ISM 751: Research Seminar in Decision Support Systems
Bryan School of Business and Economics
Department of Information Systems and Operations Management
Fall 2005 Syllabus

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Office Hours: By appointment

Prerequisites:

Enrollment in ISOM PhD program and Permission of the Ph.D. Director

For Whom Planned:
Doctoral students in Information Systems.

Catalog Description:
Study of research frameworks and methodologies in developing systems that support decision making; study of current and emerging research issues in Decision Support Systems, data warehousing and data mining.

Student Learning Outcomes:
Upon successful completion of the course, the students will be knowledgeable in the body of literature of Decision Support Systems (DSS) and will have a basic understanding of the current major research themes in this area. This will include:
1. Evaluate and assess Management Support Systems and Decision Support Systems (DSS) and their associated research opportunities
2. Describe decision making process, systems, modeling, and support
3. Explain the research issues in Decision Support System development
4. Evaluate and Understand Collaborative Computing Technologies: Group Support Systems
5. Define and demonstrate an understanding of the basic concepts, research issues and implication of the following for DSS: Business Intelligence, Data Warehousing, Data Mining, and Knowledge Management, Knowledge Acquisition, Representation, and Reasoning
6. Evaluate and assess the current and emerging research opportunities in DSS
7. Develop a research project in one of the areas of DSS

Evaluation Methods:

Weekly Research reading and reports: 40% [SLO1-7]
Each week students will be assigned one or two articles that they will read, summarize, synthesize, evaluate and prepare a two-page executive summary of each article and will present their review of each article to the class. The grade for this portion of the course depends on the quality of article summary and evaluation write up and the presentation of the article summary to the class.
**Final Research project, presentation and paper:** 50% [SLO 1-7]
Students will join one of their peers to develop a research project and paper based on one of the topics discussed in the course. The students will present this project to the class at the end of the course. More will be discussed about the details of the project parameters.

**Class Participation:** 10% [SLO 1-7]
It is very important that each student reads all the articles assigned so that they are able to participate in class discussions when their peers present their articles.

**Required Text/Readings:**

To be selected by the instructor from among the important references similar to those listed below:

**Journals**
- Journal of Strategic Information Systems
- Information Systems Research
- MIS Quarterly
- Harvard Business Review
- Decision Support Systems
- Journal of Management Information Systems
- And others in IS and DSS

**Consultancy Reports**
- Gartner
- Meta Group

**A Tentative Course Outline:**

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<th>Decision making process and computerized support for decision making</th>
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<td>DSS frameworks and evolution</td>
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<td>DSS trends in research</td>
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<td>Week 2</td>
<td>DSS techniques and tools</td>
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<td>Week 3</td>
<td>Collaboration, communication, and group decision making</td>
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<td>Week 6</td>
<td>Current and Emerging Research Methodologies and opportunities in DSS</td>
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<td>Week 7</td>
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<td>Presentation of Student projects</td>
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