

**Research Methods and Statistics
Program
MA and PhD Degrees**

**Student Handbook
2012 – 2013**



UNIVERSITY OF
DENVER

Morgridge College
of Education

The University of Denver Morgridge College of Education *Student Handbook* provides prospective and admitted students with policies and procedures to assist them as they progress through the requirements of MCE degrees certificates. In addition to this handbook, the student should also refer to the *Morgridge College of Education Bulletin* available at <http://www.du.edu/education/resources/current-students/handbooks.html> and the University of Denver Graduate Policies & Procedures available at http://www.du.edu/learn/graduates/grad_policies_procedures_11-12.pdf. In some cases, college and university policies take precedence over the regulations of the *Student Handbook*. It is the student's responsibility to read and understand University, College, and program norms relating to the degree programs, and to complete program and degree requirements in a timely fashion.

The University of Denver reserves the right to make changes in the regulations, courses, rules, fees or other changes in this handbook without advance notice.

Inquiries concerning programs in the MCE should be directed to the Morgridge Office of Admissions, 1999 E Evans Ave., Denver, CO 80208-1700; Phone 303-871-2509 and edinfo@du.edu. Current students refer to faculty/staff contact listed within this handbook.

The University of Denver (Colorado Seminary) is an Equal Opportunity Institution. It is the policy of the University not to discriminate in the admission of students, in the provision of services, or in employment, on the basis of race, color, religion, sex, national origin, age, marital or veteran status, sexual orientation, or physical or mental disability.

Inquiries concerning allegations of discrimination based on any of the above matters may be referred to the University of Denver Affirmative Action Office, 2020 E. Evans Ave., Room 104, Denver, CO 80208-4840, 303-871-2307, or the U.S. Department of Education, Office of Civil Rights, 1244 Speer Blvd., Denver, CO 80204.

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PART I: OVERVIEW

Welcome to graduate studies in Research Methods and Statistics (RMS)! The goal of the RMS MA and PhD degrees is to enhance the development and use of research in the social and health sciences. Our goals as faculty are to equip you with cutting-edge research skills, creative educational vision, social responsibility, and sufficient experience in application of your skills and knowledge to achieve a feeling of comfort. We are committed to shaping a safe, sustainable, democratic and just world and believe that high quality research is one approach to doing this. We are pleased to have you join us in this venture.

RMS Faculty

General Contact Information

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Office of Academic Services, Morgridge College of Education
303-871-2112, oas@du.edu
For assistance related to academic records, comprehensive exam registration, graduation application process, and general college support.
Primary contact: Nora McPherson, nora.mcpherson@du.edu

Office of Admissions, Morgridge College of Education
303-871-2509. edinfo@du.edu
For assistance related to admissions.

In Part III of this handbook, a complete list of faculty and staff associated with the RMS program is provided.

Location

The faculty and staff offices for the RMS Program are located in Ruffatto Hall, home of the Morgridge College of Education, 1999 E. Evans Ave, Denver, CO. Many, but not all of the classes will be held in Ruffatto Hall. There is limited visitor parking in lots near the building. For parking information, consult <https://www.parking.du.edu/default.aspx>.

Accreditation

All degrees at the University of Denver are accredited through the North Central Association of Colleges and Schools.

Program Overview

The education and social sciences fields have a growing need for professionals with strong skills in research design and data analysis. The Research Methods and Statistics Program (RMS) provides the courses and experiences necessary to conduct and supervise effective social science research. The program is individually planned around students' backgrounds and career goals. Most students prepare for positions that require consulting, research, measure development, policy-making, and teaching. Small seminars, independent projects, and a practicum offer opportunities for an individualized and well-rounded program.

Our goal is to equip you with cutting-edge research skills, a creative educational vision, social responsibility, and sufficient experience in application of your skills and knowledge to achieve professional competence. Graduates with RMS degrees hold professional positions at testing companies, universities, school districts and state agencies, among others. Admission to the master's program requires a BA or BS degree. Admission to the doctoral program requires a Master's degree.

Core Program Content

The RMS Program embraces a holistic and comprehensive view of quantitative and qualitative research methods and the importance of mixed methods designs. Foundations include quantitative and qualitative research, measurement, statistics, mixed methods, and program evaluation. Research methods include classical quantitative methods as well as several qualitative approaches. Students can elect to emphasize evaluation or a content area within or outside of education as a minor. All students conduct original research during their studies and are encouraged to present and/or publish their work. Practicum experiences also are encouraged in diverse sites, including school systems, educational research agencies, mental health agencies, and businesses.

Unique Program Features

In addition to the facilities of the entire campus, there are three features of the RMS Program at DU that distinguish it as a strong graduate program. We are particularly fortunate to have an outstanding faculty. Professors are not only leaders in their fields but also demonstrate a deep commitment to students' academic as well as personal growth. While our professors set high standards for students, they also individualize requirements to meet each student's needs and goals.

Another excellent feature of this program is the students themselves. A wide range of experiences, creative ideas, sincere dedication to research, and a sense of humor are some of the characteristics of people in our program. We enjoy each other's genuine cooperation, encouragement, and inspiration.

Small class sizes are the third distinguishing feature of our program. It is one that enables us to get to know one another and engage in ongoing dialogue about topics of interest, form study groups, and give advice about the direction of a project or dissertation. Personal and professional friendships form and continue long after graduate school.

These features contribute to an outstanding educational experience. We feel fortunate to be part of a program in which professors make themselves readily available for consultation, students support and assist one another, and small class sizes result in rich interaction among students and faculty.

The RMS program is one of seven programs offered within the Morgridge College of Education. Students may opt to take cognate courses from programs within or outside of the Morgridge College of Education. RMS students take classes with students in programs from across the College.

Program Learning Goals

The broad learning goals of RMS are as follows. Students will:

- Have a general knowledge of research methods and program evaluation and advanced knowledge of psychometrics and statistics;
- Think critically about research;
- Engage in research serving professional and local communities; and
- Understand ethics as they apply to research and behave in an ethical manner.

RMS goals relate to the MCE mission in advancing scholarship via practice and encouraging critical thought.

Data addressing learning outcomes come from multiple sources: (1) grades in courses, (2) annual review of RMS students, (3) comprehensive exams, (4) practicum and other research products, (5) dissertations, (6) selected items from MCE surveys of continuing and graduating students, (7) RMS alumni survey, (8) course evaluations, and/or (9) Research and Scholarship Committee discussions. Learning outcomes along with evaluation criteria and a synopsis of the process for reviewing data are listed below.

Learning Goal 1 (have a general knowledge of research methods and program evaluation and advanced knowledge of psychometrics and statistics) and Learning Goal 2 (think critically about research)		
Learning Outcomes: Students will demonstrate skill in	Criteria for Evaluating Learning Outcomes	Process for Collection and Review of Evidence
1) Designing research to address significant problems, with knowledge and understanding of the strengths and limitations of diverse modes of inquiry.	1) Success in coursework (B or better): Empirical research methods (RMS 4930), Introduction to Qualitative Research (RMS 4941), survey research (RMS 4931), meta-analysis (RMS 4932) 2) Comprehensive exam performance (MA and Ph.D.) 3) Research practicum 4) Dissertation quality 5) 3 MCE survey items (skill with critical thinking..., current level of expertise in designing quantitative research studies..., current level of expertise in designing .. qualitative research)	1) track student grades—reviewed annually by RMS faculty 2) review RMS student comprehensive exam performance on research methods questions—done each quarter there is a student taking an exam by both RMS faculty with discussion of mistakes on comps 3) Practicum advisor reviews product, which then is submitted for presentation (or publication) 4) Review by dissertation committee, with a goal of including a content expert external to DU on each committee and 100% student pass with no/minor changes 5) survey data collected by College—review of item responses by RMS faculty
2) Applying appropriate analytic strategies in analysis of quantitative data.	1) Coursework: introductory, intermediate, and advanced statistics classes 2) comprehensive exam performance 3) research practicum 4) dissertation quality 5) 1 MCE survey item (current level of expertise in statistics)	1) track student grades—reviewed annually by RMS faculty 2) review RMS student comprehensive exam performance on statistics questions—done each quarter there is a student taking an exam by both RMS faculty with discussion 3) Practicum advisor reviews product 4) Review by dissertation committee 5) survey data collected by College—review by RMS faculty
3) Creating and evaluating measures using diverse analytic strategies.	1) Coursework: RMS 4921, RMS 4960 2) Comprehensive exam performance 3) dissertation quality 4) 1 MCE survey item (level of expertise in designing measures)	1) track student grades—reviewed annually by RMS faculty 2) review RMS student comprehensive exam performance on measurement questions 3) Review by dissertation committee 4) survey data collected by college

