

**INSS 690**  
**PROFESSIONAL SEMINAR**  
**UMUC — MARYLAND IN EUROPE / BOWIE STATE UNIVERSITY**  
**Saturdays/Sundays, Weekend 1, Term 1 – 2002-2003, Kapaun/Ramstein**

**COURSE DESCRIPTION:** (3 semester hours) *Prerequisites: Advancement to candidacy in the MIS program and successful completion of the graduate MIS comprehensive examination. A capstone course designed to expose the student to the various areas of information systems in the organization where concepts from other core courses can be utilized. The focus is on information science research, policy formation and issues. Students produce an analytical/scientific paper within their chosen area of organizational interest. This course is graded Pass (P) or Fail (F).*

**COURSE OBJECTIVES:**

Students successfully completing this course should:

1. Distinguish a "research study" from a report or white paper
2. Evaluate the credibility of a research study
3. Identify and apply the techniques of Scientific Methodology, including
  - (a) Develop an original question which needs to be answered,
  - (b) Perform a thorough literature review of previous studies and writings in this area,
  - (c) Create the hypothesis,
  - (d) Develop the criteria for evaluating the results of the study,
  - (e) Conduct the research, and
  - (f) Summarize and report the results
4. Develop techniques for conducting a thorough literature search in the field
5. Identify, describe and model procedures for data gathering
6. Develop data reporting and analysis techniques
7. Develop technical writing skills
8. Understand the importance of research to the MIS professional

The activities and assignments for this course are designed to help the student develop accepted research skills, develop a breadth of understanding in a particular research area of Information Systems, and stay abreast of current issues in the field. In addition to the academic objectives, students are expected to improve their skills in the following areas:

1. **Critical Thinking:** Students should improve their ability to analyze information and develop appropriate summarizing and reporting techniques.
2. **Writing Skills:** Students should improve writing skills through development of the Research Proposal and the Research Paper.
3. **Oral Presentation Skills:** Students should improve their presentation skills through their oral report on the major project, individual reports on current topics and issues, and class discussions.
4. **Computer Skills:** Students are expected to improve their computer skills doing research on-line. In addition, the conduct of the course will make extensive use of the webboard.

<b>GRADING CRITERIA:</b>	15%	Research proposal and presentation
	40%	Final research paper (in pdf, or convertible to pdf)
	15%	Presentation of research
	20%	Presentation of seminar topics
	10%	Active and constructive participation

**COMPUTATION OF FINAL GRADES:**

A grade of Pass (P) will be achieved with a minimum of 70%

**METHOD OF INSTRUCTION:** As a graduate seminar, the major method of instruction is the regular exchange of ideas between members of the group. A seminar is "a small group of advanced students in a college or graduate school engaged in original research under the guidance of a professor who meets regularly with them for reports and discussions".

**COURSE REQUIREMENTS:**

**Research Proposal:** The one to two page Research Proposal will contain a clear statement of:

- (a) the purpose of the research, research questions, and preliminary thesis;
- (b) the boundaries of the research area;
- (c) an outline of the research sub-topics;
- (d) the methodology used, i.e., literature or field research;
- (e) a preliminary reading list.

**NOTES:**

1. It is suggested that participants pick research topics that they want to know more about, i.e., topics which have not been adequately covered in past courses; furthermore, research should not merely leverage experience gained in work situations.
2. Participants are encouraged also to go outside of the literature and perform "field" research, through interviews and other forms of information gathering. However, participants should be aware of the condensed time frame of the course. It can be very difficult to have field research instruments returned in a timely manner.
3. In line with current practices in industry, this will be a predominantly paperless class. The final paper will be submitted in pdf format (or a format that is convertible to pdf) and will be published to the world wide web. To see samples of previously submitted papers, participants are encouraged to visit <http://faculty.ed.umuc.edu/~meinkej/inss690/i690home.htm>
4. UMUC has guidelines for doing research using human subjects. If you are considering a research project involving use of human subjects you should visit <http://www.umuc.edu/policy/research13025.shtml> and make certain that you are in compliance with UMUC policies.

Participants will present their research proposals to the group the first weekend and will be expected to respond to each other's submissions. Participants should be prepared the first meeting for a power point presentation of their proposed research topic.

**Research Paper:** Individually, students will write a 30 to 40 page research paper that defines the problem or research area tutorially, clearly explains current technologies and issues, elaborates on the competitive usefulness of the technologies, and provides some indications of what will happen in the future. All sources are to be referenced. The use of extensive quotations is discouraged.

Students are expected to discuss their interim results with the group and accept/provide constructive criticism from/for other group members in the course of paper preparation.

The research report evaluations will be based on content, presentation, and quality of expression. Papers are expected to meet or exceed accepted graduate-level English and scholarship standards.

