Instructor Information:

Instructor: Dr. Maria Adamuti-Trache
Office: Trimble Hall #103F
E-Mail: mtrache@uta.edu
Phone: 817-272-2109
Fax: 817-272-2127
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: Spring 2016
Course Location and Time: Room TH 204; Thursdays 5:30-8:20pm

Requirements: Students must attend class on Thursday nights, specifically for this course, according to the tentative schedule. As instructor, I reserve the right to adjust the schedule in any way that serves the educational needs of the students enrolled in this course. Students should actively participate in Blackboard activities and discussions. For the weeks when no classes are scheduled, students are expected to conduct individual study, or arrange one-on-one meetings with the instructor in order to discuss their research proposals, or meet in writing groups with peers.

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**


**Tentative lecture/topic schedule** (As instructor, I reserve the right to adjust the schedule in any way that serves the educational needs of the students enrolled in this course)

<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>January 21</td>
<td><strong>Course Introduction:</strong> Educational Research K-16 system and individual life course; Doctoral program &amp; Research</td>
<td>Discuss assignments, form groups, other interview plans</td>
<td>Readings will be provided</td>
<td>Introduction, course overview, course expectations, research process, first assignment (interview), academic writing</td>
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<tr>
<td>Jan 28</td>
<td>Planning a research study; Reviewing the Literature; APA Format</td>
<td>The story of an education pathway: Does personal history shape one’s research interest? (500-750w)</td>
<td>Ch. 1 &amp; 4</td>
<td>Readings questions (R1) → Jan 28-Feb 10</td>
<td>** Additional readings</td>
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<td>Feb 4</td>
<td>NO CLASS -- meet for interviews</td>
<td>Assignment 1: Due Feb 11</td>
<td>Discuss the interview process and Assignment 1</td>
<td>No formal class → meet for interviews</td>
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<tr>
<td>Feb 11</td>
<td>Planning a research study</td>
<td>Ch. 2 &amp; 3 * readings</td>
<td>Readings questions (R2) → Feb 11-Feb 20</td>
<td>Preparing Assignment 2:</td>
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<td></td>
<td>Research process</td>
<td></td>
<td></td>
<td>1. Identify research topics and questions (RQs) → Feb 11-18</td>
<td>2. Review literature (at least 10 references relevant to the research topic)</td>
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<td></td>
<td>Research Ethics</td>
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<td>3. Start writing Assignment 2a → by Feb 25</td>
<td>** Additional readings</td>
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<tr>
<td></td>
<td>The IRB Process (guest speaker) TBA</td>
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<td>Feb 18</td>
<td><strong>Research Methods</strong></td>
<td>Ch. 5 &amp; 6 (selected parts)</td>
<td>Readings questions (R3) → Feb 21-Feb 29</td>
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<td></td>
<td>Select Statistical Techniques</td>
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<td></td>
<td>Quantitative Sampling Techniques</td>
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<td>Feb 25</td>
<td>NO CLASS - meet for group writing</td>
<td>** Prep assignment 2a: Research topic; problem statement; study purpose; research questions; significance; literature review (2000w)</td>
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<td>No formal class → meet for group writing</td>
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<tr>
<td>March 3</td>
<td>Methods of Data Collection; Large-scale databases; Introduction to SPSS (lab session)</td>
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<td>Ch. 7-9 (selected parts)</td>
<td>Lab session</td>
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<tr>
<td>March 10</td>
<td><strong>Quantitative Research Design</strong></td>
<td>Share assignment 2a with instructor and one peer: March 10</td>
<td>Ch. 10-13 (selected parts)</td>
<td>Preparing Assignment 2:</td>
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<td></td>
<td>Descriptive and Causal Com Design; Correlational Design; Experimental Research</td>
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<td>4. Share your research topic/get feedback/ revise (March 10) &amp; finalize → March 27 **Additional readings</td>
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<td>March 17</td>
<td>NO CLASS- SPRING BREAK</td>
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<td>March 24</td>
<td>SPSS (lab session)</td>
<td>Assignment 2a: Due March 27</td>
<td>Readings questions (R5) → March 21 - March 31</td>
<td>Lab session - discussion findings **Additional readings</td>
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<tr>
<td>March 31</td>
<td>NO CLASS - Readings</td>
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<td>April 7</td>
<td>Qualitative Research - brief review; Overview; Case Study Research; Historical Research; Dissertation proposal (guest speaker) TBA</td>
<td>** Prep assignment 2b:**</td>
<td>Ch. 14-16 (selected parts)</td>
<td>Outline of a quantitative or qualitative research proposal; Discuss research methods; What method is appropriate? What do you prefer? How would you use the ‘other’ method for research design? **Additional readings</td>
<td></td>
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<tr>
<td>April 14</td>
<td>NO CLASS - Individual and group work</td>
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<td>April 21</td>
<td>Present your work; Discuss final assignment</td>
<td>Assemble final research proposal (3500-4000w)</td>
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<td>Present your topic, share 1-2 journal articles; engage the class in discussion</td>
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<tr>
<td>April 28</td>
<td>Present your work; Discuss final assignment</td>
<td>Share assignment 2b with instructor and one peer: April 14</td>
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<tr>
<td>April 29-May 5</td>
<td>Individual work -- FINAL assignment</td>
<td>Assignment 2b (FINAL): Due May 5</td>
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Grade Calculation:

