GRD 520. Special Topics. 1-4 Hour.
This course addresses topics of current interest related to professional development.

GRD 542. Leading Diverse Teams. 1-2 Hour.
This course provides students with opportunities to comprehend, articulate and apply skills related to leading and building professionally diverse teams.

GRD 600. Core Issues in Aging. 3 Hours.
A multidisciplinary approach will be used to consider dimensions of the aging process. This course explores individual and societal meanings of aging and old age through the study of the biological, psychological and sociological changes accompanying aging as well as current issues and controversies in the study of aging.

GRD 617. Critical Thinking and Scientific Integrity for Masters Students. 3 Hours.
This course will give masters students an introduction to the rules of logic and reason that are necessary for effective scientific discourse and debate. In addition, students will be introduced to best practices in the responsible conduct of research, including rigor and reproducibility.

GRD 620. Special Topics. 1-4 Hour.
This course addresses topics of current interest related to professional development.

GRD 647. Navigating the Job Market. 3 Hours.
This course explores the academic and non-academic job markets and the documents and professional skills needed to navigate them effectively.

GRD 690. IGS Capstone: Research to Practice. 3 Hours.
This is the Capstone course for the Interdisciplinary Graduate Studies degree. The course addresses the research to practice cycle for professional practitioners. Focuses on developing skills and knowledge for understanding, critiquing, and applying research to practice, as well as the role of practitioners in identifying additional areas of needed research. Course may only be taken during the semester in which the learner is completing their IGS program. Learners will demonstrate their understanding, as well as abilities to apply and evaluate, critical thinking skills, deconstruct research reports, and synthesize a program or project proposals in order to facilitate success within their professional field. Learners are required to engage in readings, discussions, learning activities, and ultimately disseminate their final program, project, practice or policy proposal publicly.

GRD 701. Presentation and Discussion Skills. 3 Hours.
Develops professional communication skills, including public speaking skills, conversation management, adapting to audience, and overall comprehensibility. Presentations critiqued by self, peers, and instructor.

GRD 703. Special Topics. 1-4 Hour.
This course addresses topics of current interest related to professional development.

GRD 704. Specialized Instruction. 1-9 Hour.
This individualized course addresses particular communication needs of students actively writing theses, dissertations, articles for publication, and grant proposals. Individual plans approved by instructor are required.

GRD 705. Teaching at the College Level. 2-3 Hours.
Introduces many of the basic principles needed to teach effectively at the college level and addresses current issues relevant to college teaching. Topics include creating a learning environment, course and syllabus design, active learning approaches, evaluation and grading, and using technology to enhance learning.

GRD 706. Grants and Fellowships 101. 1 Hour.
Introduces the extramural funding process. Topics include types of awards, funding sources, components of an application, the review process, and writing effective grant proposals. One-day workshop.

GRD 707. Presenting Effectively. 1 Hour.
Provides an overview of giving effective oral presentations in academic and professional settings. Topics include analyzing audience and purpose, characteristics of an effective delivery, strategies for planning and design, handling questions and answers, boosting confidence, and using technology in presentations. One-day workshop.

GRD 708. Writing Successfully. 1 Hour.
Addresses issues involved in writing for academic and professional settings. Topics include analyzing audience and purpose, addressing common writing problems, developing effective writing practices, writing for publication, communicating research to the general public, and productivity strategies for writers. One-day workshop.

GRD 709. Writing Fellowships. 3 Hours.
Participants are introduced to ways to construct a biosketch, search for funding sources, how to construct a fellowship budget, and grant-related administrative policies. The importance of peer review and how to respond to reviewer critiques is covered as well as training plans, team-building and peer-review skills.

GRD 710. Career Workshop for Graduate Students. 1 Hour.
This workshop introduces a variety of career choices for students working on advanced degrees in the life sciences. Topics may include sources of career information, self-assessment, resume construction, interviewing, using new technologies in job searches, career choices, the hidden job market, networking, and negotiating.

GRD 711. Special Topics. 1-3 Hour.
This course addresses topics of current interest related to professional communication, career development, and ethics.

