Course Syllabus
MIS 8710-001 - Seminar in Information System I
Fall 2015
3.0 Credit Hours

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Department of Business Information and Technology
Office: FAB 346
Class Location and Hours: FCB 383 - Tuesday (1:30 PM – 4:30 PM)
Office hours: Monday (2:00pm – 5:00pm or by appointment)
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Course Overview

This is the first of two IS research seminars that together form the literature and methodological base from which you will develop your MIS research acumen. The field of MIS draws from a number of diverse theoretical lenses, many of which are adapted from reference disciplines. It is important for doctoral students to construct their own mental schema of the field so that new knowledge can be effectively synthesized. This seminar offers a start to that journey through exposure to classic and contemporary IS research as well as key theoretical underpinnings of the discipline.

Your two IS seminars, combined with your required MIS functional courses, required research methodology classes, and your directed readings will also be the basis for questions on your written and oral comprehensive examinations.

Required Texts (and Related Materials):

The course will use journal articles and readings that are either available through the University of Memphis Library or will be provided by the Professor. A schedule of weekly readings will be provided to you in class.

Course Objectives:

The primary objective of this first seminar is to provide you with a foundation for your research career and introduce many of the seminal works in MIS. Through this course you will familiarize yourself with the basic tenets of MIS research, receive an introduction to various research philosophies and approaches employed, and cover important foundational MIS articles.
At the completion of this seminar, students should:
- Understand what MIS research means;
- Comprehend the foundational systems elements of the IS field;
- Comprehend the field’s evolution and its relationship to information technologies;
- Comprehend and apply the basic tenets of theory and methods;
- Possess knowledge of key research streams in the MIS field;
- Developed skills to critically read and evaluate MIS literature:
- Have the ability to compare and contrast tradeoffs in conducting research;
- Have the ability to provide basic structure and organization to a research project;
- Have the ability to present and defend opinions by making judgments about validity of research and quality of research products;
- Begin to structure a mental schema of the IS field; and
- Start acquiring the ability to critically assess the IS field and take a position on moving it forward.

**Fogelman College: Learning Outcomes for Your Degree**

This course is designed to help you to meet the overall learning objectives for the PhD degree offered by the Fogelman College. You should take the time to become familiar with the overall learning objectives as a student in the PhD program. See: [http://www.fcbeassessment.net/LearningOutcomes/PhDDegreeLearningOutcomes.pdf](http://www.fcbeassessment.net/LearningOutcomes/PhDDegreeLearningOutcomes.pdf)

**Course Methodology:**

This is a doctoral seminar. While I do not expect you to fully assimilate everything you read on the first pass, I do expect **significant effort and thought on your part**. For my part, I will present ideas, concepts, experiences, and guidelines throughout the course. **It is your responsibility to create your own understanding and notes.** This can be done as a part of the class, but more importantly should be assimilated thoroughly after class. This might involve re-reading assigned articles, reading additional self-solicited material and discussions with your colleagues. The culmination of these efforts will result in a set of notes that reflect your understanding of an area. These notes can be enhanced as the learning process continues throughout your program and can be an invaluable part of your research schema. Do not hesitate to ask questions in class or after class if something is unclear. It is my job to provide you with research guidance and your responsibility to put your best effort forward to imbibe it.

As a seminar, your participation is absolutely essential. You will be expected to perform a major role in contributing to class discussions. This requires thorough preparation for every class. It is assumed that you have carefully read the assigned readings and are fundamentally familiar with what each has to say. The real test is in the thought process you have put into the readings, rather than merely muddling through them. Consider following the cycles of read – think – classify – think – re-read – think -- document …

The class discussions will be directed by student discussion leaders that I will assign in the previous week. While everyone must carefully read the assigned readings, the discussion leaders should:

- **PRIOR to class organize the discussion of their article(s)**
- Prepare a 2-3 page handout for distribution to the class that summarizes the major points of the article(s) (see below format suggestions)
- Ensure that the class interaction is continuous and brings out the major points (takeaways) of the article(s). Be creative in stimulating class discussion. This involves preparing leading questions and discussion points and acting as master of ceremonies of a fairly informal discussion of the paper. The discussion leader should work to ensure that all attendees at the seminar get involved in the discussion (whether they want to be involved or not).
- All article write-ups should be your original work!

The class discussion should have at least four components:
1. Summary or overview of the article.
2. Assessment of article’s contribution to the IS literature (and to practice), i.e., where it fits into your schema. Be sure to consider both the logic and clarity of the papers.
3. Discussion of article’s strengths and weaknesses, with particular emphasis on philosophy/theory/methodology.
4. Assessment of future work that can build on the study.

Typically, a discussion session on a paper will be around 20-30 minutes. Also, as the first research seminar, the primary focus is on learning – how does the article enhance our understanding? As you gain research prowess through the program, there will be an increasing emphasis on critiquing articles in your respective interest areas.