<p>4) Crafting coherent and concise expressions of ideas related to research, and communicating those ideas effectively.</p>	<p>1) Coursework: RMS 4930 2) dissertation quality 3) conference presentation or publication 4) 2 MCE survey items (skill with written communication, skill with verbal communication)</p>	<p>1) track student grades—reviewed annually by RMS faculty 2) Review by dissertation committee 3) paper accepted under peer review process 4) survey data collected by College—review by RMS faculty</p>
<p>5) Students will demonstrate a commitment to continuing learning by engagement with professional and local communities.</p>	<p>1) membership in professional organizations (goal of all students maintaining membership in at least one relevant professional organization) 2) presentation, publication, and/or service to journals or professional organizations (goal of all students having presented and/or published prior to graduation) 3) practica in local organizations</p>	<p>1 & 2) student annual review—discussed by RMS faculty on an annual basis 3) placement in local sites for practicum</p>
<p>6) Students will demonstrate professional behavior by understanding research ethics and adhering to an ethical code of conduct.</p>	<p>1) coursework in research ethics (RMS 4930, RMS 4931) 2) IRB process 3) 1 MCE survey item (level of knowledge of ethics...)</p>	<p>1) track student grades—reviewed annually by RMS faculty 2) mandatory submission of IRB applications—supervision by major advisor 3) survey data collected by College—review by RMS faculty</p>

Part II: PROGRAM REQUIREMENTS and POLICIES

The following provides information on the policies and procedures that specifically affect students. However, this is not an exhaustive list. The University of Denver's [Graduate Policies and Procedures 2011-12](#) are the first layer of academic policy under which all college and program policies are administered. The [Graduate Policies and Procedures 2011-12](#) document can be found at: http://www.du.edu/learn/graduates/grad_policies_procedures_11-12.pdf.

College policies are the second layer. Students should refer to the Morgridge College of Education Bulletin for specific policies and procedures on academic matters such as time limit, incomplete grade policies, registration, academic appeals procedures, and other information. The MCE Bulletin can be found at: <http://www.du.edu/education/resources/current-students/index.html>.

Students should check with their Academic Advisor or Morgridge College of Education Office of Academic Services for clarification of the policies and procedures that are College-wide in their applicability.

Autumn Orientation

Prior to the beginning of the autumn quarter, students are strongly encouraged to attend an orientation session that introduces them to the program, its faculty, and staff. Meeting other students, learning about faculty expectations, discussing professional roles and responsibilities, filling out initial course work plans, registering for courses, receiving pre-practicum materials, and engaging in Q&A sessions comprise the basic agenda.

Morgridge College of Education Office of Admissions (MOA) and Office of Academic Services (OAS)

To meet the requirements of your degree or certificate program, and to receive information about financial assistance, students are encouraged to work closely with MCE staff, especially in the Morgridge Office of Admissions (MOA) and the Office of Academic Services (OAS). These offices can provide information and assistance from initial inquiry through graduation. For questions related to financial aid, contact the Office of Admissions which is located on the first floor of Katherine A. Ruffatto Hall in the east wing, 303-871-2509. For questions related to academic requirements, including the comprehensive exam and graduation application, contact the Office of Academic Services, located on the third floor of Ruffatto Hall in the east wing, 303-871-2112.

The Office of Academic Services can provide essential assistance in submitting forms related to coursework and in understanding college and university academic policies. However, the faculty member assigned as your Academic Advisor should be the primary resource for decisions related to choice of courses.

Student Responsibilities

In addition to following the University of Denver Honor Code and behaving according to the professional ethical standards of our field, students are expected to take responsibility for their success in the program. The faculty is responsible for supporting all students' efforts in achieving success, but, ultimately, success is the student's responsibility. Students are responsible for keeping all official university records up to date, meeting deadlines for filing any document needing faculty, program, college, or university approval, being prepared for advising meetings and classes, fulfilling the obligations of all coursework, and behaving responsibly and courteously in interactions with fellow students, faculty, staff, and professionals in the field. If circumstances create a situation which may make it difficult for a student to meet program obligations, including class work, the student must let the instructor and/or advisor know of these difficulties as soon as possible.

Academic Policies and Procedures

Academic Advisor

When a student is admitted, an academic advisor is assigned with consideration of the areas of interest indicated in the student's application materials. A student may be assigned to a faculty member who is not in the student's area of interest because of needing to balance the number of student advisees across the faculty. However, all faculty are prepared to advise students in their selection of courses, filing of the Coursework Plan, and other program requirements. The academic advisor works with the student to complete and approve the course work plan, select electives, and submit necessary documentation for transfer credits or other coursework-related documentation. The academic advisor also guides the student in development of the student's professional goals. All of the faculty are available for career guidance. However, only the academic advisor should give the student academic program advice and approvals.

It is the responsibility of the student to make appointments to meet with his or her advisor at least once per academic year.

First year students should meet with the academic advisor during the first quarter of study.

Students should come prepared to their academic advising appointments, bringing any relevant forms and an unofficial transcript.

Faculty members generally work on nine-month contracts during the regular academic year. During the summer, students may need to work with the Program Coordinator if their advisor is not on campus.

Grade Requirements

A satisfactory quality of achievement with a grade point average of B (3.0) or better is required by the college in graduate course work counted toward the degree. The average is determined on the basis of the University's grading system. Any student whose overall grade point average

falls below a 3.0 will be warned, put on probation, and then may be suspended or dismissed. The student must contact his or her advisor to develop a plan designed to remedy the academic deficits. After two consecutive quarters of deficit, the student will be dismissed from the program.

Advanced degrees are not awarded automatically on completion of the required number of courses or hours of credit. The candidate's status is subject to review at any time.

Transfer of Credit

Transfer credit toward a Master's degree is limited to 10 quarter hours; however, some programs may have more restrictive limits. Transfer credit toward a PhD degree is limited to 15 quarter hours; however, some programs may have more restrictive limits. Please contact the individual unit for details. Transfer credit must be completed during the first quarter of attendance and must be approved by the student's faculty advisor and program coordinator in writing. Please refer to the Transfer of Credit Policy found in the Graduate Policy and Procedures Manual: http://www.du.edu/learn/graduates/grad_policies_procedures_11-12.pdf.

Course Work Plan

Complete a Coursework Plan with your advisor during your *first quarter* of enrollment for **MA** students.

For **PhD** students, submit by your *third quarter* of enrollment or before you have completed 30 credit hours of coursework.

After it has the proper signatures, make a copy for your files, and submit the approved plan to the Office of Academic Services. If any changes occur in your course work plan during your program, have your advisor approve all changes, then submit it to the OAS. Changes to the plan may be made at any time based on discussion with your advisor. Submit an updated coursework plan prior to registering for the comprehensive examination.

Cognate Requirement

All **MA** students must complete a cognate or minor study in a field outside their major area of study, determined in conjunction with the student's major course work advisor. The credits required to fill this obligation vary depending upon the student's prior graduate level course work (if any) in the minor field.

All **PhD** students complete a cognate or minor study in a field outside their major area of study, determined in conjunction with the student's major course work advisor. The credits required to fill this obligation vary depending upon the student's prior graduate level course work (if any) in the minor field. The cognate should add to one's breadth or depth of knowledge in evaluation, research methods, and statistics. Graduate-level classes, chosen in consultation with an advisor, can be taken from (1) the RMS Program, (2) other programs within the Morgridge College of Education, or (3) other departments at University of Denver.

Practicum

MA students complete an evaluation practicum. Students work with their advisor in deciding which project to pursue. The goal of the practicum is to provide field experience in evaluation.

PhD students complete a research practicum. Students work with their advisor in deciding the focus of this practicum. The goal of the practicum is to provide field experience in designing, conducting, and presenting research. It is intended that every doctoral student will submit the paper written from the practicum for presentation at a national conference and/or publication. It is the intent of the program that students receive multiple experiences with conducting research projects during the program, and so students are strongly encouraged to work with a RMS faculty member on independent research projects as well as their practicum prior to initiating work on a dissertation.

Comprehensive Examination or Thesis Options

Students must pass a comprehensive examination near or at the end of the course work. It is offered two times a year, in fall and spring quarters. There is no fee for taking Comprehensive Exams, however, students must register for the exam. Information on when exams are offered and how to register can be found at <http://www.du.edu/education/resources/current-students/exams.html>. MA students may choose to *either* take the Comprehensive Exam *or* complete a Master's Thesis. MA students are *not* obligated to do both a thesis and comprehensive exam.