GRD 713. Mentoring 101. 1 Hour.
This seminar will cover the science and theory on mentoring, including the mentor-mentee relationship, issues of gender, culture, age, and other power differentials; contemporary mentoring strategies as they relate generally and specifically to situations and fields; applying different mentoring models to real life/workplace.

GRD 715. Preparing TAs to Be Effective Teachers. 2 Hours.
Prepares teaching assistants to meet the educational needs of undergraduate students by developing effective teaching practices. Topics include preparing to teach, presenting material effectively, handling questions, handling difficult students and situations, leading laboratory sections, and ethical issues related to teaching.

GRD 716. Developing a Teaching Portfolio. 2 Hours.
This hybrid course guides students in developing a Teaching Portfolio for improving teaching practices and enhancing job search potential. The web-based curriculum introduces essential elements of the portfolio and guides students in drafting a personal Philosophy of Teaching.

GRD 717. Principles of Scientific Integrity. 3 Hours.
Surveys ethical issues and principles in the practice of science.
GRD 719. Introduction to Mentoring & Leadership. 3 Hours.
This course covers the principles of mentoring and leadership, focusing on the student's ability to demonstrate, analyze, and evaluate contemporary mentoring and leadership practices. Application positions students to tailor practices to their respective fields, articulate a mentoring and leadership philosophy and develop new career skill sets while producing a mentoring and leadership portfolio.

GRD 722. Writing Research for Broad Audiences. 3 Hours.
Introduces students to effectively writing about research for broad audiences, including the media, policy makers, and general public. Students learn to write various genres of texts, such as blog posts, press releases, letters-to-the-editor, and feature articles.

GRD 723. Writing Research for Academic Audiences. 3 Hours.
Introduces students to effectively writing about research for academic, scientific, and specialist audiences. Students learn to write various genres of texts, such as abstracts, reviews, and research papers.

GRD 727. Writing & Reviewing Research. 3 Hours.
Introduces writers to research writing “best practices,” criteria for evaluating writing, plus editing and peer review. Writers analyze and write short, strategic texts (on their own topics) in 5 research genres – critiques, annotated bibliographies, introductions, empirical, and review articles – based on peer and instructor feedback, for a draft presentation or proposal. For anyone writing course papers, theses, and/or proposals.

GRD 728. Professional Writing & Publishing. 3 Hours.
Introduces writers to “best practices” in academic/professional writing and publishing, plus editing, and peer review. Writers analyze and write short, strategic texts (in their own topics) in 7 academic/professional genres: abstracts, scholarly/empirical articles, review/historical articles, book chapters, opinion, professional philosophy statements, and digital journalism (writing for the public), based on peer review and instructor feedback, to produce a draft submission and publishing plan. For anyone writing for publication (including a dissertation).

GRD 729. Writing Your Journal Article in 12 Weeks. 3 Hours.
Introduces writers to a systematic approach to writing a journal article, including essential structures, stylistic conventions, and smart strategies for planning and completing projects under a deadline. Writers begin with their own working manuscripts (unpublished course paper, thesis, dissertation, etc.), identify a target journal, and draft short, strategic sections, based on peer review and instructor feedback, to create a final submission, per author’s guidelines. For anyone with active publishing goals.

GRD 730. Developing and Managing Your Professional Image. 3 Hours.
This course is designed to raise student awareness of their professional image. Topics include professional perception, polishing professional image, adjusting to professional contexts, and professional image and social media.

GRD 733. Managing & Leading Teams. 1 Hour.
This workshop will cover the latest science in managing and leading teams across disciplines, focusing on team building, the students' development of team presentations, peer discussion and review.

GRD 734. Ethical Leadership Development. 3 Hours.
Designed for those who want to apply evidence-based models to ethical decisions in a professional setting, this course positions students to tailor practice to their own careers, articulate an ethical philosophy for a portfolio, and model ethics as a leader in their respective fields.

GRD 735. Leadership 101. 1 Hour.
This seminar covers organizational leadership theory, as well as contemporary leadership models and strategies as they relate generally and specifically to situations and fields.

GRD 739. Science Communication Portfolio. 3 Hours.
This Science Communication Portfolio course focuses on the student's compilation of course experiences in key areas, such as science journalism, science public relations, medical writing, and entrepreneurship.

