years of study, except for basic medical students who should plan to attend a mandatory Year-3 RCR Training follow up. For most, this requirement can be met by attending three RCR Forum events (2-hour workshops) or a combination of GS711 and GS712 training events. Several GS711 events will be offered each fall and spring on a wide range of topics. The schedule of RCR Forums will be provided at the beginning of each semester. Students are responsible for checking the schedule, pre-registering, and participating in these events to complete their RCR degree requirement. Students must pre-register for RCR Forum events as directed– NOT through ACES.

Note: RCR Orientation is NOT a pre-requisite to attend RCR Forums. In the rare event that an entering Ph.D. student does not attend the RCR Orientation (due to illness, visa delay, etc.), she or he is welcome to participate in the RCR Forum events.

d. GS712: Departmental RCR Forum Events
The Graduate School collaborates with other Duke Schools, departments, campus institutes and centers to promote advanced and/or discipline-specific training in RCR-related issues. While many groups may sponsor events on ethical topics, only events pre-approved by The Graduate School as relevant to research ethics training will qualify for RCR transcript credit. If approved, the Graduate School occasionally can help fund or promote events across relevant departments or programs. If you would like the Graduate School to review any upcoming training plans in order to determine whether official Graduate School RCR credit should be granted, please follow the instructions under the section "RCR--Other Approved Training" on our web site. The faculty of staff leader must submit a one-page form--"Request for GS712 RCR Training Event"--at least two weeks before the event. The Associate Dean and/or Assistant Dean of the Graduate School must grant the approval. See Appendix at the end of this chapter.

e. GS713: Year 3 RCR Training (Ph.D. in Basic Medical Sciences only)
The Graduate School and the School of Medicine will launch a new mandatory, RCR follow-up training event in summer 2014 for Ph.D. students in the Basic Medical Sciences who have completed Year 3 of their program. At this point, many have begun to move beyond course work and are working on their research projects. Given this, their concerns about appropriate research standards and conduct may take more

focus. We will provide a 4-hour RCR training session, likely followed by 4-hour training in career and professional development planning. The GS713 4-hour training will build on the initial "Beaufort Retreat" and count toward the remaining 6 hour RCR training requirement. Thus, each Ph.D. student in the Basic Medical Sciences should attend GS710A: RCR Orientation: Basic Medical Sciences, and GS713: Year 3 RCR Training, and one additional GS711 or GS712 RCR Forum event to fulfill the total 18 hour RCR training requirement.

f. Online RCR Training

The Graduate School and ECGF view RCR training as a valuable component to a comprehensive graduate education, not simply as compliance to basic policies and procedures. While some universities and organizations utilize online modules for RCR training and these are beneficial for basic factual knowledge, we support a more interactive, interpersonal, and interdisciplinary conversation that promotes active learning and higher levels of critical thinking among students, faculty, and other research professionals. While the Graduate School has begun to develop and use online modules as preparation for training events, we think interpersonal contact and open discussion of RCR issues with faculty and staff is a vital component of the professional development of graduate students. The research on effective RCR training supports our approach to offer training events that follow models of active learning and discussion about realistic scenarios that surface in the context of conducting research.

6. RCR Transcript Credit

All RCR training approved by The Graduate School and completed by the graduate student will appear as GS710, GS710A, GS711, GS712, or GS713 on the official university transcript. For every RCR event, the Graduate School requires pre-registration by students. During each event, students are asked to complete and sign a "Request for Transcript Credit" form as an official record of their participation. All forms are collected and processed by the Graduate School who then submits an official list to the University Registrar. RCR credit will appear retroactively in the academic term in which the training was completed. Please allow sufficient time for the Graduate School and Registrar to process credit after each event.

7. Role of the DGS, DGS-Assistant, and/or Department in RCR training

Since RCR training is a formal requirement of the Ph.D. and awarded transcript credit, it is important that each DGS and DGS-Assistant inform new matriculants of this requirement, forward Graduate School announcements, and remind enrolled students to monitor their own progress to complete the 12 or 18 hours.

PeopleSoft Query to Report on Total RCR Training Completed
To determine the number of hours completed, the student or DGS-A can simply add the credits for GS710, GS710A, and GS711 (or GS712 & GS713) on the student transcript (academic history) in ACES or STORM. Also, the Graduate School has created a query

that can be run in PeopleSoft as a summary report for students in your department or program.

<u>Department Representative at RCR Orientation</u>
Each fall, the DGS should identify ONE faculty member (and/or possibly an upper-level graduate student) to serve as co-facilitator(s) to lead a breakout session during the RCR Orientation (campus), or respond to requests from the Basic Medical Science co-directors for the Beaufort Retreat. Student feedback on RCR training indicates that faculty participation is vital to the success of RCR education and that students appreciate the opportunity to discuss such issues with colleagues in their department in a more casual environment than a class or lab setting. The purpose of the breakout sessions is to promote conversations about research ethics in your field of knowledge. Some smaller departments will be grouped together to promote discussion and an effective use of faculty time.

8. **Frequently Asked Questions about RCR**
   a. *What are the requirements for Ph.D. students who began their doctoral studies prior to Fall 2003?*
   [This question has a few answers, depending on your field of study.]

