“A key point, one that we will return to again and again, is that data analysis alone does not enable researchers to achieve their main goal, namely, to answer questions. To reach that goal, researchers must concentrate on their design: it must be as sound as possible, and it must be appropriate for the questions they want answered. Though there are numerous techniques of data analysis, no technique, regardless of its elegance, sophistication, and power can save the research when the design is poor, improper, confounded, or misguided. As we have stated, and will state again, sound inferences and generalizations from a piece of research are a function of design and not statistical analysis.” (Keppel & Zedeck, 1991)

Course Description and Objectives

The major goal of this seminar is to develop a broad understanding of the major types of research designs employed in the Information Systems (IS) discipline, as well as their major issues, assumptions and considerations. The ultimate objective is to prepare doctoral students to have a solid basis to conduct their own empirical research in the future. Particular attention will be given to the research process, defining research questions, reviewing the literature, formulating a sound strategy for empirical investigation, considering and deciding of alternative methodologies and research designs, and preparing and presenting research findings.

This course has the following major objectives:
- Develop the ability to critically read and discuss IS research
- Gain an understanding of the major characteristics and issues associated with the key research designs employed in the discipline
- Provide the skills and knowledge to formulate a sound research strategy to conduct empirical research
- Gain guided, but independent, practice in the development of research proposals on topics of interest to the field
- Develop the foundations of a methodological knowledge base on which to build a research program
- Introduce students to the key methodological and design issues to be considered in IS research

Course Assessment

There are three major requirements in this course, whose grade will be weighed as noted in the next section.

Participation. This course will be run as a seminar; therefore, active participation by all students is fully expected each and every meeting. Each student is expected to arrive on time and be fully
prepared to engage in meaningful discussion of any and all readings assigned for the day. Failure to be fully prepared and engaged will have a marked negative impact on your course grade. Short of plagiarism, cheating, or other unethical behaviors, not coming to a seminar fully prepared is one of the most egregious mistakes doctoral students can make, and one that is easily avoidable. As a result, absences are strongly discouraged unless under extreme circumstances (see below for the attendance policy). Please note that being fully prepared entails more than simply reading an article and being able to recall its contents; rather, you should be able to discuss the contents of the article in relationship to the topic of the class and other assigned readings for that day (or previous meetings), give a supported opinion on the merits (or otherwise) of the reading, be able to engage in discussions with the instructor or other students, etc.

**Reading Summaries.** Each assigned reading for each week will be assigned to a member of the class (equity over the course of the semester will be the goal) to serve as a discussion leader. These assignments will be made each week at the end of class to take effect in the following week (no discussion leaders will be assigned for the first week of class). The discussion leaders will prepare a summary of their assigned articles (format to be found on our Blackboard site) and will distribute these by email no later than end of business the day prior to the scheduled class meeting. These summaries will then be used by the discussion leaders to facilitate a meaningful discussion of the important issues in their assigned paper. As such, the discussion leader will be responsible for presenting a summary of the assigned research, come to class prepared with important issues or questions to discuss about the article, etc.

**Research Proposal.** During the semester each student will work to develop a research paper or proposal on a topic of their interest, but which must be approved by the instructor prior to engaging in extensive development of the document. The topic need not be substantively related to the topics covered in the course (that is, it need not be a research design or research methods topic), but should unequivocally be of interest to the discipline. The proposal will be evaluated on its originality, sound use of theory, potential for contribution, and appropriate use of research design and methodology.

The important deadlines for this requirement are as follows (all these will be returned to you with feedback):

Week 5: Overview of the proposed research topic. This should include a discussion of the general area in which you are interested, important research streams in this area, why one or more of these merits further study, and how you are planning on contributing to the existing literature. The main goal of this submission is to ensure that this is an appropriate and fruitful selection of topic before investing any additional work.

Week 9: Conceptual portion of the proposal. This submission should include an introduction that clearly motivates the work to be conducted and states the main research questions that you intend to answer, a developed literature review and hypotheses development, and a brief outline of the intended research design (but the bulk of the submission should be about the first three elements). This submission should make it clear that, if the proposed research were to be properly conducted, it would be of interest to the field and thus publishable.
Week 13: Research design. This submission should describe how you intend to conduct your research. In particular, you should discuss your proposed research method, sources and types of data, subjects for data collection (where appropriate), any description of intended tasks or experimental designs (also where appropriate), sampling considerations, measure to be used (where those exist, include, to the extent possible, scales and evidence of psychometric properties), etc. You should also include a discussion of how this research design would allow you to answer the central research questions of your proposal.

Week 15: Final submission and presentation. You should submit your final research proposal that includes all the elements outlined above. Each student will be slotted to provide a 20 minute presentation of their work to the rest of the class (which is similar to the time you are allowed to present in a conference, so this should be good practice for that as well).

