Instructor Information:

Instructor: Dr. Maria Adamuti-Trache
Phone: 817-272-2109
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Fax: 817-272-2127
E-Mail: mtrache@uta.edu
Mailbox: 19575

Office Hours: Thursdays 1:30-5pm (please call or email before coming); or by arrangement.

Course Information:

Course Title: K-16 Quantitative Research Design & Methodology
Course Number: EDAD 6304
Semester: Fall 2014
Course Location and Time: Room TH 110; Thursdays 5:30-8:20pm

Requirements: Students must attend class on Thursday nights, specifically for this course: August 21 & 28; September 4 (interviews & Welcome ELPS department); September 11 & 18; October 2, 16 & 30; November 6 & 13. Students should actively participate in Blackboard activities and discussions. For the weeks when no classes are scheduled, students are expected to conduct individual study and/or arrange one-on-one meetings with the instructor in order to discuss their research proposals.

Catalog Description

Advanced course that covers the logic of research methods and design with an emphasis on empirical and other quantitative methods, including designing, conducting, and analyzing research from multiple paradigms. Emphasis will be placed on the steps involved in the administration of a research project including the literature review, methodology, data collection and analysis, and presentation and publication in multiple media. State-of-the-art technology will be utilized.

Course Prerequisites:

No prerequisites. Students must be formally admitted into the K-16 Educational Leadership PhD program.
**Student Learning Outcomes:**

The course is designed to provide students with an overview of the research paradigms used in education as well as opportunities to apply specific research methods related to these paradigms. At the end of the course, students will demonstrate an understanding of the following aspects of contemporary social science research methodologies:

1) Research processes  
2) Library and technology resources  
3) Research ethics  
4) Advantages and disadvantages of qualitative research  
5) Advantages and disadvantages of quantitative research  
6) Sampling methods and data collection  
7) Reliability and validity  
8) Descriptive studies; Correlational studies; Causal comparative research  
9) Survey research methods  
10) Experimental and Quasi-experimental designs  
11) Scales of measurement  
12) Determining the proper usage of research design methods.

Course learning objectives will provide the tool for conducting research on issues relevant to school and post-secondary education, and will help the student explore research areas of interests and make decisions on the appropriate methods of investigation. We will focus on quantitative research design and methodologies. Teaching and learning will be approached within a K-16 (and beyond) perspective. The main goal of this course is to bring you one step closer to becoming educational researchers.

**Textbook(s) and Materials:**

**Required Text**


This textbook will be used as a central material for class discussion. Other resources will be made available, and students will be expected to search for various references to complete their assignments.