Master's Thesis or Doctoral Dissertation

Master's candidates have the option to develop a thesis proposal and present it to a committee. Doctoral students must complete a dissertation. Both MA and PhD students should refer to the Morgridge College of Education's dissertation handbook, known as *Completing the Doctoral Dissertation: Guidelines for Students*, which can be found on the MCE website, <http://www.du.edu/education/resources/current-students/dissertations/index.html>. Students should also refer to the Graduate Studies dissertation instructions found at: <http://www.du.edu/media/documents/graduates/formatting.pdf>.

Institutional Review Board (IRB)

Researchers who use human participants in their research must follow specific guidelines as a condition for using the data provided by these persons. If your proposal involves human participants, you will need to submit an application to the Institutional Review Board (IRB). In consultation with his or her doctoral director, the student prepares an IRB application and submits it to the University's Office of Research and Sponsored Programs (ORSP). The IRB judges your application on issues related to protection of participants from physical and emotional distress and not on theoretical or methodological grounds. Your study cannot go forward until IRB approval is received. In many cases, minor revisions to your study will be necessary to gain approval. The IRB meets monthly, so plan on a several week lag between approval of the dissertation proposal and the beginning of data collection. Collecting data prior to receiving IRB approval is considered sufficient grounds for halting a research study. In

general, students should not submit their IRB application before the proposal defense as any major changes in the proposal would necessitate re-applying to the IRB.

IRB procedures, requirements, and application materials can be viewed/downloaded at:

<http://www.du.edu/orsp/irb.html>.

A short, multiple choice test is required with the IRB application that can be taken on line or in person. According to DU's ORSP, "education on the protection of human research participants is required for all investigators conducting research involving human subjects. To access DU's on-line "Education Program for the Protection of Human Subjects in Research" go to:

<http://www.du.edu/orsp/instructions.html>." Please call 303-871-4052 with any questions you may have about the testing process for IRB at DU.

Student Annual Review

Annually, the RMS ask you to take an active role in program planning by providing us with self-evaluation of (a) your progress in meeting your own educational goals, (b) your strengths and weaknesses as a developing research methodologist, and (c) how the RMS program can better assist you in achieving your educational goals.

- Please complete this self-evaluation form online at <https://assess-it.du.edu/> and keep a copy of your self-evaluation form. The forms are available in the Appendices.
- After the submission and depending on the reported data, some students will be asked to make an appointment with the Program Coordinator, to hold a 30-minute joint **planning** meeting with the program faculty by the end of May.
 - The purpose of the meeting is to discuss your progress during the past year and develop directions for your work in the next year. When coming to the meeting please bring the following documents:
 - Most recent curriculum vitae
 - DU unofficial transcript
 - Other documents you would like to discuss

Registration for Graduation

All students must apply for graduation two quarters prior to the quarter in which they intend to graduate. Applications are available on-line via webCentral. During the quarter of intended graduation, students should be sure that all library fines, traffic tickets, or other encumbered charges have been paid.

Extension of a Degree Program

Candidates for the **MA** degree program are expected to complete their degree within the 5-year stated expected time period specified by the University of Denver. This time period is calculated from the date of initial enrollment in the student's program of study. Students may, under special circumstances, request one period of extension, not to exceed one year.

Extension requests are not automatically granted and must be considered extraordinary circumstances. Instructions for submitting academic extension petitions, including extensions

of time, can be found at:

<http://www.du.edu/currentstudents/graduates/AcademicExceptionInstructions.pdf>.

Students who do not complete their program during an approved extension period will not be permitted to re-apply for additional extensions and their program of study will be terminated. Specific procedures for an extension of a degree program can be found in the MCE Bulletin.

Candidates for all **PhD** degree program are expected to complete their degree within the 7 year time period specified by the University of Denver. This time period is calculated from the date of initial enrollment in the student's program of study. Students may, under special circumstances, request one period of extension, not to exceed one year. Extension requests are not automatically granted and must be considered extraordinary circumstances. Instructions for submitting academic extension petitions, including extensions of time, can be found at:

<http://www.du.edu/media/documents/graduates/exceptions.pdf>.

Ethical Behavior and Conduct

Most students understand that copying another student's answers on a test, copying another student's paper, stealing copies of a test, using forbidden material on a closed book test, etc., are included in the typical definition of academic cheating. Again, as students you should know such behavior is unacceptable and, according to the DU Honor Code, are grounds for placing a student on probation or dismissing them from the University. Please refer to the DU Honor Code: http://www.du.edu/studentlife/studentconduct/honor_code_2011-2012.pdf. Students are expected to demonstrate the highest level of ethical behavior as set forth by the American Psychological Association (APA).

In the RMS Program at the University of Denver, we have tried to maintain an atmosphere of student cooperation. As a result, students are often encouraged to work together on a project or to prepare for tests. Students prepare together for exams and often share notes, references, etc. On the other hand, it is and has been unacceptable in almost any academic setting to use other people's ideas or data without giving them credit. This is called plagiarism and is considered unethical according to the APA (2010) Code of Ethics. As a result, the Program faculty wants to clarify that it is similarly unacceptable in our Program to "borrow" another student's work without giving him or her credit. It is often the case that professors use similar or identical assignments from year to year. Usually, this is because they believe the assignments are useful in teaching students a particular concept or skill. Using papers written by others, or parts of papers, materials, and handing it in as your own work is clearly unethical. It is tempting in the guise of friendship to pass on to new students copies of old assignments knowing that a professor will use the same one in future years. It is also tempting for new students to borrow copies of old assignments. Such behavior is, however, unfair to other students who do not have "friends" from whom to borrow assignments, to the student whose work is being "borrowed" without credit, and to the student who is "borrowing" the assignment since they do not have to do the learning involved in working through the assignment on their own. As a result, the faculty will consider such behavior to be cheating and it will be treated like other forms of cheating specified in the first paragraph. Points may be deducted from a student's grade if cheating is discovered, and/or the student may be referred to the Office of Student Conduct.

Unethical behavior will be considered cause for dismissal at any time during a student's program. These policies are described more fully in the MCE Bulletin. Violations of code of student conduct or the honor code are overseen by the Office of Student Conduct (<http://www.du.edu/ccs>) in conjunction with an appointed DU Conduct Review Board. This office can be contacted with questions about these policies and procedures at 303-871-4851.

Probation or Dismissal from the Program

Students who do not follow program or university policies may be placed on probation and ultimately dismissed from the program. While these instances are rare, should they occur, students first will be contacted by their advisor and then will be informed in writing of all concerns that have been raised. In other words, students will be told specifically and in writing of any issues in regards to academic progress or attendance, interpersonal or practice effectiveness, or ethical violations. Students also will be asked to respond to these concerns personally and in writing. Decisions regarding probation or dismissal will be considered by the Program Director and RMS faculty in consultation with the MCE Associate Dean. Students will be informed of all pertinent information regarding the basis for the decision.

If a doctoral student fails the comprehensive examination, the student will be given the opportunity to retake the examination when it is next offered. If failed a second time, the student may be eligible to receive a Master's degree in RMS but will be dismissed from the doctoral program.

Grievance Process

Procedure for Academic Grievances for Graduate Students – revised August 2010

Students may seek resolution of complaints or grievances through the Academic Grievance Procedure during their enrollment at the University of Denver. Please refer to the [Graduate Studies manual on Grade Appeals and Academic Grievances](#) for further information.

http://www.du.edu/learn/graduates/grad_policies_procedures_11-12.pdf

Degree Requirements

RMS Master's Degree

The program in RMS at the MA level focuses on measurement, research design, statistics, and evaluation. All Master's students will take courses in assessment as well as major area studies. Students can also take thesis credits. A blank course work plan is available as Appendix A, and on the MCE website at <http://www.du.edu/education/resources/current-students/coursework-plans.html>. Master's students will take courses in assessment and RMS and complete a comprehensive examination or an optional thesis. Students are also required to take courses in related studies or a cognate field. The *minimum* credit requirement for the program is 45-quarter hours, though students with no quantitative background must take a minimum of 47-quarter hours. Students may transfer a maximum of 10-quarter hours above the bachelor's degree with approval during the first quarter of enrollment. Courses marked with an asterisk (*) are required unless previously taken, and all waived courses must be approved by an advisor.

Refer to the attached RMS MA coursework plan in the appendices for more current and detailed information about course selection.

RMS Doctor of Philosophy Degree

All students are required to complete a course plan with their advisors. A blank course work plan is available as Appendix B, and on the MCE website at <http://www.du.edu/education/resources/current-students/coursework-plans.html>. Doctoral students will take courses in assessment, RMS, and dissertation research. Students are also required to take courses in related studies or a cognate field. The minimum credit requirement for the program is 90-quarter hours.