Papers should conform to the APA documentation style with minor modifications. Some general guidelines for the INSS 690 final paper can be found at <http://faculty.ed.umuc.edu/~meinkej/inss690/apaguidelines.pdf>. A power point summary of using references in the APA style can be found at <http://owl.english.purdue.edu/workshops/pp/APA2.PPT> and a more extensive description of the APA style is available at <http://owl.english.purdue.edu>. The general order of items in the research paper should be: Title Page, Table of Contents, List of Tables (if used), List of Figures (if used), Abstract, body of paper, References, and Appendices (if used).

**Presentation of Research:** Participants will present their research findings and conclusions to the class using appropriate audio-visual and handout materials. The in-class presentation should run approximately 40 minutes with another 10-15 minutes allowed for questions and discussion.

**Class Participation:** The essence of a seminar is the exchange of information among peers. Thus, members of the group will be expected to interact on each other's research areas in class plus via the internet. That interaction should also involve positive comments and recommendations on how research topics can be strengthened.

#### **TEXTBOOK:**

Primarily articles from current journals and periodicals -- other materials as appropriate. It is recommended that participants have access to *Publication Manual of the American Psychological Association*, 5<sup>th</sup> edition, ISBN 1-55798-810-2, for preparation of the final paper in APA style.

A partial list of suggestions of current journals and periodicals includes:

#### **Professional Journals:**

<i>IEEE Spectrum</i>	<i>Harvard Business Review</i>	<i>Communications of the ACM</i>
<i>IEEE Computer</i>	<i>The Economist</i>	<i>Journal of Systems Mgmt</i>
<i>MIS Quarterly</i>	<i>Scientific American</i>	<i>Sloan Management Review</i>
<i>IBM Systems Journal</i>	<i>AT&amp;T Technical Journal</i>	<i>IEEE Transactions on Computers</i>
<i>IEEE Transactions on Software Engineering</i>		<i>ACM Computing Surveys</i>

#### **Trade Journals:**

<i>Information Week</i>	<i>Byte</i>	<i>InfoWorld</i>
<i>Communications Week</i>	<i>LAN Times</i>	<i>Network World</i>
<i>Datamation</i>	<i>CIO</i>	<i>Computer World</i>
<i>Business Week</i>	<i>Baseline</i>	

Note that the full Maryland on-line library facilities are available to registrants for University System of Maryland courses, including INSS 690. A number of the publications listed above are available through the ACM Digital Library accessible through <http://www.umuc.edu/library> and logging in using last name and social security number.

#### **SEMINAR TOPICS LIST:**

Following is a [dated] list of current topics that have been used in the past. Some of the entries are necessarily broad, and a subtopic would be more appropriate. This list is in no way intended to be a final list that the participant must choose from. The current literature in the field of IT will provide a much more updated list of possible topics.

Wireless computing	Future trends
Intranets in organizations	Voice over IP
IT Careers/Opportunities	Object-oriented everything
Operating Systems releases	MP-3, copyright issues, etc.
Software quality	Current hardware trends
IT related legislation	

This is only a partial list of potential topic areas and is in no way intended to be exhaustive.

The purpose of the seminar topic list is to reinforce habits of remaining current on topics in the profession. Professionals must be constantly aware of changes happening in the field that are not necessarily directly tied to their areas of research. Thus, both the second and third weekends of the course participants will lead a discussion on a current topic issue.

### **INSTRUCTOR: J. Meinke**

Mr. Meinke earned the BA in Mathematics and the MEd in Mathematics Education from SUNY/Buffalo, the MAT in Mathematics from the University of Montana, and the MS in Computer Science from Illinois Institute of Technology. After a period with RCA Computer Systems Division, he became involved with post-secondary education, and has been involved in teaching and curriculum development in computing for more than two decades. He currently serves on the Board of Directors of the Consortium for Computing in Small Colleges and on the Steering Committees of both the Eastern Small College Computing Conference and the CCSC Southeastern Conference. In addition, he serves as a consultant to the CEEB (College Board) AP (Advanced Placement) in Computer Science program. His areas of interest include curriculum development, computer architecture and operating systems.

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### **TENTATIVE COURSE SCHEDULE:**

1 <sup>st</sup> weekend	24 <sup>th</sup> -25 <sup>th</sup> Aug	Introductions; course administration details: syllabus, grading, paper/presentation expectations; discussion of available research facilities; topic list development for future classes; writing the research paper  Presentation of research proposals and critiques.  <b>Note</b> that facilities will be available for power point presentations. Participants should be prepared that first weekend to present and defend their reseach proposals
2 <sup>nd</sup> weekend	14 <sup>th</sup> -15 <sup>th</sup> Sept	In-progress research paper review; seminar topic presentations
3 <sup>rd</sup> weekend	28 <sup>th</sup> -29 <sup>th</sup> Sept	Due: Final statement of the hypothesis, detailed outline, annotated bibliography, draft of research paper  In-progress research paper review; seminar topic presentations
4 <sup>th</sup> weekend	12 <sup>th</sup> -13 <sup>th</sup> Oct	Due: final research paper  Research presentations; course evaluations