   For MSTP and all basic medical science Ph.D. students:

   To comply with federal guidelines, Ph.D. students who entered Duke prior to Fall 2003 are required to attend the Basic Medical Science Orientation at Beaufort AND beginning with Fall 2011 matriculants they must attend the new, Year-3 RCR Forum event, and one additional RCR Forum prior to graduation. These credits will be posted on their official university transcripts.

   For all other Ph.D. students prior to Fall 2003:

   The Graduate School has NO degree requirements in RCR for students who began their doctoral studies prior to Fall 2003. While such students are welcome to attend RCR Forums (space permitting) and other training events for their professional development, we will not provide transcript credit.

   b. *Can postdoctoral fellows attend RCR training events?*
   The Graduate School plans to open as many RCR Forum training events as possible to postdoctoral fellows; however, given the entering class size for Ph.D. students, we are not able to include postdocs in the RCR Orientation. Begun in fall 2010, the Office of Postdoctoral Services now offers a separate, annual RCR Orientation for postdocs at Duke. In addition, the Trent Center for Bioethics, Humanities, and History of Medicine at Duke offers an annual course that is open to postdocs. The Graduate School and Office of Postdoctoral Services will report postdoc participation in RCR training to the Office of Research Support who will maintain a database of RCR completion for postdocs.

9. Handling or Reporting Misconduct

Any member of the Duke community (student, faculty member, or staff) having reason to believe that a researcher has committed misconduct in research should report the matter, in writing, to the researcher's department or section chairperson, division chief, dean, or the appropriate Misconduct Review Officer (MRO). Allegations addressed to anyone other than a MRO shall be promptly forwarded to the appropriate MRO, who will immediately notify the chancellor for health affairs and the vice chancellor for medical center academic affairs that such an allegation has been made.

10. Misconduct Review Officers

Medical Center
Donna Cookmeyer, Ph.D.
Research Integrity Officer
Hook Plaza, 2424 Erwin Road, Suite 405
DUMC 2712
Durham, NC 27710
919-668-5115
donna.cookmeyer@duke.edu

Non-Medical
Dr. Keith Whitfield, Vice Provost for Academic Affairs
220 Allen Building
919-660-0330
keith.whitfield@duke.edu

11. RCR Training by Academic Department or Program

Basic Medical Sciences
Biochemistry
Biological Chemistry
Cell Biology
Cell and Molecular Biology
Computational Biology and Bioinformatics
Developmental Biology
Genetics and Genomics
Immunology
Integrated Toxicology and Environmental Health
Medical Physics
Medical Scientist Training
Molecular Cancer Biology
Molecular Genetics and Microbiology
Neurobiology
Pathology
Pharmacology
Structural Biology and Biophysics

<u>Natural Sciences and Engineering</u>
Biological and Biologically Inspired Materials
Biology
Biomedical Engineering
Chemistry
Civil and Environmental Engineering
Cognitive Neuroscience
Computer Science
Earth and Ocean Sciences
Ecology
Electrical and Computer Engineering
Environment
Evolutionary Anthropology (formerly BAA)
Marine Science and Conservation
Mathematics
Mechanical Engineering and Materials Science
Physics
Psychology and Neuroscience: (research as Psychological and Brain Sciences)
Statistical Sciences

<u>Humanities and Social Sciences</u>
Art, Art History, and Visual History
Business Administration
Classical Studies
Cultural Anthropology
Economics
English
German Studies
History
Literature
Music
Nursing
Philosophy
Political Science
Psychology and Neuroscience: (research as Social and Health Sciences)
Public Policy
Religion
Romance Studies
Sociology

Note: MSTP students (M.D. /Ph.D.) must participate in RCR Orientation when they officially matriculate in the Ph.D. in year three (normally).

12. Contact for More Information

Dr. Hugh Crumley
Assistant Dean for Academic Affairs
Duke University Graduate School
2127 Campus Drive, Box 90068
Durham, NC 27708
Phone: (919) 660-5975
Fax: (919) 684-2277
Email: grad-rcr@duke.edu
Web Site: www.gradschool.duke.edu/

G. Professional Development of Graduate Teaching Assistants and Instructors

1. Introduction

Duke University Graduate School is committed to the professional development of graduate students as effective college or university teachers. Graduate students may serve as Teaching Assistants (TAs), may teach their own courses while at Duke, and may pursue faculty positions in higher education. We offer relevant training that will prepare graduate students for the realities they will encounter as TAs and/or future faculty – realities such as classroom management, student learning styles, active learning, new expectations of junior faculty, appropriate uses of instructional technology, peer evaluation of teaching, and attention to student learning outcomes in higher education. In addition, we provide resources to assist faculty and departments engaged in direct training and mentoring of graduate student TAs or instructors.