Suggested Course Sequencing

Note: The recommended sequence for the statistics courses is as follows:

1. RMS 4910 or equivalent (offered Fall quarter, generally also in Summer)
2. RMS 4911, RMS 49120 (offered Fall & Winter)
3. RMS 4913 (offered Spring quarter)
4. RMS 4914, RMS 4915 (offered alternate years)
5. RMS 4916 (offered alternate years)

For measurement courses, the recommended sequence is:

1. RMS 4921 (offered Fall)
2. RMS 4922 (offered Winter every second year), RMS 4929 (offered occasionally)

For research courses, the recommended sequence is:

1. RMS 4930, RMS 4931, RMS 4941
2. RMS 4942 (offered annually), RMS 4959 (offered periodically)

Waived Course

If it is appropriate to waive a course, the course credit hours must still be utilized for another course. **A waived course does not mean a reduction in credit hours required.** The student's advisor must complete the appropriate form (available at <http://www.du.edu/education/resources/current-students/forms.html>) indicating the course waived and the course designated as the substitute for the waived course. This must be done in the **first quarter** of enrollment. It is the student's responsibility to ensure that the form is submitted to OAS along with the coursework plan.

Waiver Process for Required Doctoral Research Courses

You **may** be able to waive a course **IF**

- You have taken a similar course at graduate level within 5 years with a grade of B or better.

OR

- You can demonstrate content knowledge through coursework or work experience.



Take the syllabus from the comparable course and any other relevant material to the **instructor of the course you want to waive** for that faculty member to review—e.g., contact the RMS program chair to identify who the instructor is (for 2011-2012 Kathy Green for RMS 4910, 4920, and 4930 and Nick Cutforth for RMS 4951).



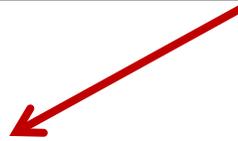
If approved, complete a waiver form with signatures of the **instructor of the course you want to waive** and your advisor.



Student files waiver with OAS.



If **not** approved, you may elect to attempt to test out of the course by taking a written test on the course content. If you score above 80%, you will not be required to take the course. You may **retake** the test **once**.



If you do not pass the test on the first or second attempt, you must register for and take the course.



If you pass the test, file an email notice from the course instructor saying you have tested out with OAS---*student files email notice with OAS.*

Test-Out Exams

A student may attempt to test-out of the following required courses:

RMS 4910 Introductory Statistics	5 credit hrs
RMS 4920 Educational Measurement	3 credit hrs
RMS 4930 Empirical Research Methods	3 credit hrs
RMS 4951 Introduction to Qualitative Research	4 credit hrs

The credit hours associated with the class you successfully test out of MUST be utilized for other, more advanced research courses. Please note that you are still required to complete at least 20 hours of research credits [covering the 17 introductory credit hours, a minimum of 8 intermediate credit hours, and a minimum of 3 advanced level credit hours]. You should consult with the instructor of the course you wish to test out of if you have any questions or need advice about whether or not you should take the course or test out.

Exams are scheduled on a case-by-case basis. All exams are closed book and no notes, materials, or other persons may be used or consulted during the exam.

Waiver Process for Other Doctoral Courses

You may wish to waive courses that are required by your program that you have taken in prior coursework or for which you have content knowledge through work experience. The process to waive courses other than required research courses is: First, consult your advisor to discuss courses you think you can waive. Your advisor will direct you to the instructor of the course you wish to waive or waive the course him/herself depending on program protocols. Second, you will consult with the instructor of the course you wish to waive if advised to do so, bringing the syllabi from a course you think is comparable or other relevant materials. If that faculty member agrees that you can waive the course, complete a waiver form signed by the instructor of the course you wish to waive and signed by your advisor. Give the waiver form to your advisor and keep a copy for yourself. You will indicate on your coursework plan that the course was waived. It is the student's responsibility to ensure the waiver form and coursework plan are both filed with OAS. OAS will retain the waiver form along with the updated coursework plan. If the instructor of the course you wish to waive does not agree that you can waive the course, you must register for the course.

Doctoral Comprehensive Examination

Purpose

The purpose of the Ph.D. comprehensive examination is to allow students to demonstrate ability to integrate the information and knowledge of research, measurement, and statistical theory and practice acquired during the degree program. Registration deadlines are on the MCE website.

Format

The test will be taken over a two-day time period with a different set of questions for each day. You are expected to organize your writing to give equal time to each question and to include time to proofread your answers. Some questions will be required and there will be some choice among others.

Evaluation Criteria

Accuracy in addressing the questions

In writing your responses to the question it is important to address the questions that are asked, without omitting parts of a question and without answering questions that were not asked.

Skill in defining issues

Each of the questions presented will relate to a particular problem area in Research Methods and Statistics. In order to give focus to your response you must be able to identify the particular issue or issues you are addressing.

Clarity in stating your position

While few questions can be answered by a simple yes or no as an expert in Research Methods and Statistics you are often required to take what seems to be the best and or most responsible position in terms of the evidence you have available at that time. In writing your responses in this examination ask yourself if a reader is able to identify clearly and directly the point of view you are developing.

Competence in applying information

To take a position on an issue is more than to repeat your own biases. You need to provide evidence in the form of bibliographic references specific data and quotations (direct or indirect) from authorities to substantiate the points you make. As a scholar in the field you are expected to be able to demonstrate that your opinions are well informed.

Clarity in writing

At this level of study you should be able to express yourself in clear and direct prose. Are you developing your responses logically and coherently? Poorly stated and illogically presented responses obscure rather than illuminate. Can a reader follow the structure of your argument? Do you use correct grammar construction and form?

Overall adequacy

Do you address the issues, reveal insight into problems, and document your position adequately?

Examples of Comprehensive Exam Questions for Doctoral Students

1. Differentiate among experimental, quasi-experimental, and correlational research designs in terms of control of extraneous variables and the validity of drawing causal inferences. Illustrate each design with an example.
2. Show how the internal consistency reliability coefficient (e.g., Cronbach's alpha) is derived from the assumptions of true-score theory.

3. Compare and contrast multiple regression, canonical correlation, ANCOVA, and factor analysis in relation to the following:
 - a. Type of research question(s) appropriately addressed by each technique
 - b. Numbers and types of variables appropriate for the technique
 - c. Important assumptions (if any)
 - d. Important mathematical similarities and differences

Doctoral Dissertation Policies

Completion of a project of original research leading to the dissertation is a major requirement of the doctoral program. The MCE determines the amount of credit allowed for research and work on the dissertation. Specific guidelines and instructions for the dissertation can be found at <http://www.du.edu/learn/graduates/studentresources.html> under Policies and Forms, Graduation Information, where you will find step-by-step instructions on how to submit the thesis/dissertation.

Students must pass their comprehensive exam prior to defending their dissertation proposal.

In addition, students should refer to the MCE's *Completing the Doctoral Dissertation: Guidelines for Students* available on the MCE website at:

<http://www.du.edu/education/resources/current-students/dissertations/index.html>

Once the student has completed successfully all required courses and the required comprehensive exam, a student must follow the MCE Dissertation Credit Policy and DU Continuous Enrollment Policies.

MCE Dissertation Credit Policy

Dissertation credits are reserved for work on the dissertation, which generally occurs after a student has completed all required courses and after successful completion of the required comprehensive exam. In some programs, however, a student may be under the direct supervision of a faculty member and begin preliminary work on the dissertation. A student may register for dissertation credits before completing and passing the comprehensive exam under the following conditions: 1) if the student's Dissertation Advisor agrees to work directly with the student on a regular basis throughout the quarter in which the student is registering for dissertation credit; and 2) if the student is prepared and able to dedicate substantial work to dissertation planning and preparation.

To conduct preliminary dissertation work, the student must have the support of the dissertation advisor. The dissertation credit form can be obtained from the Morgridge College of Education's Office of Academic Services and must be signed by the student's advisor. **The student must register for dissertation credits during the first week of class of the quarter in which the work will be conducted.**

The policy regarding preliminary dissertation work is as follows:

- A student may register for no more than 50% of the minimum number of dissertation credits required by his/her program prior to the completion of all course work and comprehensive exams. Dissertation credit, as with any credits, will not be refunded if the student does not successfully complete his/her dissertation, other required courses, or qualifying or comprehensive exams.
- Once the student has completed successfully all required courses and the required comprehensive exam, the student must register for dissertation credits. The faculty support students in the dissertation process by providing advising during this phase of the Ph.D. It is the expectation of the faculty that each student will successfully complete the required dissertation with quality work.