**Other course materials**


<table>
<thead>
<tr>
<th>Date</th>
<th>Weekly topic</th>
<th>Assignments</th>
<th>Readings</th>
<th>Online (in-between classes)</th>
<th>Class</th>
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</thead>
<tbody>
<tr>
<td>August 21</td>
<td>Course Introduction: Educational Research K-16 system and individual life course Doctoral program &amp; Research</td>
<td>Discuss assignments, form groups, other interview plans</td>
<td>Other readings will be provided</td>
<td></td>
<td>Introduction, course overview, course expectations, research process, first assignment (interview), academic writing</td>
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<tr>
<td>August 28</td>
<td>Planning a research study Reviewing the Literature APA Format Library Resources (guest speaker)</td>
<td>The story of an education pathway: Does personal history shape one’s research interest? (500-750w) → Due Sept 10</td>
<td>Ch. 1 &amp; 4</td>
<td>Readings questions (R1) → Aug 30-Sept 10</td>
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<tr>
<td>September 4</td>
<td>Welcome Cohort 9 NO CLASS -- meet for interviews TBA (University Club)</td>
<td>Assignment 1: Due Sept 10</td>
<td>Ch. 2 &amp; 3</td>
<td>Readings questions (R2) → Sept 11-Sept 20</td>
<td>Start discussing Assignment 2: 1. Identify research topics and questions (RQs) → Sept 11-20 2. Review literature (at least 5 references relevant to the research topic) → by Sept 30 3. Start writing Assignment 2a → by Oct 3 4. Share your research topic, get feedback, revise → Oct 23</td>
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<tr>
<td>September 11</td>
<td>Planning a research study Research process Research Ethics The IRB Process (guest speaker)</td>
<td>Assignment 2a: Due Oct 23</td>
<td>Ch. 5 &amp; 6 (selected parts)</td>
<td>Readings questions (R3) → Sept 21-Sept 30</td>
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<tr>
<td>September 18</td>
<td>Research Methods Select Statistical Techniques Quantitative Sampling Techniques Dissertation proposal (guest speaker)</td>
<td>Prep assignment 2a: Research topic; problem statement; study purpose; research questions; significance; literature review (2000w)</td>
<td>Ch. 7-9 (selected parts)</td>
<td>Readings questions (R4) → Oct 1-Oct 15</td>
<td>Lab session</td>
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<td>October 2</td>
<td>Research Methods Methods of Data Collection Large-scale databases Introduction to SPSS (lab session)</td>
<td>Assignment 2b: Prep assignment 2b: - Revise assignment 2a based on instructor’s feedback; - Research design, methods, data, ethics, (1500w)</td>
<td>Ch. 14-16 (selected parts)</td>
<td>Readings questions (R5) → Oct 16-Oct 30</td>
<td>Outline of a quantitative or qualitative research proposal Discuss research methods What is appropriate? What do you prefer?</td>
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<td>October 16</td>
<td>Quantitative Research Design Descriptive and Causal Comparative Design Correlational Design Experimental Research</td>
<td>Assignment 2b: Due Oct 23</td>
<td>Ch. 10-13 (selected parts)</td>
<td>Readings questions (R5) → Oct 16-Oct 30</td>
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<tr>
<td>October 30</td>
<td>Qualitative Research - brief review Overview Case Study Research Historical Research Dissertation proposal (guest speaker)</td>
<td>Prep assignment 2b:</td>
<td>Ch. 14-16 (selected parts)</td>
<td>Readings questions (R5) → Oct 16-Oct 30</td>
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<td>November 6</td>
<td>Present your work Discuss final assignment</td>
<td>Assemble final research proposal (3500-4000w)</td>
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<td>An online forum will be open to give you a space to discuss your research journey. Present your topic, share 1-2 journal articles; engage the class in discussion</td>
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<td>November 13</td>
<td>Present your work Discuss final assignment</td>
<td>Assignment 2b (FINAL): Due December 6</td>
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<td>Nov20-Dec3</td>
<td>Individual work – FINAL assignment</td>
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**Grade Calculation:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of final grade</th>
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<tr>
<td>Attendance/Participation in class discussions</td>
<td>10%</td>
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<tr>
<td>Five online questions/discussions (R1-R5) (September-October)</td>
<td>15%</td>
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<tr>
<td>Proposal presentation (November 6 &amp; 13)</td>
<td>10%</td>
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<tr>
<td>Assignment 1: The story of an education pathway (interview) (Sept 10)</td>
<td>15%</td>
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<tr>
<td>Assignment 2a: Proposal: Research topic/questions/framework (Oct 23)</td>
<td>30%</td>
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<tr>
<td>Assignment 2b: Final proposal (Revision &amp; Method of inquiry) (Dec 6)</td>
<td>20%</td>
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Online activities will help students with the readings, literature search, research questions.

At the end of the semester you will be given an opportunity to evaluate course contents and the quality of instruction provided.

**Email Communication:**

UTA e-mail will be considered the official means of communication between the university and students. Utilize your UTA e-mail for all communications. You are responsible if you do not receive information because you do not regularly check your UTA email.

**Attendance Policy:** Regular and prompt attendance is expected. As doctoral students, you understand the importance of participation in class discussion, including participation in Blackboard activities which continue the discussion of topics covered in class. When you miss taking part in these discussions, we lose out on hearing your ideas and you miss out on hearing ours.

**Course Late-Work Policy:** If you are unable to submit a paper the evening it is due, your paper will receive a 1-point deduction every day it is late (e.g., assignment 1 will receive maximum 9 points if received next day). Please contact the instructor to discuss any issue related to your assignment’s submission.