While the primary mentoring of TAs often is handled by individual faculty within a department or program of study, the Graduate School offers various courses, workshops (like the Teaching Ideas series), and programs such as the Certificate in College Teaching https://gradschool.duke.edu/professional-development/programs/certificate-college-teaching (CCT) to supplement this training. In fact, the Preparing Future Faculty (PFF) program provides an opportunity for advanced PhD students to learn about faculty roles and responsibilities across a range of academic institutions by interacting regularly with faculty mentors at our nearby partner institutions (Durham Technical Community College, Elon University, Guilford College, Meredith College, North Carolina Central University). Since the number of PFF Fellows is limited annually, we now offer the CCT program and collaborate with the Career Center and other units to offer similar training and topics to a wider audience at Duke. Moreover, we collaborate with Duke's Center for Instructional Technology (CIT), the Link Teaching and Learning Center, the Thompson Writing Program, the Scholarly Communications Office, the Academic Resource Center, and the Office of Student Conduct (on academic integrity) to promote training on a wide range of topics related to effective teaching in higher education.

Because of the importance of any teaching responsibilities assigned to graduate students at Duke, serious consideration must be given to how we train, develop, and evaluate their teaching. The University expects that all graduate departments and programs--particularly those in Arts and Sciences disciplines—will develop their own training to prepare graduate students for their upcoming teaching roles in the discipline. Although these training programs are likely to have several elements in common, each program should

be tailored to the signature pedagogies of the discipline and to the resources of the department. In addition, departmentally based programs are expected to contribute to the vitality of disciplinary and interdisciplinary units by fostering collegiality and intellectual exchange among faculty, graduate students, and undergraduates. Several department s do offer a formal course on pedagogy in the discipline, and they collaborate with the Graduate School's Certificate in College Teaching Ultimately, the overall pedagogical objectives of graduate programs can be separated into two distinct learning objectives. First, they must prepare graduate students for their specific roles in undergraduate instruction at Duke. Second, they must prepare them to enter subsequent employment as experienced teachers, researchers, or other professionals who are able to present their work more effectively than doctoral recipients from other competitive institutions. Thus, the CCT program requires graduate students to document their teaching skills, experiences, and disciplinary practices and to prepare them to engage with current issues in undergraduate education.

Finally, in order to ensure fairness in financial remuneration, equal demands upon graduate students' time, open communication, adequacy of preparation for instructional roles, and ongoing professional development, the Guidelines and Policies that follow propose broad standards and a common foundation for these departmentally based programs. The Guidelines and Policies address the selection, assignment, training, payment, supervision, and evaluation of teaching assistants. They are intended, in most instances, to be suggestive rather than prescriptive and to raise issues that departmental and program faculty should consider and review annually.

2. **Duke University Guidelines and Policies for the Professional Development of Graduate Teaching Assistants and Instructors**

    a. **Teaching Assistant Responsibilities**
    In numerous departments at Duke, graduate Teaching Assistants (TAs) perform a variety of roles related to teaching that represent different levels of independence and of direct contact with undergraduate students. The designations of these TA assignments may differ among the various graduate programs, and can include serving as laboratory assistants, laboratory directors, graders of essays and examinations, course development assistants, leaders of discussion sections, course instructors, teaching apprentices, and head teaching assistants. Often a single TA assignment will include more than one of these roles. With accompanying training, these roles might properly be understood as constituting an apprenticeship in teaching.

    During the course of their graduate education, TAs should, where possible and appropriate, progress from TA assignments closely supervised by faculty to less closely supervised assignments. We strongly encourage departments to provide graduate students with rationalized and incremental experiences in teaching as they progress through their graduate programs. To the extent possible, departments should make assignments that contribute to the intellectual and professional development of graduate students, not ones that represent menial or highly repetitive tasks. Advanced

students may assume full responsibility for their own courses or, in some programs, for coordinating the activities of beginning TAs.

Each faculty member and/or department should develop and publicize any specialized responsibilities assumed by TAs in their various instructional roles within the departmental curriculum or their individual courses. Where practical, these responsibilities should be communicated either in the annual contract letters provided to graduate TAs or in a separate letter prior to the semester in which they are to be employed.

Whether graduate TAs serve primarily as assistants to a faculty instructor, instructors of their own classes, graders, tutorial leaders, laboratory instructors, or as occasional lecturers or discussion group facilitators, all TAs at Duke University are expected to maintain the highest levels of professional and ethical standards. These standards include, among others, a respect for honest and responsible exchange of intellectual ideas, fair and equal treatment of all students, respect for individual differences, and avoidance of any interactions that could jeopardize the objective assessment of student efforts.

b. Selection and Assignment of TAs

In order to ensure that graduate students are qualified for their roles as TAs, the following minimum guidelines are provided:

1. Only enrolled graduate students who are in good academic standing are eligible for teaching assistantships;
2. Only enrolled graduate students who demonstrate oral proficiency in English are eligible for appointment as a graduate teaching assistant. This proficiency is determined by the Graduate School, as currently the policy, in consultation with individual Directors of Graduate Study and may vary depending upon the requirements of the TA assignment;
3. Only graduate students who have completed one year of academic study in their discipline at Duke and who have completed or are currently taking either a departmentally based or Graduate School training course or program should be given complete instructional responsibility for a free-standing course;
4. First-year graduate TAs are normally expected to work under the supervision of individual faculty, who mentor them in carrying out duties in specific laboratory or lecture courses.