In order to encourage the completion of the dissertation, the policy requiring dissertation credits is as follows:

A student is required to remain continuously registered for dissertation credit at the minimum rate of one credit per quarter (Academic Year of Fall, Winter, and Spring quarters), until the student has completed the minimum necessary number of dissertation hours required by the student's program AND until a successful dissertation defense has occurred. Therefore, depending on the time a student takes to successfully complete the dissertation, registration for additional dissertation credits may be necessary beyond the required minimum.

University Continuous Enrollment Policy

All graduate degree-seeking students must be in active status and continuously enrolled. Enrollment may consist of registration for courses, thesis, or dissertation credits, or Continuous Enrollment registration. The University Continuous Enrollment Policy is ideal for students who need to defer loan repayment while completing the dissertation, though you must consult with the appropriate DU Financial Aid Office for more specific information.

Keep in mind you must also register for one credit hour of dissertation research (RMS 5995) each quarter until you graduate per the MCE Dissertation Credit Policy (noted above). If a student is on a full-time, year-long internship required by your program, this generally applies to Counseling Psychology and Child, Family, and School Psychology students only, please see your program handbook for specific instructions on meeting MCE and DU requirements.

If a student is registering for RMS 5995 for less than four (4) credits in a given quarter AND you are attempting to defer student loan repayments, the University Continuous Enrollment Policy should be utilized in addition to the MCE Dissertation Credit Policy. You are advised to always contact the DU Office of Financial Aid to clarify any financial aid requirements. The MCE does not provide financial aid policy interpretation so please consult the appropriate office for support on any financial aid policy.

To register for University Continuous Enrollment, a form must be completed and approved by the Morgridge College of Education, who will submit it to the Associate Provost for Graduate Studies for final approval.

For the complete DU Graduate Studies Continuous Enrollment Policy, please go to:
http://www.du.edu/learn/graduates/grad_policies_procedures_11-12.pdf.

For the University Continuous Enrollment form and instructions, please go to:
http://www.du.edu/media/documents/graduates/continuous_enrollment.pdf

Please note that completing the University Continuous Enrollment form DOES NOT register you for continuous enrollment. Permission to enroll for Continuous Enrollment is granted for one academic year beginning in the fall quarter. Students requiring Continuous Enrollment after fall quarter registration must complete and submit a new form prior to the beginning of the fall quarter of the subsequent academic year. Continuous Enrollment permission is granted for one (1) full academic year.

REGISTRATION must be completed QUARTERLY. Students are responsible to register for Continuous Enrollment each quarter, and for payment of the \$50.00 registration fee and the associated technology fee, \$4 per credit hour. Students should register for CENR 5600 (Doctoral, 8 credit hours). Doctoral students working on a dissertation CENR 5600 registrations will confer loan eligibility or loan deferment if the student is eligible to receive financial aid. Students with an approved time extension for completion of their degree program, but who are no longer eligible for Financial Aid because they are past the aid eligibility time limit (10 years Doctoral) register for: CENR 5700 (Doctoral Level, Non Financial Aid Eligible, 0 credit hours). CENR 5700 registrations do not confer loan eligibility or loan deferment.

Some examples of how to use these two policies:

1. If you are not concerned about loan repayment issues or not currently receiving some form of financial aid, you may only need to register for the MCE Dissertation Credit Policy. Please consult the DU Office of Financial Aid for specific requirements.
2. If you are receiving some form of financial aid and/or you need to defer loan repayment while you are working on your dissertation, the University Continuous Enrollment Policy would be necessary in addition to the MCE Dissertation Credit Policy. Please consult the DU Office of Financial Aid for specific requirements.

Student policy for booking study and meeting spaces

Student Policy for Booking Study and Meeting Spaces

Katherine A. Ruffatto Hall (KRH) is a state of the art learning space. It has been designed to facilitate all forms of learning. Within the building there are several large state of the art

classrooms and there are many smaller spaces that are available for students to use for individual study and/or small group work. The Morgridge College of Education employs a computerized room scheduling system. This system, R-25, is open for students to book the following spaces for school related activities:

- 124 Ruffato Hall (turret room East – Capacity 6)
- 134 Ruffato Hall (turret room West – Capacity 15)
- 203 Ruffato Hall (small conference room – Capacity 8)
- 206 Ruffato Hall (turret room East – Capacity 14)
- 234 Ruffato Hall (turret room West – Capacity 12)
- 334 Ruffato Hall (turret room West – Capacity 12)

Larger rooms are used heavily by faculty for classes, faculty meetings, and dissertation/thesis defenses and are not available for student scheduling. If you are interested in scheduling a room for studying or to meet with a small group [please use this link](#). Once you are on the page, log on using your WebCentral user name and password. It is very important that you fill out every field within the form or the system will refuse your request. Although this appears to be a completely automated system it does require human management, as a result requests are not processed immediately so please plan ahead. You can find instructions for R25 completion at [the bottom of this page](#).

Once you have requested a room you will receive an email stating the request has been processed - this is NOT the confirmation. The confirmation will come in a separate e-mail message. If you have to cancel a reservation you will need to work with Julie Collier or James Conyers directly as the cancellation cannot be completed online.

We are all fortunate to work and learn in such a lovely and versatile space. Please keep in mind that if you use a room it is your responsibility to place it in its original configuration before you leave. This will ensure that the next user will have the same experience that you had. All classrooms have layout diagrams posted within the room.

PART III: PROGRAM, COLLEGE, and UNIVERSITY OFFICES, PERSONNEL, AND RESOURCES

Student Associations

Graduate Student Association Council (GSAC)

The mission of this organization is to represent and to serve all graduate students at the University of Denver. This shall be accomplished by soliciting the views of graduate students and by representing those views in University-wide committees and Board of Trustees meetings. GSAC will continually strive towards creating a stimulating and nourishing environment for graduate students at the academic, social and philanthropic levels.

College of Education Student Association (COESA)

The College of Education Student Association (COESA) promotes unity of program support in the college and augments personal and professional development for graduate students. COESA represents students in all policy-making activities affecting student interests and provides students studying in the college an opportunity to engage in collegial and social relationships with faculty, peers and experts in the field.

Research Methods and Statistics Student Association (RMSSA)

The RMSSA's mission is to serve students enrolled in the RMS program at MCE. RMSSA shall:

- A. Represent RMS students in all policy-making activities affecting program and student interests.
- B. Provide students studying in the RMS program at the Morgridge College of Education (MCE) an opportunity to engage in the collegial and social relationships with faculty, peers, and experts in the field.
- C. Encourage and promote professional, intellectual, and social interaction between students and faculty within the RMS program
- D. Provide career assistance and mentorship to current RMS students and alumni.
- E. Enhance student educational experience through supporting research and conference activities
- F. Represent the Research Methods and Statistics program and student on the College of Education Student Association and the Graduate Student Association Council (GSAC).

There shall be two types of membership: Membership shall be through election, where students enrolled in the RMS program at the Morgridge College of Education are voting members and may hold office; Non-voting members: RMS Alumni and faculty are non-voting members and may not hold office.

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PART IV: ETHICAL CODES AND PROFESSIONAL STANDARDS

The University Honor Code governs all students and faculty at the University of Denver. In addition, MCE students are expected to adhere to the academic and professional expectations and standards of professional associations. Failure to comply with these expectations may be construed as unprofessional behavior and can result in dismissal from the program.

Part V: PROFESSIONAL ASSOCIATIONS

All RMS students are encouraged to join at least one professional association. Membership in these organizations provides the student with an opportunity to become familiar with, begin networking, and become part of a professional community. The following organizations are suggestions; there are many others for students to consider.

- American Educational Research Association (AERA): also join divisions and SIGs (Special Interest Groups) www.aera.net
- American Psychological Association (APA) www.apa.org
- American Evaluation Association (AEA) www.eval.org
- National Council on Measurement in Education (NCME) www.ncme.org

Part VI: STYLE GUIDE, COMMUNICATION CHANNELS, TECHNOLOGY

APA Requirements

The Morgridge College of Education requires that students use *The Publication Manual of the American Psychological Association* (currently in its 6th edition) when writing research papers. The APA guidelines set forth rules that ensure clear and consistent presentation of written material. Editorial style concerns uniform use of such elements as:

- punctuation and abbreviations
- construction of tables
- selection of headings
- citation of references
- presentation of statistics, along with
- other elements that are a part of every manuscript

It is highly recommended that all students purchase *The Publication Manual of the American Psychological Association* to ensure that papers submitted conform to APA guidelines. The DU Bookstore carries the APA Manual, and additional information is available online.

<http://www.apastyle.org/manual/index.aspx>.