Article write-ups should contain at least two major sections:
(a) A summary of the key takeaway points as discerned by the reader, and
(b) An interpretation of the article. This could include responses to questions like:
• How did this article influence thinking in the IS field at that time?
• What is its contribution with respect to contemporary IS environments?
• How does it relate to other articles and practices?
• Does it espouse a theoretical perspective that is useful to study IS phenomena and why?
• How has it influenced your thinking of the field?
• Are there aspects of the article that are unclear, make too many assumptions or could be subject to other criticism?

In addition to the questions above, for empirical articles you should consider each of the following dimensions.

- **Abstract**: Does the abstract highlight the significant points of the article?
- **Introduction**: Is the “So What” compelling? Is the background covered thoroughly and succinctly?
- **Theory**: Does the background include a strong theory? Does the theory form a strong basis for a casual model? Is the theoretical conceptual model clear?
- **Independent Variables**: Do the independent variables have conceptual and operational definitions that are reasonable?
- **Dependent Variables**: Do the dependent variables have conceptual and operational definitions that are reasonable?

- **Hypotheses**: Are the hypotheses meaningful and clearly stated? Are they reasonably deduced from the background?

- **Methodology**: How well does the methodology test key hypotheses?

- **Analysis**: Were the appropriate statistical tests applied? What alternative/complementary statistical techniques may be used?

- **Results**: Do the results follow reasonably from the analysis?

- **Implications for Future Research**: How can this research be replicated? What questions does it raise for future research that needs to be answered? How can such research be conducted?

- **Implications for Practice**: Does the research help MIS practitioners? How, in your opinion, will this research improve future MIS practice?

NOTE: IT IS CRITICAL THAT EVERY STUDENT READ ALL PAPERS ASSIGNED AND CONTRIBUTE THEIR PERSPECTIVE DURING OR AFTER THE DISCUSSION LEADER’S PRESENTATION. In this regard, I will often call upon unassigned students to lead impromptu discussion or respond to question pertaining to the topic under discussion.

Finally, I expect classes to be productive and challenging. Such an environment requires that we maintain professional behavior. I expect honesty, maturity, courtesy, and sensitivity. I want you to enjoy attending class and to feel relaxed – but there is no room for unprofessional behavior. We will hopefully learn from one another and push each other to a higher level of understanding and appreciation.

**Course Evaluation**:

Final grades will be based on average score of course requirements. Please discuss any concerns you may have about the grading policy as early as possible in the semester. The following grading scale will be used.

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<tr>
<th>Points percentage</th>
<th>Letter grade</th>
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<tr>
<td>90 - 96.9; 97 – 100</td>
<td>A, A+</td>
</tr>
<tr>
<td>80 - 86.9; 87 - 89.9</td>
<td>B, B+</td>
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<tr>
<td>70 - 76.9; 77 - 79.9</td>
<td>C, C+</td>
</tr>
<tr>
<td>60 - 66.9; 67 - 69.9</td>
<td>D, D+</td>
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<tr>
<td>&lt; 59.9</td>
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**Class Preparation & Contribution (see above): 40%**
Course Assignments: 10%

IRB Assignment: Each student should complete the University of Memphis’ Institutional Review Board training in the protection of human subjects. The training has 8 required training modules in the Social and Behavioral Sciences track. To do this, each student must complete the online training. A copy of emails designating each module completion should be submitted to me before the Thanksgiving Break. This training is required if any survey or experiment is to be administered at the UoM.

Research Project: Proposal Development, Execution & Presentation: 50%

The purpose of the research project is to assist you in developing and refining your research skills including written and oral communication skills. The project will involve developing testable hypotheses, preparing a proposal, and executing an empirical research study.

You may choose any behavioral science topic area, as long as your proposal represents an original empirical research project that is practically feasible. By original, I mean that the proposal should not include a study already implemented in published or unpublished work.

The paper should be double-spaced pages in a 12-point font with 1” margins on all sides. Beyond that, use the predominate format in our field (e.g., APA Guidelines). It should include references, tables, figures, or appendices (all highly recommended).

By Fall Break, please turn in your developed research proposal. The final paper itself is due just before Thanksgiving Break. We will have the project presentations will be scheduled before Thanksgiving Break.

Proposal description and guidelines:

1. Abstract: 100-150 words summarizing the contents of the proposal.

2. Introduction: Describe why your topic is important for practice and research. Conclude with specific research questions you plan to address.

2. Literature Review: Concisely review relevant literature on which your research is based. The gaps in the literature motivating the need for your research should be evident.

3. Model & Hypotheses: Describe your research model. Develop a set of testable hypotheses. Briefly justify your hypotheses based upon the literature reviewed and tight logical arguments.

4. Methodology: Describe the methodology used, its rationale, and how you intend to conduct it. This section could include information on the sample, operational definition of the variables, unit of analysis, procedures, and methods to be used for validation and analysis of the data.
5. Implications of your study’s findings. Assuming your hypotheses are supported, what are the implications for theory, future research, and, to a lesser extent, practice?