A limited number of exceptions to the second of these guidelines may be required in departments where all first-year students serve as laboratory or other instructional assistants. In such cases, exceptions will be granted on condition that students are enrolled in the appropriate classes of the English for International Students program. Exceptions to the third guideline may also be made in individual cases, particularly where students have entered their graduate programs with outstanding professional experience or commensurate work experience and demonstrated contributions to the teaching discipline presented in lieu of formal academic preparation. In all cases, departments and programs must document all exceptions granted.

Clear procedures for the selection and assignment of graduate students as TAs are essential to prevent misunderstandings about, and inequities in, the allocation of departmental resources to graduate students. Departments should make written guidelines available to their graduate students. To ensure a common understanding of TA responsibilities, departments should offer each TA a contract at the time of assignment that clearly specifies both the expectations of the position the graduate student will fill and the financial remuneration the student will receive. Departments are strongly encouraged to prepare brief descriptions of TA duties for each of their courses in which TAs serve and to make these descriptions available to all graduate students.

c. **TA Training**
Because teaching expertise represents a set of skills and attitudes acquired through training, experience, and critical reflection, preparation for and practice in teaching are at the core of an effective professional development program for graduate TAs. Departments in which students routinely pursue academic careers should provide ongoing training to ensure that their graduate students are adequately prepared for their responsibilities as both TAs at Duke and faculty members elsewhere. This training, ideally, should include a discipline-specific introduction to issues of course design and planning, instructional methods, effective assignment sequencing, and issues of evaluation and grading that is offered either prior to or concurrent with their appointment. Departments that do not already have training programs are encouraged to work with the Graduate School staff in developing them. Graduate TAs also should be encouraged to avail themselves of the [Graduate School courses on college teaching](#) the CCT program and resources offered through Duke's [Center for Instructional Technology](#). Additional resources are available through the Preparing Future Faculty program and the Teaching IDEAS discussion series coordinated by the Graduate School. Graduate students in programs that do not typically lead to careers in the academy also benefit from TA training and instructional experiences. Such activities hone professional abilities to marshal, summarize, and present research and other material in clear and effective form and are therefore highly desirable for students planning careers in business or industry. Departments in this category are thus encouraged to develop training programs and other instructional activities that will provide students with opportunities to sharpen and refine their presentational skills.

d. **Payment of Teaching Assistants**
The Graduate School is committed to provide financial support to all doctoral students in years one through five that is competitive with comparable programs elsewhere. In support of this goal, the Graduate School regularly establishes minimal stipend expectations for departments in the four basic academic divisions of humanities, social sciences, biological sciences, and physical sciences. Graduate students in these divisions who are involved in undergraduate education are paid a fixed per course rate, set by Trinity College, for their instructional services. This amount is supplemented with a graduate fellowship in order for the total stipend to remain at the recommended level during the initial years of graduate study.

Duke University also is committed to ensuring that the professional development of graduate students as teachers is considered as part of their doctoral training, not simply as paid service to the institution. However, departments should carefully avoid overburdening TAs and should bear in mind that graduate students have multiple requirements and responsibilities in completing their degrees. Graduate TAs should not teach more than one course per semester if they are the instructor of record in the course, and various other TA arrangements should not exceed the time investment necessary to teach one course during a semester. We encourage departments to work to create the opportunities necessary for students to gain teaching experience as they complete their degrees.

e. **Supervision and Evaluation**
To enhance the training and teaching experience of graduate students, the departments should—wherever possible—assign graduate TAs a faculty mentor who can provide ongoing guidance during their appointment. In smaller programs, departments might wish a single faculty member to serve as the "teaching mentor" to all graduate students; in others, mentors could either be singly assigned or a subset of the faculty could agree to assume this responsibility. In either case, departments should also develop a procedure for providing feedback to TAs on their teaching. This procedure should include a formal written evaluation by the faculty member responsible for the course, section, or laboratory taught by the TA; direct observation of the TA in the classroom or lab; and follow-up consultations with the TA. A teacher course evaluation instrument—whether the one currently used by the undergraduate college or one devised by the department—should be completed by undergraduate students to evaluate their TA's performance in lecture, laboratory, or discussion sections. As an institutional resource, the Center for Instructional Technology, Graduate School staff, or Trinity College Office of Assessment can assist departments in developing assessment instruments and, to the extent possible or necessary, in providing training for faculty members supervising TAs.

f. **Recognition and "Certificate in Teaching" Programs**
Duke University has a number of teaching awards that recognize graduate TAs for their performance in the classroom. Each year, the Graduate School awards up to three recipients for the Dean's Award for Excellence in Teaching. Departments are encouraged to develop additional ways of rewarding TAs for their outstanding teaching contributions. Additionally, the Graduate School has developed a new Certificate in College Teaching program which has integrated prior departmental-level certificate programs in college teaching such as the former Certificate in Teaching College Biology.

g. **Monitoring Departmental Programs**
Each department or program will provide the Dean of the Graduate School with a copy of its current procedures for the professional development of graduate TAs. In addition, as part of their annual "budget requests" departments are expected to report not only on the anticipated levels of instructional and financial need for the budget

year, but also on any changes in how TAs are trained, assigned, and assessed. The Dean of the Graduate School will be responsible for soliciting from the Deans of the individual schools any additional information that might be necessary to assess the overall activity of the various professional development programs for TAs and for forwarding this material annually to the Office of the Provost to ensure compliance with the institutional Guidelines and Policies by all units in the University.

