Instructor: Dr. James Courtney  
Office: Business Building 325C  
Phone: (318) 257-3804  
E-Mail: courtney@latech.edu  
Office Hours: Tuesday 11:00 – 11:30, 1:00 – 4:00  
Wednesday 11:00 – 11:30, 1:00 – 4:00  
Thursday 1:00 – 4:00  
And by Appointment  
This class has virtual hours via e-mail, Moodle and phone.

Instructor Website: Moodle

by Alan Dennis, Barbara Haley Wixom, and Roberta Roth

Course Prerequisites: Doctoral Standing

Course Overview and Objectives
The analysis of business processes and the design of computer systems to meet business requirements are at the heart of CIS. This course is designed to cover the traditional systems development life cycle (SDLC) and the Unified Modeling Language (UML), although alternative methodologies are also discussed. It will focus on the earlier phases of the SDLC, from information systems planning through the specification of structured system requirements in functional form (i.e., logical system design) and concentrate on the methods, techniques, and tools used to determine information requirements and to document there requirements in a thorough and unambiguous form.

The second major function of this course is research. This course is designed to provide dWeekoral students in MIS an introduction to some key managerial and organizational issues and challenges in Information System Analysis and Design. For each of these key topical areas, the seminal pieces (if any) and most recent research articles were selected. The seminal readings were selected as an introductory overview and the most recent research articles were select for stimulating discussion of future research possibilities.

At the conclusion of this course, successful students should be able to:  
1. Define the systems analyst's role and responsibilities in a typical organization.  
2. Explain the phases of the systems development life-cycle (SDLC) and the major deliverables in each.  
3. Explain the elements of the UML.  
4. Analyze and solve a business problem using the SDLC and UML.
On the research side, at the completion of the course, course participants are expected to have a broad knowledge about the past and current research issues in Information System Analysis and Design, be able to identify relevant research questions and conduct in-depth exploration in the various topical areas in SAAD, and be able to propose a research project including problem statements, literature, and research methods.

Course Organization
The course consists of two components lectures/discussions about systems analysis design and seminar discussion concerning research articles.

Course Evaluation and Grading Scale

<table>
<thead>
<tr>
<th>Evaluation Area</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Research Paper</td>
<td>60%</td>
</tr>
<tr>
<td>Participation</td>
<td>50%</td>
</tr>
<tr>
<td>Total</td>
<td>110%</td>
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</tbody>
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The final course grade will be determined as follows:

- 90-100 A
- 80-89.99 B
- 70-79.99 C
- 60-69.99 D
- Less than 60% Brain dead

Students with Disabilities
Any student in this class who has a documented visual or physical impairment, hearing disability, or any other disability covered by the university’s services for students with disabilities should contact me during the first week of class to discuss and arrange any instructional accommodations that may be necessary. Students who would like to serve as volunteer tutors, readers, or note takers for students needing special assistance are encouraged to contact me during the first week of class.

Academic Integrity
I have adopted a very simple but strict policy within the overall university guidelines to maintain academic integrity. In all cases of academic dishonesty (for example, cheating of any kind in quizzes and exams or plagiarism in project reports), the involved student(s) will get the grade of Fail (F) for the whole course. Exceptions will be made only in rare cases, in which the student makes a convincing case of the situation beyond the control of the student.
OBTAINING THE ASSIGNED LITERATURE ARTICLES

At the first class meeting, we will equitably assign responsibility for gathering and copying of the articles for each week’s meeting. The assigned person for that session is responsible for gathering the masters and having the articles copied and ready to distribute by the beginning of each class session prior to those assigned readings being due. It has been my experience that becoming immersed in the gathering of literature has resulted in numerous serendipitous events which have led to successful research projects for me. Maybe the article just before or after the one you need catches your eye and results in a research idea. Maybe something in the table of contents for that issue is relevant to some research you are pursuing. Maybe you just become better at using the library, who knows? In any event, this is the method we will use this semester. Try it with an open mind and you may find value in it.

DISCUSSION LEADERSHIP

Each of the class participants will be assigned as the discussion leader for their assigned paper at each class meeting. The discussion leader will be expected to drive the discussion toward the key issues and relevant discussion associated with the assigned reading. I will serve as a moderator and facilitator for the discussions and, whenever relevant, will provide additional guidance and insight.

CLASS PARTICIPATION

Despite the use of a discussion leader approach, all class participants are expected to be fully prepared to discuss all assigned article for that course session. The class participation grade will be assigned based on the relative contribution of each class participant to the class as a whole and will represent 20% of the total course grade. Please do not underestimate the importance of coming to class fully prepared. The class participation will consider the following:

- the familiarity with the assigned readings,
- the ability to integrate material from a diverse set of readings,
- the ability to develop new ideas based on the readings,
- the ability to provide real-world examples to support or refute the readings,
- the ability to ask and/or answer relevant questions, and
- My personal assessment on the overall degree of preparedness of each participant.
Course Schedule

Week 1  Introduction  (Ch 1 & Ch 2)

Classic Systems Theory


Week 2  Requirements Determination (Ch 3)

System Development Methodologies


Week 3  Use Case Analysis & Process Modeling (Ch 4 & Ch 5)

System Development Methodologies


Week 4 Data Modeling (Ch 6)
System Development Process


Week 5 Architecture Design (Ch 7, Ch 8)
ERP


Ranganathan , C. and Brown, C., 2006. ERP Investments and the Market Value of Firms: Toward an Understanding of Influential ERP Project

Jones, M., Cline, M., and Ryan, S., Exploring knowledge sharing in ERP implementation: an organizational culture framework, *Decision Support Systems*, Jan 2006. Vol. 41, Iss. 2; p. 411


**Week 6**  
**User Interface Design (Ch 9)**  
**User-IS Relationship**


**Week 7**  
**Program Design (Ch 10)**  
**User Participation & Involvement**


**Week 9**

**Data Storage Design (CH 11)**

**User Requirement Analysis: Elicitation**


**Week 9**

**Implementation & Transition (Ch 12 & Ch 13)**

**IS Implementation: User Training**


**Week 10**

**Object-Oriented Design (Ch 14)**

**Usability**


**Week 11**  
Final Exam  
Last Day of Class  
Research papers & presentations due

**Other Topics**

**IS Implementation: User Acceptance**


**IS Implementation: Organizational Level Issues**


**IS Project Management**