6. Critique. Identify the shortcomings and problems with your research, with special attention given to methods. In this section, you will be acting as your own reviewer, so do not hesitate to be critical.

7. References. Follow APA guidelines for referencing works within the text and in the reference list.

Full Paper should include:
   - Analysis
   - Results
   - Implications for Future Research
   - Implications for Practice

We will be discussing many elements of the research project throughout the course. Read and explore literature in an area of your interest so that the project does not creep up on you. You will struggle with this, but I believe you will be better off for the experience. Alas, such is the life of a doctoral student.

**Final Examination Schedule**

The final exam (in the form of a research proposal and presentation) will be scheduled according to the Registrar’s academic calendar for final examinations unless notified otherwise.

**Course Policies**

**E-MAIL:**

All students are required to maintain and access their University of Memphis (@memphis.edu) email account. You will receive all official course correspondence at this email account. Any inability to receive incoming mail in a timely fashion (e.g., not regularly checking your email, having a “full mailbox” condition, etc.) is the student’s responsibility.

**Attendance:**

Students are required to attend all classes unless you have a medical excuse or your absence is approved under university policy. Due dates and deadlines have been established for each graded assignment. In this course, deadlines are taken very seriously. If an emergency should arise, it is the student’s responsibility to contact the instructor prior to the deadline to discuss the matter. A deadline extension will be considered only if all of the following conditions are met: (1) Extreme emergency and (2) Instructor contacted prior to the due date.

This is a doctoral seminar. As such, the primary goal is to maximize your learning potential. If necessary that might involve investing in greater class time or effort outside the classroom.
**Academic Integrity:**

The University of Memphis has clear codes regarding cheating and classroom misconduct. If interested, you may refer to the Student Handbook section on academic misconduct for a discussion of these codes. Note that using a “Solutions Manual” is considered cheating. Should your professor have evidence that using a “Solutions Manual” has occurred, he/she may take steps as described on the campus’ Office of Student Conduct website. If you have any questions about academic integrity or plagiarism, you are strongly encouraged to review the Fogelman College's Website on Academic Integrity.

**Course Help:**

If you are experiencing any problems with the course, please do not hesitate to schedule a private meeting with me. I am not unreasonable and will give you a fair hearing. E-mail bill.kettinger@memphis.edu is the best vehicle to get quick access or schedule an appointment.

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities. Students are encouraged to contact Student Disability Services to discuss their individual needs for accommodation

**Student Services**

Please access the FCBES Student Services page for information about:

- Students with Disabilities
- Tutoring and other Academic Assistance
- Advising Services for Fogelman Students
- Technical Assistance
Appendix: Research Methodologies More Commonly Used in MIS

Case Studies

A case study is a particular method of qualitative research. Rather than using large samples and following a rigid protocol to examine a limited number of variables, case study methods involve an in-depth, longitudinal examination of a single instance or event: a case.


Survey/Interviewing

This is a research methodology that relies on gathering research data via interviews and surveys instruments.

Laboratory Experiment

Empirical and quantitative research done in a controlled environment.

Field Experiments

Research done in a less controlled natural environment, must be quantitative and include research principles such as random selection.


Field Studies

Research done not in a laboratory but in the natural environment; it may be observational only, it may include experimental interaction with the subjects in the field.

Action Research

In action research, the researcher wants to try out a theory with practitioners in real situations, gain feedback from this experience, modify the theory as a result of this feedback and try it again. Action research consists of iteration. Each iteration of the action research process adds to the theory so it is more likely to be appropriate for a variety of situations.
Ethnographic research

Ethnography refers to the genre of writing or research that presents qualitative description of human social phenomena, based on fieldwork. Ethnography presents the results of a holistic research method founded on the idea that a system's properties cannot necessarily be accurately understood independently of each other. The genre has both formal and historical connections to travel writing and colonial office reports. Several academic traditions, in particular the constructivist and relativist paradigms, claim ethnographic research as a valid research method. It can also include case suites, interviews, long-term studies of sites.


Design Science

Creates and evaluates IT artifacts intended to solve identified organizational problems. Design science is inherently a problem solving process. DS seeks to create innovations that define the idea, practices, technical capabilities, and products through which the analysis, design, implementation, management, and use of IS can be effectively and efficiently accomplished. DS can use a combination of other research methodologies to achieve the research aim.

Mathematical Models

Abstract model using mathematics to describe system behavior; include independent variables, constants; may be derivable through proof; has a quantitative outcome that is verifiable via a proof or via experiments. May use Economics theory and Econometric modeling.

Simulation

Enhances purely mathematical models when elementary functions alone cannot describe the solution. Generates samples of data from running multiple simulation, usually includes variables too numerous to put into one mathematical model or that cannot be derived via a mathematical proof and is generally not experimentally verifiable in the full-scale natural environment.

Pluralistic Methodology

Using multiple research methodologies.