Grading Policy

The final grade in the course will be determined according to the following scale (note that grades in this course are not subject to a curve):

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90 – 100%</td>
<td>A</td>
</tr>
<tr>
<td>80 – 89.9%</td>
<td>B</td>
</tr>
</tbody>
</table>

It is expected that all participants in the seminar will have demonstrated sufficient mastery of the content in order to be awarded a grade of A or B. Any grade below B will be considered unsatisfactory work. A grade of “Incomplete” will be given only under extraordinary circumstances beyond student control. All those enrolled in the seminar should work on the assumption that all the requirements set forth in this syllabus will need to be completed during the semester.

Your final grade will be a weighted average of the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>40%</td>
</tr>
<tr>
<td>Reading Summaries</td>
<td>20%</td>
</tr>
<tr>
<td>Research Proposal</td>
<td>40%</td>
</tr>
</tbody>
</table>

Handwritten deliverables are not acceptable. It is expected that all assignments will be completed on time on the dates indicated in this syllabus. Failure to turn in any assignment (or conduct a research presentation) on time will lead to a grade of zero for that assignment. Any impropriety or unethical behavior will result in the failure of both the assignment and the course. Discussion between students regarding assignments and projects is encouraged, but final submissions should represent the unique work of each student. Any occurrences of any of the behaviors outlined in OP 34.12 will be dealt accordingly, following the procedures outlined in the relevant policies. It is wrong, and there will be consequences. Please do not do it. If you have any questions or concerns about anything you can always come talk to your instructor beforehand.
Classroom Policies

Attendance (Operating Procedure 34.04)
University policy (OP 34.04) states: “Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is expected, and the university reserves the right to deal at any time with individual cases of non-attendance. The instructor determines the effect of absences on grades consistent with university policy for excused and unexcused absences”. Excused absences will typically include: Illness requiring the student, by written doctor’s orders, to miss a regularly scheduled exam or quiz or at least one week of classes leading up to the date of an exam or quiz, university-sponsored events – professional, academic, or athletic – that require the student to miss a regularly scheduled exam / quiz or at least one week of classes leading up to the date of an exam or quiz, unexpected emergencies or immediate family death/tragedy that can be verified and/or documented, which requires the student to miss a regularly scheduled exam or quiz or at least one week of classes leading up to the date of an exam or quiz, or religious holidays (any student who intends to observe a religious holy day should make that intention known to the instructor prior to the absence). In addition to these, I will take into consideration any requests that involve a job-search or job-related absence (for example, flying out of town to interview). In all cases, some documentation to verify the reason for the absence will be required. Students will then be allowed to make-up any missing grades by means of alternative activities.

Academic Integrity / Dishonesty (Operating Procedure 34.12)
As stated in the TTU Catalog: “It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and a high standard of integrity. The attempt of students to present as their own any work that they have not honestly performed is regarded by the faculty and administration as a serious offense and renders the offenders liable to serious consequences, possibly suspension.”

Disability Accommodation (Operating Procedure 34.22)
Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor’s office hours. Please note: instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services in West Hall or call 806-742-2405.

Withdrawal Policy (Operating Procedure 34.05)
The requirements set by the university for withdrawal will be strictly followed. You should retain all documentation of courses you have dropped.

Religious Holy Day Observance (Operating Procedure 34.19)
A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.
Title IX Compliance
Texas Tech University is dedicated to providing a safe and equitable learning environment for all students. Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to The Student Resolution Center: (806) 742-SAFE (7233). The TTU Counseling Center (http://www.depts.ttu.edu/scc/) provides confidential support (806-742-3674) and the Voices of Hope Lubbock Rape Crisis Center has a 24-hour hotline: 806-763-RAPE (7273). For more information about support, reporting options, and other resources, go to: http://www.depts.ttu.edu/sexualviolence/
ISQS 7341 – Seminar in MIS Research and Methods  
Fall 2016 – Topics and Readings by Date

Note: Readings marked with *** are available on the Blackboard site for the class. Readings marked with +++ are sample applications of the topics discussed in a given class. In those meetings, the majority of the discussion will focus on the other assigned readings, and those marked with +++ will be then subject to analysis.

Week 1 (September 2): Course Overview and Introduction to Research

Week 2 (September 9): Information Systems as an Academic Discipline

Week 3 (September 16): Philosophy of Science


**Week 4 (September 23): Theory and Theory Building**


**Week 5 (September 30): Construct Development and Validation**


**Week 6 (October 7): Experimental and Quasi-Experimental Designs**


Week 7 (October 14): Issues in Survey Research

NOTE DATE CHANGE: Week 8 (October 19): Sampling and Generalizability

Week 9 (October 28): Case Research Design and Methods
Week 10 (November 4): Working with Secondary Data


Week 11 (November 11): Advanced Topics on Theory Structure


Week 12 (November 18): Approaches and Threats to Causal Inference


Thanksgiving Week (November 25) No Class

**Week 13 (December 2): Qualitative Research Approaches and Design Science**


**Week 14 (December 9): Writing and Reviewing Research**


**Week 15 (TBD): Research Presentations**