Laptops

It is strongly recommended that students invest in a quality laptop. Our campus offers a quality mobile learning environment, with more than 24,000 Internet connections located across campus. The University of Denver's wireless network is designed to be a convenient supplement to the wired network for general functions including web browsing, email, and

printing to public printers. Wireless access points located in many areas of campus allow suitably configured computers equipped with wireless network cards to make wireless connections to the Internet. For recommended specs on laptops, visit the DU Bookstore website.

Computer Labs and Technology Resources

A computer lab is available for Morgridge College of Education students on the second floor of Ruffatto Hall. Throughout Ruffatto Hall, there are large monitors for use by students working in groups or individually; a VGA cable is needed in order to connect to these monitors.

Computer lab hours vary but normally range from 8:00 a.m. to 9:00 p.m. Monday through Thursday and from 8:00 a.m. to 4:30 p.m. on Fridays. Weekend hours may be available, please check the schedule. Labs are closed on holidays.

Software Installed in Computer Lab

The Microsoft Office Suite consisting of Access, Excel, FrontPage, Internet Explorer, PowerPoint, Publisher, and Word is on all lab computers in both buildings. In addition, SPSS, Mozilla, Adobe Acrobat Reader, and Windows Media Player are installed in both labs along with many Morgridge College of Education course-specific software titles. Quantitative Research Methods course software is also available. For questions about specific software titles please call 303-871-2789 for information.

Technology Support and Services

The computer lab in Katherine A. Ruffatto Hall is located in Room 210. Generally, hours are Monday through Thursday 8:00 a.m.- 9:00 p.m., Fridays 8:00 a.m. - 4:30 p.m., closed on weekends and holidays. The Penrose Library computer lab has extended evening and weekend hours for your convenience.

Software Installed in Computer Lab

Microsoft Office Suite 2007 which includes Access, Excel, FrontPage, Internet Explorer, PowerPoint, Publisher and Word are on all lab computers in the lab. In addition, SPSS, Mozilla, Adobe Acrobat Reader, and Windows Media Player are installed along with many Morgridge College of Education course-specific software titles. For questions about specific software titles, please call 303-871-2789 for information. Instructors requesting installation or purchase of a specific software title should also call to arrange for class-specific software to be purchased and installed.

The technology staff are housed in the Katherine A. Ruffatto building and are available to provide technical help in the computer lab and classrooms Monday through Friday from 8 a.m. to 4:30 p.m. Call 303-871-3222. Students and faculty may also request assistance from the UTS Helpdesk by calling 303-871-4700.

Student Training

The University Technology Services (UTS) offers [various training and events](#) to accommodate the specific needs of DU students. Their goal is to help students become familiar with various software applications, the University Internet, user login and email use, and course resources such as Blackboard. Courses are available free of charge to all students who have a DU ID number. The DU Discoveries program provides setup assistance to entering students.

Computer and Software Purchases

Academic discounts are available for all DU students when purchasing a new computer from select retailers. The University has formed alliances with several computer manufacturers. Visit the [Laptops and Learning Page](#) for more information.

DU students may also buy computer software at a substantial educational discount from the DU bookstore. Please visit the [Bookstore web site](#) or visit the Bookstore in the Driscoll Center for information about software titles and pricing.

Digital Cameras, Camcorders, Transcribers and Laptop Computers

The Morgridge College of Education provides cameras and transcription machines for students to use in order to complete requirements of various courses. This equipment can be checked out from the Technology Coordinator. There are a limited number of laptop computers which Morgridge College of Education students may also check out for limited time periods. Laptop computers are checked out for no longer than 1 week at a time. Because of the large number of students needing the cameras and transcription machines check out time is limited to 1 or 2 days at a time. Often students check out the cameras, do their recording, and return the camera within 2 or 3 hours so that the equipment is available for other students. In order to check out this equipment, your DU identification number, email, and phone number are required.

VII: RMS Course Descriptions

Please Note: The University of Denver Registrar's website contains the official and most current course descriptions. Available at: <http://www.du.edu/registrar/> - Courses and Schedules, Course Descriptions

Subj	Crse #	Title	Crdt Hrs	Course Description
RMS	4900	Education Research & Measurement	4	This course is intended for Master's degree students in the College of Education. Quantitative research designs, empirical methods of data collection and interpretation, and measurement issues in research are examined.
RMS	4910	Introductory Statistics	5	This beginning statistics course examines use and interpretation of statistics in educational and human services research, including descriptive and inferential techniques.
RMS	4911	Correlation & Regression	4	This course focuses on the study of correlational and multiple regression research designs and their application to educational and social science problems.
RMS	4912	Analysis of Variance	5	Conceptual and applied analyses of one-way through factorial nested analysis of variance designs and multivariate analysis of variance are presented.
RMS	4913	Multivariate Analysis	5	Conceptual and applied analyses of common multivariate statistical techniques used in research in social sciences are presented as are assumptions and limitations of techniques and interpretation of results. Prerequisites: RMS 4910.
RMS	4914	Structural Equation Modeling	5	This course covers major applications of and issues related to covariance structure modeling, specifically confirmatory factor analysis and latent variable path modeling; types of research applications for which covariance structure modeling analyses are appropriate. Prerequisite: course in multiple regression analysis. Recommended prerequisite: background in multivariate analysis, factor analysis and psychometric theory.
RMS	4915	Hierarchical Linear Modeling	4	This course introduces models that extend multiple regression to analysis of nested data structures common in education and other social sciences. Application of these methods to various forms of multilevel data, including repeated measure (growth trajectory) data is emphasized. Prerequisite: RMS 4952
RMS	4916	Latent Growth Curve Modeling	4	This course covers advanced issues in longitudinal data analysis using structural equation modeling and hierarchical linear modeling with latent variables. It involves both conceptual development and practical implementation of longitudinal data analysis. This course is intended to be a hands-on approach to working with data and addressing research

				questions that can be best answered by longitudinal data. The prerequisites are Structural Equation Modeling (RMS 4912) and Hierarchical Linear Modeling (RMS 4913).
RMS	4917	Computer Application in Social Science Research	3	This course focuses on use of statistical software and other appropriate software programs in the analysis of quantitative data.
RMS	4919	Topics in Statistics	1 to 5	Topics vary by quarter, but may include log-linear analysis, factor analysis, or missing data analysis.
RMS	4920	Educational Measurement	3	This course examines the meaning, characteristics, and processes of educational measurement and evaluation. Development and interpretation of both standardized and informal tests are considered.
RMS	4921	Psychometric Theory	3	This course examines major psychometric theories (e.g., classical, item response) as related to reliability, generalizability, validity, and item analysis methods.
RMS	4922	Item Response Theory	3	Theory and methods for the educational and psychological measurement of latent variables using item response theory are covered in this course.
RMS	4929	Topics in Psychometrics	1 to 3	Topics vary, but include large scale testing, computer applications of item response theory, affective measure construction, generalizability theory, additive conjoint measurement, and standard testing.
RMS	4930	Empirical Research Methods	3	This course provides in depth study of empirical research methods involved in experimental, quasi-experimental, correlational, and single-subject designs.
RMS	4931	Survey and Design Analysis	3	Survey techniques, needs assessment, item construction, sampling, maximizing response rates and data analysis; survey construction and data analysis are required.
RMS	4932	Meta-Analysis Social Sci Res	2	This course examines meta analytic techniques in the social sciences. Included are discussions of review of critical data bases, coverage of all major methods of data collection and analysis, and coverage of how best to present meta analytic findings for publication.
RMS	4939	Topics in Quantitative Research	1-5	Topics vary, but include minimization as an alternative to randomization, propensity score modeling as an alternative to experimental control, and analysis of data from single-subject designs.