H. Courses on College Teaching

Contact: Dr Hugh Crumley, Assistant Dean for Academic Affairs
Address: Duke University Graduate School, 2127 Campus Drive, Box 90068
Phone: (919) 660-5975
Email: crumley@duke.edu
Website: Courses on College Teaching

GS 750: Fundamentals of College Teaching

In this course, graduate students (mainly first year or beginning Ph.D. students) will learn how to: clarify TA or instructional responsibilities with faculty mentors, promote active learning in the classroom or lab, lead effective discussions, design learning activities, utilize instructional technology, and develop and apply grading criteria appropriately. In addition, you will identify Duke campus resources that can provide both you and your students with personal, academic or professional support. Finally, you will engage in critical self-reflection on your own teaching and learning. Credit: (1 credit; CR/NC). Instructors: Crumley or Ramos. Two sections offered each fall and at least one section in spring term.

GS 755: College Teaching & Course Design

In this course, each Ph.D. student will draft at least one course syllabus that may be used to teach an independent course at Duke, to seek adjunct teaching opportunities, or to apply to future faculty positions. Topics will include methods of course design, syllabus construction, critical thinking, student learning outcomes, formative and summative evaluation methods, analytic vs. holistic grading rubrics, and practical steps to propose and teach a new course. Research on college students and successful new faculty will be discussed. The products created in this course are a vital part of any teaching portfolio. Limited to Ph.D. students in year two or higher. Credit: (1 credit; CR/NC). Instructor: Goldwasser. Offered spring and fall terms.

GS760: College Teaching & Visual Communication

This course is offered to support your professional development as a graduate instructor and/or future faculty member. In this course, you will explore visual communication for teaching and other professional activities in print, in face-to-face situations and online. This includes introductions to web design, graphic design, effective presentations, development of an online electronic teaching portfolio, and exploration of other instructional technology for college teaching. Limited to 2nd year and higher graduate students. 1 Credit. Instructor: Crumley. Offered fall and spring terms.

GS762: Online College Teaching

Bass Online Apprenticeship

In this course, students examine different formats of online and hybrid courses for teaching at the college level. This includes evaluation and assessment of learning outcomes, syllabus design, materials production and issues in intellectual property in online education. Limited to 2nd year and higher graduate students. Prerequisite: completion of another course in teaching college. 1 Credit. Instructor: Crumley. Offered spring term.

GS765: The College Teaching Practicum
A principal component of this course is graduate students giving teaching demonstrations that are video recorded. Over the semester, you will give four presentations that will be observed by classmates, instructors, and for the third and fourth presentations, undergrad volunteers. You submit self-evaluations based on feedback from others and observation of your own teaching videos. In the weeks that there are not teaching demos, we will be talking about very practical concerns for teaching, including classroom management, using groups in class, facilitating discussion, active learning, and visual aids. Limited to 2nd year and higher graduate students. 1 Credit. Instructor: Crumley. Offered spring term only.

GS 770: Topics & Careers in Higher Education
In this course, advanced Ph.D. students will identify various types of faculty or administrative careers in higher education, locate and interpret position announcements, examine steps in the hiring and review process, evaluate academic cultures, explore alternative career paths in academia, and discuss current issues facing higher education. Activities include preparing application materials for peer review, and interacting with leaders in higher education who represent different types of institutions in higher education. Limited to Ph.D. students beyond qualifying exams. Credit: (1 credit; CR/NC). Instructor: Klingensmith. Offered fall term only.

I. Certificate in College Teaching

Contact: Dr. Hugh Crumley, Director of Graduate Studies
Address: Duke University Graduate School, 2127 Campus Drive, Box 90068
Phone: (919) 660-5975
Email: crumley@duke.edu
Website: CCT

The Certificate in College Teaching (CCT) program is for enrolled PhD students in any department or program of study at Duke.

1. Goals
The goals of the CCT program are to facilitate and recognize graduate students' completion of:
  a. sustained, systematic pedagogical training that promotes
      i. current best practices in teaching and learning
      ii. appropriate use of instructional technology
      iii. systematic assessment of student learning outcomes
  b. a reflective teaching practice including peer observation

    c. development of materials suitable for use in applying for teaching positions after graduation

2. Administration

The CCT Program Director (Dr. Hugh Crumley) assumes primary responsibility to recruit graduate student participants, to serve as a liaison to faculty in departments and other Duke units like the Center for Instructional Technology, to organize and/or lead course offerings and training workshops, to facilitate teaching observation opportunities, to monitor graduate student progress toward completion, and to conduct annual program evaluations of graduate student participants and of the program itself.

3. Program Evaluation

Reporting will include an annual assessment report written by the Program Director for the Senior Associate Dean of the Graduate School. This report will use the data from student work, interviews and survey responses to describe how the program is meeting its goals.

4. Student Requirements for the Certificate in College Teaching

The requirements presented here are based on a review of the relevant literature in graduate instructor development; a review of the practices in teaching certificate and related programs at Duke's peer, neighbor and other institutions; and personal communication with directors of such programs at Vanderbilt, Yale and Emory. The requirements are in three general categories: 1) coursework, 2) teaching and observation, and 3) reflection and a teaching portfolio.

