

IS 7890	IS Research Seminar		Fall 2007
Class	Thursday, 12.30-3.10 p.m.	Room	CCB 212
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COURSE DESCRIPTION

Information Systems, as an academic discipline, has been in existence for about twenty-five years. Due to its recent conception, this discipline is still working towards a definition of its boundaries and field of application. It is essential, therefore, that those willing to work in the Information Systems discipline understand its history and development as well as the schools of thought and theoretical perspectives underlying research activities.

The primary course objective is to help prepare students to become good IS researchers. While this cannot be accomplished in a single course, key elements of a foundation for doing research is established by covering a wide array of IS research topics. This course seeks to help the students develop an understanding of the evolution of Information Systems as a discipline, to identify IS research streams, and to analyze the principal methodologies and frameworks used in IS research.

The following areas are covered in the course.

- Several classic IS articles. These articles are well known to IS researchers and are still cited. They also provide a perspective on how IS research has evolved over time.
- Some IS research framework is studied. Research frameworks are used to position research and generate research ideas.
- A wide array of IS research streams – including management of IS, knowledge management, systems development, IT adoption, and so on – are examined.
- Some emergent IS research directions.
- Diverse methodologies used for IS research: case study, field studies, field experiments, and laboratory experiments. A variety of readings are covered that explore areas such as when each is appropriate, how they should be conducted, and issues that may be encountered.

EVALUATION CRITERIA

The seminars will be student led for the most part with the instructor serving as a coach and facilitator. In preparation for each seminar session students will read and critically examine key pieces of published IS research.

Your performance will be depend on the following:

Best 10 of 12 weekly quizzes (2% each):	20%
Class contribution:	25%
Final paper:	35%
Final exam (take-home):	20%

QUIZZES

- Each quiz will have two short-answer type questions.
- For each quiz, you will have 15 minutes to answer the questions.
- Each quiz will be open book and open notes, but closed friends.
- First quiz will be based on readings #4-#13.
- All subsequent quizzes will be based on the assigned readings for that class. For example, quiz 2 will be based on readings #14-#18, quiz 3 on readings #19-#23, and so on.
- Each quiz will be at the start of a class.
- The first quiz will be at the start of the class on 9/6/07. After that, there will be a quiz each class until 11/29/07.

CLASS PARTICIPATION

The class schedule, along with the assigned readings is attached. **For every class:**

Each student should carefully read all the assigned articles in-depth and critically. For each session, prepare a one-page set of discussion issues from the assigned readings. These write-ups can be useful compilations for comprehensive exam preparation. More importantly, you should “read,” “think” and

“interpret.” The write-up should contain two sections:

- (a) A summary of the key takeaway points as discerned by the reader, and
- (b) An interpretation of the article.

For (b) consider the following questions:

- 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 here that are unclear, make too many assumptions or could be subject to other criticism?
- What were the most important insights you obtained from the article, e.g., what ...do you know now that you didn't know? ... do you now think about differently after reading the article? ... surprised you the most? And, what didn't you understand?

While not all these questions may be relevant for every article under consideration, the essence is to ensure that you have gone through the think-read-interpret process. Keep in mind that the write-ups (or class discussions) are not intended to be critiques. While you will have many opportunities to criticize, at this stage of your career it is more useful to assimilate and interpret. With a stronger foundation under your belt, you will increasingly be in a position of strength with regard to criticism of others' work.

Use your one-page write-up on each paper as guides during the class discussion of each paper. Moreover, each paper will have a discussion leader, to be appointed by the Instructor before we discuss the paper. Therefore, please be prepared to be the discussion leader on any paper. Each discussion leadership role will count toward your “class contribution” score, as will your comments throughout each class. In addition to the above suggestions, a list of pointers for a review of empirical papers is provided in Appendix A. **YOU DO NOT NEED TO SUBMIT YOUR ONE-PAGE WRITE-UPS.** Instead, they will help

you in contributing to the class discussion, and – along with your class notes – help you build and sustain knowledge about the IS research field.