		Methods		
RMS	4940	St Fnds of Research in So Scs	3	This introductory course on epistemology and research Includes discussion of identification and development of problems for research; introduction to basic quantitative and qualitative methods of conducting research in social science settings, ethnographic, and criticism methods.
RMS	4941	Introduction to Qualitative Research	4	This introductory level course introduces students to the philosophical underpinnings, history, and key elements of five qualitative approaches: narrative research, phenomenology, grounded theory, ethnography, and case study.
RMS	4942	Qualitative Data Collection and Analysis	4	In this intermediate level qualitative research course students will learn about design, purposeful sampling, field work, observational approaches, and interviews, with special attention directed to the skills and competencies needed to gather and analyze high quality data.
RMS	4943	Computer Applications in Qualitative Research	3	Review of assumptions of qualitative designs, types of qualitative approaches and current data-analysis techniques; computer software to analyze qualitative data.
RMS	4944	Action Research	3	Definition of action research, whether it improves classroom practice, methods of conducting, strengths and weaknesses; use to improve specific aspects of educational practice, to become more reflective practitioners.
RMS	4945	Community-Based Research	4	This class will introduce the emerging philosophical and methodological issues that arise when university faculty students collaborate on research with community-based organizations.
RMS	4946	Ethnographic Research	4	This course introduces exemplary ethnographic studies and consideration of implications for education, and considers the types of questions asked by ethnographers and methods they use, particularly observation and interviewing. Students also undertake a mini-ethnography to consider theory, techniques, and practice of ethnographic inquiry.
RMS	4947	Arts-Based Research	3	In this course students explore the ground upon which arts-based research is built and become acquainted with salient issues regarding this kind of research. We practice

				interviewing, observations and a few arts-based practices.
RMS	4949	Topics in Qualitative Research	1-5	This seminar builds on the content of other qualitative research courses offered in the RMS program and meets the students where they are on their dissertation journey; thus learning opportunities will be tailored to individual needs as far as possible. Assignments will focus on the issues pertinent to the design of dissertation proposals and writing, including ethical issues and IRB preparation, theoretical/conceptual framework, literature review, methodology, data collection and analysis strategies, and various forms of representation.
RMS	4951	Mixed Method Research Design	4	This course is designed as a fundamental exploration of mixed model and mixed method approaches. Students design mixed model and mixed method research studies with a particular emphasis on multi-site and longitudinal designs that are especially suited to educational issues. Students learn analysis approaches that incorporate previously learned quantitative and qualitative skills, and apply these in practice problem examples.
RMS	4952	Research Ethics	1	This course introduces ethical theory and a selection of current issues in research ethics.
RMS	4953	Topics in Data Management	1 to 3	This is a preparatory course emphasizing the manipulation and analysis of data in electronic form.
RMS	4954	Grant Writing	3	This course provides a focused overview of grant writing for educators. It examines the development of reference tools (paper, electronic, and online), websites, structuring, and writing funding requests, community collaboration and partnerships, project budgeting, management, evaluation, sustainability, and reporting activities.
RMS	4959	Topics in Research Design	1 to 5	Topics vary, but include single subject design issues, minimization as an alternative to randomization, advances in quasi-experimental design.
RMS	4960	Program Evaluation Theory	3 to 4	This course reviews theories of program evaluation and current trends in evaluation.
RMS	4961	Program Development & Eval	3	This course focuses on the practice of program development and evaluation in school, business, or community agency settings. Both qualitative and quantitative methods of program evaluation are discussed. Students have the opportunity to focus on evaluation of a specific program.

RMS	4962	Program Development & Assessment	3	This course focuses on how student affairs administrators conduct student outcomes assessment, evaluate program development, and monitor program and division budgets.
RMS	4969	Topics in Program Evaluation	1-5	Topics vary, but include advocacy and policy change, assessment in higher education, multi-level evaluation, cost effectiveness analysis, data visualization and reporting, assessment in distance education, and evaluation in the arts and culture.
RMS	4980	Practicum in Research	1 to 5	This course provides a supervised experience in design and implementation of an empirical research or evaluation study. Organization of research proposals, completion of human subjects applications, collection, and analysis of data are emphasized. Students are also expected to prepare a written report of their project which is suitable for professional presentation or publication.
RMS	4981	Community-Based Research Practicum	1 to 5	Students provide community-based research assistance to a community partner (non-profit, school, community based organization, etc). Student researchers are supervised by DU faculty. This course is an excellent opportunity to match the student's research expertise with the real needs of community partners.
RMS	4991	MA Independent Study	1 to 17	This course allows Masters students in RMS to study a topic area independently in conjunction with a cooperating faculty member.
RMS	4992	MA Directed Study	1 to 10	This course provides Masters students a supervised experience in systematically studying a topic area of choice or working on a research project of interest.
RMS	4995	Research - M.A. Thesis	1 to 17	This course is for Masters students in RMS whose program requires completion of a Master's thesis.
RMS	5991	PhD Independent Study	1 to 17	This course allows Ph.D. students in RMS to study a topic area independently in conjunction with a cooperating faculty member.
RMS	5992	PhD Directed Study	1 to 10	This course provides doctoral students a supervised experience in systematically studying a topic area of choice or working on a research project of interest.
RMS	5995	Dissertation Research	1 to 20	This course is for Ph.D. students in RMS who are engaged in completing their doctoral dissertation.

APPENDIX A: RMS Master's Course Work Plan (2012-2013)

MORGRIDGE COLLEGE OF EDUCATION
 Research Methods and Statistics - MA
 Course Work Plan 2012-2013

Student: _____ ID #: _____

Phone #: _____ Email: _____

I. Morgridge College of Education Requirements (required)	Course #	Expected Qtr. Of Completion	Credit Hours
Educational Measurement (or Psychometric Theory)	RMS 4920 (or RMS 4921)		3
II. Program Requirements			
A. Research Design			
Survey Research Methods	RMS 4931		3
Empirical Research Methods	RMS 4930		3
Research Ethics	RMS 4952		1
Meta Analysis in Social Sciences Research	RMS 4932		2
Introduction to Qualitative Research	RMS 4941		4
B. Statistics			
Introductory Statistics	RMS 4910		5
Correlation Regression (or PSYC 4300)	RMS 4911		4
C. Evaluation (6 credits required, *required)			
*Program Evaluation Theory	RMS 4960		3
<i>(Choose one of the following)</i>			
Program Development and Evaluation	CFSP 4363		3
International Project Analysis	INTS 4333		3
Cost Benefit Analysis	PPOL 4500		4
School Admin: Program Dev and Evaluation or	ADMN 4820		3
Program Development and Evaluation	CNP 4730		3
Program Development and Assessment	HED 4262		3
D. Practicum			
Practicum in Program Evaluation	RMS 4901		3
E. Cognate (Minimum 5 hours)			
III. Thesis Option (Minimum 10 hours)	RMS 4995		

Summary of Degree Requirements	Credits Required (does not include courses waived)	Credits Transferred in	Credits Completed
I. Morgridge College of Education Requirements	3		
II. Program Requirements			
A. Research Design	13		
B. Statistics	9		
C. Evaluation	6		
D. Evaluation Practicum	3		
E. Cognate	Minimum 5		
III. Thesis Option	10-15		
Total	Minimum 45 hours		

Student's Signature _____

Date: _____

Advisor's Signature _____

Date: _____

APPENDIX B: RMS Doctoral Course Work Plan (2012-2013)

**Morgridge College of Education
Research Methods and Statistics – Ph.D.
Course Work Plan 2012-2013**

Student: _____

Student #: _____

Phone #: _____

E-mail: _____

I. Morgridge College of Education Requirements	Course #	Expected Qtr. of Completion	Credit Hours
A. Research			
Empirical Research Methods	RMS 4930		3
Introduction to Qualitative Research	RMS 4941		4
Dissertation Research (Minimum 10 credits, must register for at least 1 hr per Fall, Winter & Spring after most coursework is completed until Graduation)	RMS 5995		
II. Program Requirements			
	Course #	Expected Qtr. of Completion	Credit Hours
A. Assessment			
Assessment for Non-psychologists	CFSP 4000		2
B. Measurement (* optional)			
Psychometric Theory	RMS 4921		3
Item Response Theory	RMS 4922		3
Meta Analysis in Social Sciences Research	RMS 4932		2
C. Research Methods (* optional)			
*Structural Foundations of Research in Social Sciences	RMS 4940		3
Qualitative Data Collection and Analysis	RMS 4942		4
Program Evaluation Theory	RMS 4960		3
Mixed Method Research Design	RMS 4951		3
Research Ethics	RMS 4952		1
<i>(choose at least one of the following)</i>			
*Topics in Research Design	RMS 4959		
*Arts-Based Research	RMS 4947		3
*Ethnographic Research	RMS 4946		3
*Survey Research Methods	RMS 4931		3
*Single Case Research Design	CFSP 4364		3
*Community Based Research	RMS 4945		3

D. Statistics	Course #	Expected Qtr. of Completion	Credit Hours
Correlation & Regression (or PSYC 4300)	RMS 4911		4
Analysis of Variance (or PSYC 4330)	RMS 4912		5
Multivariate Analysis	RMS 4913		5
Hierarchical Linear Modeling	RMS 4915		4
Structural Equation Modeling (or PSYC 4290)	RMS 4914		5
Latent Growth Curve Modeling	RMS 4916		4
*Topics in Statistics	RMS 4919		
III. Practicum			
Research Practicum	RMS 4901		3
IV. Cognate (Minimum 20 credit hours)	Course #	Expected Date of Completion	Credit Hours

Summary of Degree Requirements	Credits Required (does not include courses waived)	Credits Transferred in	Credits Completed
I. Morgridge College of Education Requirements			
A. Research	17-22		
II. Program Requirements			
A. Assessment	2		
B. Measurement	8		
C. Research Methods	14		
D. Statistics	27		
III. Practicum	3		
IV. Cognate	20		
Total	Minimum 90 hours		

Student's Signature _____

Date: _____

Advisor's Signature _____

Date: _____

APPENDIX C: RMS Master's Student Annual Review Form

Date _____

Student Name _____

Your Course Work Advisor's Name _____

Occupation (if applicable) _____

Employment Status _____

1. a) Were you admitted on a probational basis? Yes ___ No ___
b) If "yes", have the probation conditions been met? Yes _____ No _____
c) If "no", when do you plan to do so? _____

2. a) Have you filed your Course Work Plan? Yes _____ No _____
b) Was there any change to your filed Course Work Plan in the past year?
Yes _____ No _____ (If "yes" please attach its most recent version).