5. Orientation

Any interested graduate student should complete and submit an application to the Program Director, then register for and attend a CCT program orientation session. During this meeting, each applicant will begin the process to identify possible teaching and observing opportunities, review the requirements for the certificate (listed below) and develop a timeline for their completion. Each graduate student who enrolls in the certificate program will schedule one progress report meeting per year with the Program Director.

To enroll in the CCT program, students must submit an application before the end of drop-add of the semester in which they intend to complete all program requirements.

6. Coursework

Participants should successfully complete two courses in college teaching. This can include any combination of Graduate School and/or discipline specific pedagogy courses offered by a Department or Program.

Graduate Studies courses

GS 750 Fundamentals of College Teaching

GS 755 College Teaching & Course Design (syllabus & materials design, teaching statement)
GS 760 College Teaching & Visual Communication (graphic & web design for teaching)
GS762: Online College Teaching
GS 765 College Teaching Practicum (video recorded teaching demos)
GS 770 Topics and Careers in Higher Education (job application materials)
(Course deliverables listed after each course can be used in a teaching portfolio)

Departmental pedagogy courses
AAAS 780S: Teaching Race, Teaching Gender (crosslisted in WOMENST, HIST, LIT)
BIO 705S: Seminar in Teaching College Biology
ENG 890S: 21st Century Literacies: Digital Knowledge, Digital Humanities (crosslisted in ISIS)
ENV 737: Environmental Education and Interpretation
GERMAN 700S: Foreign Language Pedagogy: Theories and Practices
HIST 703S: Focusing on Teaching and Pedagogy
ISIS 640: History and Future of Higher Education
MATH 771S: Teaching College Mathematics
NURSING 543: Facilitating Student Learning (online)
NURSING 545: Integrating Technology into Nursing Education (online)
NURSING 546: Innovative Curriculum Development in Nursing (online)
NURSING 547: Educational Program Evaluation and Accreditation (online)
NURSING 548: Test Construction and Item Analysis (online)
NURSING 549: Using Qualitative Assessment and Evaluation Strategies (online)
NURSING 550: Role of the Nurse Educator: Issues and Challenges (online)
PHILOSOPHY 795S: Teaching Philosophy
POLISCI 790: Teaching Politics
RELIGION 996S: Teaching in Religion
RELIGION 885: The Study of Asian Religions (UNC)
ROMST 700: Theories and Techniques of Teaching Foreign Languages
RUSSIAN 714: Methods in Teaching Russian
STA 790.04: Special Topics (Teaching Statistics)
WOMENST 320: The Pedagogy of Women's Studies

7. **Teaching Experience and Observation**
   Participants should have experience teaching a group of students over the course of a term in a classroom or lab setting. Depending on the discipline and department, this could include serving as a Teaching Assistant with appropriate teaching responsibilities, leading a recitation section or lab; being a co-instructor of a course or being the primary instructor of record. With the approval of the CCT Program Director, other types of teaching experience may be used to fulfill this program requirement.

   Students in the program should participate in teaching observations, both as a teacher being observed and as an observer of others teaching. In their teaching role, participants should be observed by at least two who provide brief written feedback. Observers can be faculty from the participant's department or a related program, Graduate School staff,

trained peer graduate students or others as approved by the Program Director. Participants should also conduct at least two observations of other faculty or graduate students teaching. Appendix C contains a number of short classroom observation forms suitable for use here.

8. **Online teaching portfolio**

The online teaching portfolio can be created in any web authoring tool the participant is comfortable using (Word Press, Dreamweaver, Google Sites, etc.) It may include a current CV, a teaching statement and other materials as appropriate to the student's discipline. Note that students will create portfolio materials in the college teaching classes and as part of their teaching experience as described above in requirements 1 and 2.

9. **Exit Interview**

When all courses, materials and documentation are ready for evaluation, the participating student should contact the Program Director to schedule an exit interview. At the exit interview, the participant will be asked to discuss his or her experience, present a self-evaluation and give feedback about the certificate program. We expect to maintain contact with them after they have graduated from Duke to find out how well this program prepared them for their (future) position.

J.   Preparing Future Faculty Program
Contact: Dr. Hugh Crumley, Assistant Dean for Academic Affairs
Address: Duke University Graduate School, 2127 Campus Drive, Box 90068
Phone: (919) 660-5975
Email: grad-pff@duke.edu
Website: Preparing Future Faculty (PFF)

The **Preparing Future Faculty (PFF)** program began as a national project of the Council of Graduate Schools and the Association of American Colleges and Universities. Duke University participated in this national initiative and maintains an active program led by the Graduate School. The purpose of PFF is to better prepare Ph.D. students and postdoctoral fellows for the multiple roles and responsibilities they will have as future faculty members and to educate them about the wide range of academic institutions in which faculty work. The program brings together faculty members from nearby partner institutions with Duke graduate students in order to provide mentoring relationships and conversations about all aspects of faculty life. Our Partner Institutions include Durham Technical Community College, Elon University, Guilford College, Meredith College, and North Carolina Central University. Nearly 30 doctoral students and postdoctoral fellows participate annually, and there are several requirements and benefits outlined below.