GRD 740. UAB Prep Scholar Workshop. 2 Hours.
This course will provide writing and other enrichment activities to prepare UAB PREP Scholars for entry into graduate school.

GRD 741. UAB PREP Scholar Workshop I. 1-3 Hour.
This course will provide writing and other enrichment activities to prepare UAB PREP Scholars for entry into graduate school.

GRD 742. UAB PREP Scholar Workshop II. 1 Hour.
This course will provide writing and other enrichment activities to prepare UAB PREP Scholars for entry into graduate school.

GRD 743. Critical Thinking and Quantitative Concepts. 3 Hours.
The goal of this course is to enhance students' critical thinking skills in the context of rigorous experimental design and quantitative analysis. Specifically, students will engage in activities that explore robust and unbiased approaches toward analysis, interpretation, and reporting of experimental results.

GRD 744. Leadership Survival Skills. 1 Hour.
In this course, participants explore the day-to-day activities of leaders, including organizational mission, vision, values, and goals, budgeting, human resources, and project management. Case studies are used to help students reflect on and discuss solutions from a leader's perspective.

GRD 745. Communication and Diversity Leadership. 3 Hours.
Upon completion of the course, students will be able to explain, analyze, and apply approaches to leading and communicating in diverse communities.

GRD 746. Critical Decisions in Mentoring & Leadership. 3 Hours.
This course explores the critical thinking skills related to the decision making processes for mentors and leaders.

GRD 747. Navigating the Job Market. 3 Hours.
This course explores the academic and non-academic job markets and the documents and professional skills needed to navigate them effectively.

GRD 748. Faculty Mentoring in Higher Education. 1 Hour.
In this one-day workshop, faculty will explore the mentor/mentee relationship in higher education, as well as peer mentoring, role modeling, coaching, and formal/informal mentoring structures.

GRD 749. Improvisational Techniques to Improve Leadership, Teaching, and Research Communication. 1 Hour.
This workshop engages participants through improvisational and theatrical techniques in order to build confidence and improve as leaders, teachers, and/or researchers.

GRD 750. CIRTL Seminar in Teaching and Learning. 1 Hour.
CIRTL seminar provides opportunities for students to read and discuss basics of effective teaching and learning.

GRD 751. CIRTL Seminar in Teaching and Learning II. 1 Hour.
This CIRTL seminar provides opportunities for students to read and discuss teaching as research projects.
GRD 752. Introduction to Evidence-based Teaching. 2 Hours.  
This CIRTL Network seminar is designed for graduate students and  
postdoctoral scholars who plan to teach undergraduate STEM (science,  
technology, engineering, and mathematics) courses. It addresses a range  
of topics focused on enhancing STEM teaching.  

GRD 753. CIRTL Seminar on STEM Academic Teaching Careers. 1-3  
Hour.  
This CIRTL Network seminar provides an overview of types of academic  
teaching positions and addresses topics related to academic careers.  

GRD 754. Advanced Evidence-based Teaching. 2 Hours.  
This CIRTL Network course explores effective research-based teaching  
approaches for enhancing learning in STEM (science, technology,  
engineering, and math) courses. Approaches such as collaborative  
learning, team-based learning, flipped classrooms, inquiry science, case  
studies, and problem-based learning will be considered.  

GRD 755. CIRTL Teaching Practicum. 3 Hours.  
This CIRTL course provides students a structured observation and  
practicum experience in which they shadow a faculty member as he/  
she teaches a semester-long course and engage in a variety of guided  
teaching activities.  

GRD 756. CIRTL The College Classroom. 2 Hours.  
This CIRTL Network course provides students with the basics of effective  
teaching with an emphasis on the learning-centered classroom and the  
interconnected cycle of teaching, assessment, and learning.  

GRD 757. CIRTL Effective Use of Technology in Teaching and  
Learning. 2 Hours.  
This CIRTL Network course provides students with strategies and  
technological choices and tools for effective use of instructional  
technology in their teaching practices.  