**Grading Policy:**

- A = 90-100
- B = 80-89
- C = 70-79
- D = 60-69
- F = 0-59

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering.

**Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships ([http://wweb.uta.edu/ses/fao](http://wweb.uta.edu/ses/fao)).
**Americans with Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA).* All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**Academic Integrity:** All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

Instructors may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents’ Rule 50101, §2.2,* suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

**Student Support Services:** UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

**Electronic Communication:** UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at [http://www.uta.edu/oit/cs/email/mavmail.php](http://www.uta.edu/oit/cs/email/mavmail.php).

**Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit [http://www.uta.edu/sfs](http://www.uta.edu/sfs).
Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Librarian to Contact: Our research librarian is
   Andy Herzog, MLS
   Reference/Instruction Librarian
   Central Library, Rm. 313
   University of Texas at Arlington
   amherzog@uta.edu
   http://libguides.uta.edu/profile.php?uid=33755
   817.272.7517

University Mission:

The mission of The University of Texas at Arlington is to pursue knowledge, truth and excellence in a student-centered academic community characterized by shared values, unity of purpose, diversity of opinion, mutual respect and social responsibility. The University is committed to lifelong learning through its academic and continuing education programs, to discovering new knowledge through research and to enhancing its position as a comprehensive educational institution with bachelor’s, master’s, doctoral and non-degree continuing education programs.

College Mission:

The mission of the UTA College of Education is to develop and deliver educational programs that ensure the highest levels of teacher, administrator, and allied health science practitioner preparation and performance. As a recognized contributor to the fields of education and allied health science, the College engages in effective teaching, quality research, and meaningful service. The College is committed to diversity and to the advancement of active teaching and learning in all educational environments and at all levels.

Core Values:

Excellence Student-Centered Environments,
Research Collaboration
Diversity Technology
Field Experiences Life-Long Learning
Conceptual Framework:

The work of the College of Education is grounded in constructivism as a theory of teaching and learning and is done in a spirit of expectation that all involved in the College of Education, whether candidate, faculty or administrator, will hold the following as important: Excellence, Student-Centered Environments, Research, Collaboration, Diversity, Technology, Field Experiences and Life-Long Learning.

Partners for the Future serves as the theme of the College of Education and epitomizes the understanding that it takes a village of partners to insure the future of education for all.

In 2011, the Library migrated its website to the University’s content management system. As a result the Library’s website address changed from http://library.uta.edu to http://www.uta.edu/library. Although the library staff instituted a series of automatic redirects, many syllabuses and online courses have deep links into the Library’s website that will no longer work.

Unfortunately a simple "find & replace" function won't solve the problem of updating these links. Instructors will need to manually locate the places in each syllabus and course webpage where they link to the Library and update the URLs (as they appear on the new site). If you need help doing this, both Center for Distance Education staff and the Subject Librarian for your area can help you.

This is a page where we have gathered many commonly used resources needed by students in online courses:

http://www.uta.edu/library/services/distance.php

The following is a list of commonly used library resources:
Library Home Page ......................... http://www.uta.edu/library
Subject Guides......................... http://libguides.uta.edu
Subject Librarians .................. http://www-test.uta.edu/library/help/subject-librarians.php
Database List.............................. http://www-test.uta.edu/library/databases/index.php
Course Reserves ...................... http://pulse.uta.edu/vwebv/enterCourseReserve.do
Library Catalog......................... http://discover.uta.edu/
E-Journals................................. http://utalink.uta.edu:9003/UTAlink/az
Connecting from Off-Campus .... http://libguides.uta.edu/offcampus
Ask A Librarian......................... http://ask.uta.edu

Finally, the subject librarian for your area can work with you to build a customized course page to support your class if you wish. For examples, visit http://libguides.uta.edu/os and http://libguides.uta.edu/policyissues. If you have any questions, please feel free to contact the Coordinator for Information Services, Suzanne Beckett, at sbeckett@uta.edu or at 817.272.0923.