1. **Requirements for PFF Fellows**
    • **Faculty Mentoring:** PFF Fellows select a faculty mentor from one of the cluster institutions and develop a set of professional activities to complete over the course of the year. These can include attending departmental or faculty senate meetings, teaching

classes, advising, and learning first-hand the roles and responsibilities of a faculty member at cluster schools.

• **Site Visits to Cluster Campuses:** PFF Fellows attend field trips to all five cluster campuses throughout the academic year. These trips provide an opportunity for conversation with faculty, administrators, and students on their campus. Site visits include classroom observations, campus tours, departmental visits, faculty meetings, and a dinner or seminar with faculty members to discuss such issues as the job market, tenure, effective teaching, funding research, publishing, and the academic community.

• **Teaching IDEAS Workshop Series:** PFF Fellows must participate in a majority of the Teaching IDEAS workshops offered during the academic year. Members of the Duke faculty or guest speakers will share practical tips and strategies for effective undergraduate teaching.
• **Assignments:** Fellows will have a small number of reading assignments and must submit mid-year and final self-evaluation reports of their experience.

2. **Benefits for PFF Fellows**
• **Broader Knowledge of Academia:** Past fellows have identified numerous benefits such as a clearer sense of the type of position they will seek, how to ask interview questions, hiring criteria and negotiations, and how institutional governance impacts faculty life.
• **Access to Job Listings:** The national PFF office maintains a job listing open only to PFF participants and graduates. Many colleges and universities seek faculty candidates who have completed PFF programs.

• **Transcript Recognition:** Graduate students who complete the program will receive a special notation on their transcripts recognizing their participation as a Preparing Future Faculty fellow, as well as credit for GS300: Colloquium on the Academic Profession.

3. **How to Apply to PFF**
To apply for the PFF program, we recommend that you attend the Information Session offered each spring. Application information and more details are provided on the Graduate School website found here: PFF Application.

K. Teaching IDEAS Workshop Series
Contact: Dr. Hugh Crumley, Assistant Dean for Academic Affairs
Address: Duke University Graduate School, 2127 Campus Drive, Box 90068
Phone: (919) 660-5975
Email: crumley@duke.edu
Website: Graduate School

The Teaching IDEAS program is open to all faculty, postdocs, and graduate students at Duke. These workshops represent an annual workshop series on topics related to effective undergraduate teaching. Speakers include faculty at Duke and nationally respected leaders in higher education. Topics will address teaching large and small classes, leading effective

lectures or discussions, advising students, developing a teaching portfolio, diversity issues in the classroom, service learning, the scholarship of teaching and learning, assessment of critical thinking and learning outcomes, and more. The schedule is posted in the "Professional Development" section of our website.

Professional Development Series
The Professional Development Series includes one-time events and series of related topics that can help students identify and prepare for the range of professional doors that their graduate degrees will open for employment. This series is designed to broaden graduate students' career perspectives and develop competencies in communication, self-awareness, professional adaptability, professionalism, and leadership.

Events in the Professional Development Series are offered on a two-year cycle and change each semester. Over the course of each two-year cycle, the series will include opportunities to learn about career paths in each of the five major career sectors available to master's and doctoral degree graduates: academia, business, entrepreneurship, government, and nonprofit.

Each semester, events in the Core Competencies series address skills that are transferable to nearly every professional context that Graduate School students might encounter, with a focus on communication, self-awareness, and leadership. Students can also find events in the PhD Career Paths series every semester, which provides an ongoing focus on the many career paths available to PhD-qualified professionals.

The Academic Job Search Series is hosted during academic years that begin in an odd number (e.g., 2015-16). This series features panel discussions, workshops, and events that help students explore faculty positions and broad career options within academia. Many of the events offered in this series are targeted to students from specific disciplinary divisions, such as STEM or Humanities and Social Sciences. Students can access videos from past panel discussions in this series through the Office of Postdoctoral Services YouTube channel. This series is co-sponsored with the Office of Postdoctoral Services and the Duke Career Center.

The Careers Beyond Academia Series is hosted in alternating years with the Academic Job Search Series. This series features panel discussions, workshops, and events that help students explore the range of employment opportunities in business, government, and nonprofit. Many of the events offered in this series are targeted to students from specific disciplinary divisions, such as STEM or Humanities and Social Sciences. Students can access videos from past panel discussions in this series through the Office of Postdoctoral Services YouTube channel. This series is co-sponsored with the Office of Postdoctoral Services and the Duke Career Center.

Emerging Leaders Institute
Cosponsored with the Office of Postdoctoral Services, the Emerging Leaders Institute is an in-depth professional development program for Graduate School students and postdocs,

designed to prepare them to be competent, confident, and effective leaders at Duke and beyond.

In a series of intensive workshops, participants work with a team of experienced leadership coaches to develop their communication, self-awareness, professional adaptability, interdisciplinary teamwork, and leadership skills.