THE RESEARCH PROJECT

Each student is expected to write, either alone or in a group of TWO students, a theoretical or empirical paper. The overall project includes (1) defining the research topic, (2) reviewing the literature, (3) developing the research question, (4) developing and supporting (using logic AND prior research) a set of research hypotheses that together constitute a research model; (5) preparing an overall proposal with a preliminary design of data collection and analysis; (6) refining the data collection instruments; (7) collecting data, (8) conducting statistical analyses, and (9) writing-up the findings. The first FIVE phases will need to be completed, and a high-quality paper on them written, in this course. The last four phases may then be done as a part of a later research seminar, such as the seminars on quantitative or qualitative research in IS.

A research project in the area of information systems is required. The paper should be based on a comprehensive review of the literature, which may or may not be followed by an empirical study within this paper itself. The paper provides the opportunity for the student to explore an area of IS research in which (s)he has an interest. The paper should develop and present a conceptual model(s) and/or framework(s) that synthesizes current ideas (obtained through a careful examination of relevant scholarly journals) on your selected topic. The paper should be of high quality and should be written in a form that it could be submitted to a conference or journal as research in progress. It should be creative and intellectually stimulating and should have a definite potential for publication. Students are encouraged to submit their paper to a journal or conference. A paper accepted for publication by a recognized journal such as those listed on the ISWorld website will be considered for a grade of A.

Note that the final paper is due by 5.00 PM on March 1, 2008. At the end of the semester, each student will receive a Delayed grade, which will then be changed to the final grade after receiving the final paper.

However, if a student does not submit the final paper by 5.00 PM on March 1, 2008, there will be a 20 percent penalty (on the grade for the final paper, which constitutes 35% of the course grade) per day of delay. If a student delays the paper submission by 5 or more days, (s)he will receive an automatic zero in the paper. NO EXCEPTIONS WILL BE MADE TO THIS POLICY.

There are actually four parts to this assignment, each of which has a separate due date:

- A two to three page description of your topic area (2.5%); this should clearly describe both the phenomenon you will be investigating and the major literature sources you will be examining.
- An in-class presentation (5%); the presentation should be approximately 20 minutes in length, followed by another 20-25 minutes of Q&A. The exact duration of each presentation will depend on the number of groups. We may need additional time for the class on 12/6/07 depending on the number of groups. We will decide this on 9/27/07. Visual aids should be used to emphasize major points and concepts. Power Point overheads are appropriate for this purpose. Hard copies of the presentations should be given to all class members. Student performance is evaluated on the basis of the presentation and ensuing discussion.

The instructor will provide an assessment of the presentations.

- The final paper (27.5%); the paper itself can be no more than 40 pages in length, excluding figures, tables and reference list.

NOTES

1. If anyone has a health condition or disability, which may require accommodations in order to effectively participate in this class, please contact the Disability Access Services Office in 144 Millennium Student Center at 516-6554. Information about the disability will be regarded as confidential.
2. This course syllabus provides a general plan for the course; deviations may be necessary.

ONLINE RESOURCES

ISWorld <http://www.isworld.org>

MIS Quarterly: <http://www.misq.org>

Myers, M. D. "Qualitative Research in Information Systems," ISWorld Net,

<http://www.auckland.ac.nz/msis/isworld/>

Newsted, P., Huff, S. and Munro, M. "Survey Instruments in IS,"

<http://www.isworld.org/surveyinstruments/surveyinstruments.htm>

Appendix A: Critiques of Empirical Research

Review each article by summarizing and criticizing each of the following dimensions. Be sure to consider both the logic and clarity of the papers.

Abstract

Does the abstract highlight the significant points of the article?

Introduction

Does the background include a strong theory?

Is the background covered thoroughly and succinctly?

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 their 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?

How can such research be conducted?

Implications for Future Research

Does the research help improve the understanding of IS practitioners?

How in your opinion will this research improve the future practice of IS.

Appendix B: Summarizing the Session

Each of you should prepare a summary of each session after class. The session summary should attempt to cover areas such as:

- Interrelationships between the articles comprising the session and the other relevant articles.
- Strengths and weaknesses of the past research.
- The implications of the research already conducted in the area
 - areas of agreement
 - areas of disagreement/contradictory findings
- Key issues for future research
- Potential reference disciplines for future research