3. The program requires that students conduct a research project (the research practicum) prior to graduation. Have you met your research practicum requirement?
Yes _____ No _____ Partial _____
a) If "yes" or "partial," indicate research activity in which you participated.
b) If "yes" and the research activity was presented or published, indicate where you presented or published the research, date of presentation, title of presentation using APA style.
c) If "no," indicate a plan for completing this requirement.

4. Have you taken your comprehensive examination? Yes _____ No _____
If "yes," year and quarter _____
If "no," when do you plan to take it? _____

5. Do you plan to do a Master's thesis? Yes _____ No _____
 - a. If "yes", has your thesis proposal been approved? Yes _____ No _____
 - i. If "yes," list the Chairperson and the proposed title
_____ (chair)
_____ (title)
 - b. If "no," do you have a proposal chairperson? Yes _____ No _____
 - i. If "yes," list name of chairperson and topic

_____ (chair)

_____ (topic)

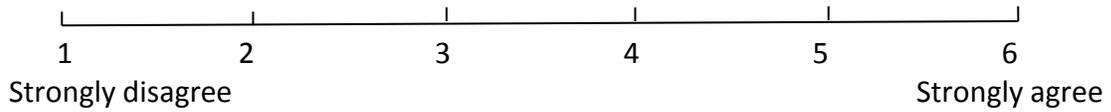
6. If you have completed your coursework and plan to do a Master's thesis, are you registered for Continuous Enrollment and Thesis credits?

Yes _____ No _____ N/A _____

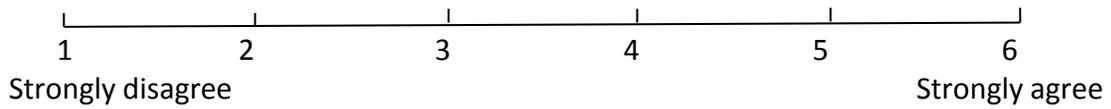
If no, please go to the MCE Office of Admissions and Enrollment Services to register.

7. If you have completed your course work and plan to do a Masters thesis, have you submitted a timeline for completing your thesis? Yes _____ No _____
8. List professional organizations of which you are a member.
9. List all presentations you have made at meetings or conventions of professional associations since entering the program - or that have been accepted for presentation or publication using APA style.
10. List all community engagement activities in which you participated during the year (e.g., program evaluation, volunteer, paid/unpaid consulting).
11. Describe your strengths as a developing research methodologist.
12. Describe areas that you find challenging and/or need to work on.
13. If appropriate list any personal and professional issues that may impact your progress in our program (i.e., job change, family changes, health, etc.)

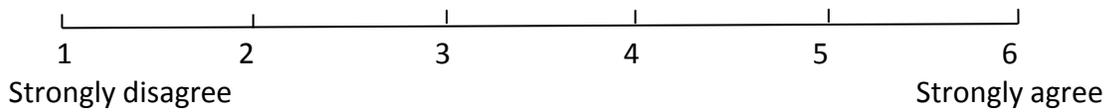
7. Attending/listening skills – listens attentively; attends to important communications



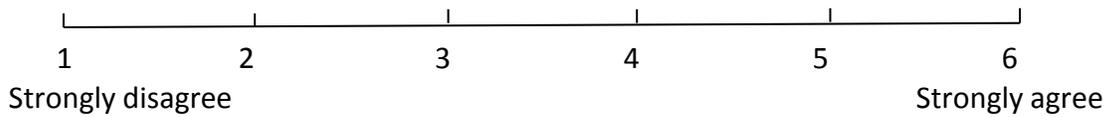
8. Interpersonal relations – relates effectively with peer students, faculty, and colleagues



9. Adaptability / flexibility – adapts effectively to demands of situation; exhibits flexibility in face of change.



10. Ethical responsibility -



APPENDIX D: RMS Doctoral Student Annual Review Form

Date _____

Student Name _____

Your Course Work Advisor's Name _____

Occupation (if applicable) _____

Employment Status _____

1. a) Were you admitted on a probational basis? Yes___ No___
b) If "yes", have the probation conditions been met? Yes_____ No_____
c) If "no", when do you plan to do so? _____

2. a) Have you filed your Course Work Plan? Yes_____ No_____
b) Was there any change to your filed Course Work Plan in the past year?
Yes_____ No_____ (If "yes" please attach its most recent version).

3. The program requires that students conduct a pre-dissertation research project (the research practicum). Have you met your pre-dissertation research practicum requirement?
Yes_____ No_____ Partial_____
a) If "yes" or "partial," indicate research activity in which you participated.
b) If "yes" and the research activity was presented or published, indicate where you presented or published the research, date of presentation, title of presentation using the APA style.
c) If "no," indicate a plan for completing this requirement.

4. Have you taken your comprehensive examination? Yes_____ No_____
If "yes," year and quarter _____
If "no," when do you plan to take it? _____

5. If you have completed your coursework, are you registered for Continuous Enrollment and Dissertation credits?
Yes_____ No_____ N/A _____
If no, please go to the MCE Office of Admissions and Enrollment Services to register.

6. Has your dissertation proposal been approved? Yes_____ No_____
If "yes," list the Chairperson and the proposed title
_____ (chair)

_____ (title)

If "no," do you have a proposal chairperson? Yes_____ No_____

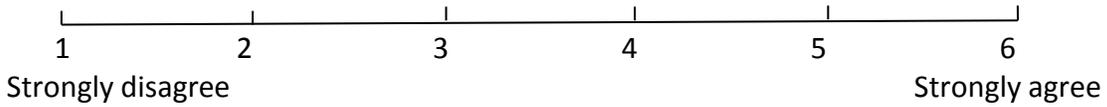
If "yes," list name of chairperson and topic

_____ (chair)

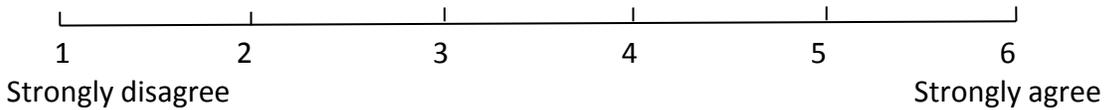
_____ (topic)

7. If you have completed your course work, have you submitted a timeline for completing your dissertation? Yes_____ No_____
8. List professional organizations of which you are a member.
9. List all presentations you have made at meetings or conventions of professional associations since entering the program - or that have been accepted for presentation or publication using APA style.
10. List all community engagement activities in which you participated during the year (e.g., program evaluation, volunteer, paid/unpaid consulting).
11. Describe your strengths as a developing research methodologist.
12. Describe areas that you find challenging and/or need to work on.
13. If appropriate list any personal and professional issues that may impact your progress in our program (i.e., job change, family changes, health, etc.)

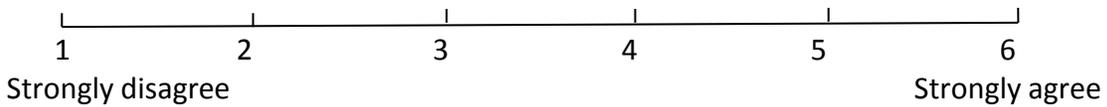
6. Written communication – expresses self in writing in a clear and organized manner



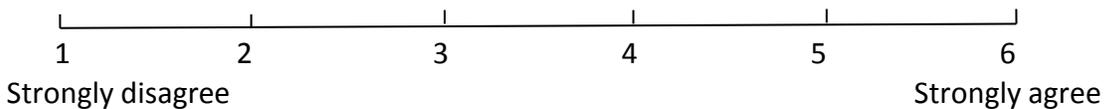
7. Attending/listening skills – listens attentively; attends to important communications



8. Interpersonal relations – relates effectively with peer students, faculty, and colleagues



9. Adaptability / flexibility – adapts effectively to demands of situation; exhibits flexibility in face of change.



10. Ethical responsibility -