ELI participants who complete the program receive

- experience in project management and interdisciplinary teamwork
- reports from two in-depth assessments of their strengths, preferences, and opportunities for growth
- individual professional development coaching
- a certificate of completion
- the foundation for a lifelong commitment to professional development

Professional Development Grant

The Graduate School recognizes the need for discipline-specific professional development programming and acknowledges that professional development needs across disciplines may vary. A competitive Professional Development Grant funds department/program and cluster efforts to offer professional development programming. This includes any activity that provides professional development relevant to the preparation of graduate students (and postdocs, where relevant) for their future careers.

Full details for the award, including deadlines and submission guidelines, are available on [The Graduate School's website.](#)

Examples of topics that could be funded by this award include:

- Career decision-making (e.g., academe vs. industry)
- Job search strategies
- Negotiation skills
- Alumni networking events
- Leadership and management skills
- Work-life balance
- Organizational and time management skills
- Conflict management and communication skills
- Mentorship and advising skills
- Presentation/communication skills
- Academic career topics, such as the academic job search, applying for positions at teaching institutions, finding a postdoctoral position, first year on the job, the tenure process, job searching in a difficult economy, etc**. *Note: These must be balanced with parallel resources for students pursuing other career paths*.
- Career paths outside academia (careers outside academia for PhDs, invited speakers from industry, alumni events, CV to résumé workshops, etc.)

Professional Development Blog

All Graduate School students are invited to consider writing about their professional development experiences for our [blog](). The Professional Development blog offers current graduate students an opportunity to learn about professional development opportunities in a dynamic virtual format, share their experiences through their own posts, and build their career networks in an online professional community. It showcases professional development programming as well as profiling student successes, and is oriented toward an audience of current students, alumni networks, and potential employers.

Students know how important a polished, professional online presence can be to their job search, no matter what their career aspirations are. When they contribute to the Graduate School's professional development blog, the editors ensure that they have a professional-looking headshot that they can also use on LinkedIn, Twitter, and other web profiles. Student contributors have the opportunity to promote their accomplishments and research and provide links to their blogs or websites. Contributing to the professional development blog is an opportunity to grow and highlight students' online communication portfolio.

L. Professional Development Appendix

1. Procedure to Request Credit Approval for RCE Training Event
2. Request for Credit Approval of RCE Training Event

Duke University Graduate School

Procedures to Request GS712 Credit Approval
for Departmental RCR Training Events

Who can develop RCR training events

Any faculty member, center director or other appropriate personnel at Duke should complete the *"Request for GS712 RCR Training Event"* form that is available (MS-Word, .pdf format) on the Graduate School's RCR web site. An approved signature is required from at least one Director of Graduate Studies (DGS) OR from a departmental Chair or Center Director who represents the graduate students for whom the training event is being developed.

How to request pre-approval for RCR training events

Submit the form and any supporting materials via email **at least 2 weeks BEFORE** the event to:

Dr Hugh Crumley, Assistant Dean for Academic Affairs
Duke University Graduate School
2127 Campus Drive, Box 90068
Durham, NC 27708
Phone: 919-660-5975
Email: crumley@duke.edu

Supporting materials should include:
- outline of any presentations
- basic biographical information for any featured speakers
- resources that may be used (case studies, web resources, etc.)
- draft of PowerPoint slides

After the RCR Training Event

If approval is granted, upon completion of the event please submit the following to crumley@duke.edu:
- An Excel spreadsheet based on the Graduate School GS712 template.
- Electronic (.pdf) or printed copies of any handouts, materials, or resources used.
- Any evaluation forms provided to graduate students or a summary of responses from any evaluation mechanisms.

NOTE: We prefer to receive all information via email. Please allow 2-3 weeks for the Graduate School and Office of the University Registrar Office to process and enter the data on university transcripts.

Duke University Graduate School

Request for GS712 RCR Training Event
Directions

Please complete and submit this form **at least 2 weeks** before the event to request credit approval from the Graduate School so that Ph.D. students can receive RCR transcript credit. While most Graduate School RCR Forums are 2 credits, credit can be variable (2-6 hours) and is based on contact hours (i.e., not meal time, etc.). Once approval is granted, please submit any related materials and the list of Ph.D. student participants to the Graduate School at grad-rcr@duke.edu .

Type of Event:
      __ Departmental or interdepartmental workshop
      __ Guest speaker(s) – Duke staff or speaker outside Duke
      __ Workshop for professional development series
      __ Seminar
      __ Other (describe) _____

Speaker(s): (name and affiliation)
      Name(s):_____

      Institutions/Depts.: _____

Topics: (check as appropriate)
    □ Academic integrity/ Research misconduct
    □ Conflict of interest/commitment
    □ Mentor/advisee responsibilities
    □ Harassment prevention
    □ Human subjects issues
    □ Care & use of animals in research
    □ Data management
    □ Intellectual property
    □ Authorship & publication practices
    □ Collaborative research
    □ Fiscal responsibility
    □ Social impact of research
    □ Bioethics issues
    □ Other: (please name):_____

Audience (what graduate students should attend; by dept. or academic division; max. # expected)
      _____

Proposed Date/ Time & Duration/ Location:

      _____

Suggested Credit Amount: __ 2 credits __ 4 credits   Other: _____

Requested by: (printed name) _____ Dept. _____

Signature: _____ Date: _____