GRD 758. CIRTL Diversity in the College Classroom. 2 Hours.  
This CIRTL Network course addresses different aspects of diversity,  
particularly in STEM (science, technology, engineering, and math)  
education, with the underlying principle of equitable access and  
enhanced learning of all students. Topics include gender, race, culture,  
disability, first-generation college students, ethnically diverse students  
(men of color, Latino/as, and international students), and learning style/  
environment.  

GRD 759. CIRTL Teaching-as-Research in STEM Courses. 3 Hours.  
This CIRTL course introduces Teaching-as-Research project design and  
guides students through the TAR planning process.  

GRD 760. CIRTL Teaching-as-Research Project. 3 Hours.  
This CIRTL course is designed for students who are conducting a  
Teaching-as-Research project.  

GRD 761. CIRTL Special Topics. 1-5 Hour.  
This CIRTL course addresses topics of current interest related to college  
teaching.  

GRD 762. CIRTL Individualized Seminar. 1-3 Hour.  
This CIRTL seminar addresses teaching and learning projects related to  
STEM (science, technology, engineering, and math). Individual plans  
approved by the instructor are required.  

GRD 763. CIRTL Individualized Teaching and Learning Project. 1-3  
Hour.  
This CIRTL individualized course provides students with opportunities to  
engage in teaching and learning projects related to undergraduate STEM  
(science, technology, engineering, and math) education. Individual plans  
approved by the instructor are required.  

GRD 764. CIRTL Individualized Teaching Experience I. 1-5 Hour.  
This CIRTL individualized course provides students with opportunities to  
teach and reflect on these experiences in a variety of teaching contexts.  
Co-instructor students serve as “Teaching Fellows”. Individual plans  
approved by the instructor are required.  

GRD 765. CIRTL Individualized Teaching Experience II. 1-5 Hour.  
This CIRTL individualized course provides students with opportunities to  
teach for more extended periods and to reflect on these experiences in a  
variety of teaching contexts. Individual plans approved by the instructor  
are required.  

GRD 766. Introduction to Online Teaching. 1 Hour.  
Learn basics of developing and teaching an online course including how  
to structure content, effective interaction and communication, active  
online engagement techniques and assessments.  

GRD 770. Intro to Biostats. 2-3 Hours.  
This course is intended to provide graduate students with an introduction  
to biostatistics. The emphasis in this course will be upon understanding  
statistical concepts and applying and interpreting tests of statistical  
Inference. Content will include but not be limited to: choosing the correct  
test for a given research design, data and data files, data screening,  
scaling, visual representations of data, descriptive statistics, correlation  
and simple regression, sampling distributions, and the assumptions  
associated with and the application of selected inferential statistical  
procedures (including t-tests, Chi-square, and ANOVA). Computer  
software (SPSS) will be employed to assist in the analysis of data for this  
course. Students should have access to a computer, SPSS software, and  
the Internet.  

GRD 771. ePortfolio Workshop. 1 Hour.  
Learn how to Build a personalized website to host your Teaching and/or  
Mentoring Portfolio or for personal branding/promotion.  

GRD 772. Emotionally Intelligent Leadership. 1-2 Hour.  
This course provides students with opportunities to explore the  
relationships among emotional intelligence (EI), leadership, and  
professional development.  

GRD 773. Research Lab Management. 3 Hours.  
By successfully completing this course, enrolled participants should  
be able to i) construct a start-up budget; ii) design a safe research  
laboratory environment; iii) hire, mentor and manage research lab staff  
and trainees; and iv) develop and implement a research lab management  
plan. Submission of a completed research lab management plan will be  
used to measure attainment of learning objectives.  

GRD 774. Introduction to Regulatory Compliance. 1 Hour.  
Enrolled participants will examine regulatory compliance issues related  
to basic research needs, including but not limited to animal use, human  
subjects and export control. Completion of in-class activities will be used  
to measure attainment of learning objectives.  

GRD 775. Research Lab Safety. 1 Hour.  
Enrolled participants will examine general laboratory safety practices  
and should be able to i) design a safe laboratory plan; and ii) develop  
lab safety-related standard operating procedures. Completion of in-class  
activities will be used to measure attainment of learning objectives.  

GRD 790. Research/Lab Rotation. 1-10 Hour.  
Graduate Lab Rotation Used by MD/PhD Students first summer  
semester.