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of final grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance/Participation in class discussions</td>
<td>10%</td>
</tr>
<tr>
<td>Five online questions/discussions (R1-R5) (January-March)</td>
<td>15%</td>
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<tr>
<td>Proposal presentation (April 21 &amp; April 28)</td>
<td>10%</td>
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<tr>
<td>Assignment 1: The story of an education pathway (interview) (Feb 11)</td>
<td>15%</td>
</tr>
<tr>
<td>Assignment 2a: Proposal: Research topic/questions/framework (March 27)</td>
<td>25%</td>
</tr>
<tr>
<td>Assignment 2b: Final proposal (Revision &amp; Method of inquiry) (May 5)</td>
<td>25%</td>
</tr>
</tbody>
</table>

Online activities will help students with the readings, literature search, research questions. You will receive detailed guideline for each written assignment.

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

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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).

Attendance Policy: As graduate students, you understand the importance of participation in class discussion through Blackboard activities. Regular and prompt participation is expected. When you miss taking part in these discussions, we miss out your ideas and you miss out 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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
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<tr>
<td>B</td>
<td>80-89</td>
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<tr>
<td>C</td>
<td>70-79</td>
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<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
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</tbody>
</table>

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://www.uta.edu/aao/fao/](http://www.uta.edu/aao/fao/)).
Disability Accommodations: UT 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), The Americans with Disabilities Amendments Act (ADAAA), and Section 504 of the Rehabilitation Act. 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 disability. Students are responsible for providing the instructor with official notification in the form of a letter certified by the Office for Students with Disabilities (OSD). Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting: The Office for Students with Disabilities (OSD) www.uta.edu/disability or calling 817-272-3364. Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671.

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 or by calling the Office for Students with Disabilities at (817) 272-3364.

Title IX: The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos. For information regarding Title IX, visit www.uta.edu/titleIX.

Academic Integrity: Students enrolled all UT Arlington courses 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.

UT Arlington faculty members 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 Feedback Survey: At the end of each term, students enrolled in classes categorized as “lecture,” “seminar,” or “laboratory” shall be directed to complete an online 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.

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.

**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 http://www.uta.edu/universitycollege/resources/index.php

**The English Writing Center (411LIBR):** Hours are 9 am to 8 pm Mondays-Thursdays, 9 am to 3 pm Fridays and Noon to 5 pm Saturdays and Sundays. Walk In *Quick Hits* sessions during all open hours Mon-Thurs. Register and make appointments online at http://uta.mywconline.com. Classroom Visits, Workshops, and advanced services for graduate students and faculty are also available. Please see www.uta.edu/owl for detailed information.

**Librarian to Contact:** Our research librarian is Gretchen Trkay (http://library.uta.edu/staff/gretchen-trkay)

Reference/Instruction Librarian  
Central Library, Rm. 516, University of Texas at Arlington  
gtrkay@uta.edu  817-272-7434

**Emergency Phone Numbers:** In case of an on-campus emergency, call the UT Arlington Police Department at 817-272-3003 (non-campus phone), 2-3003 (campus phone). You may also dial 911. Non-emergency number 817-272-3381

**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

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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 sveckett@uta.edu or at 817.272.0923.