

**Information Systems Development**  
**ACIS 5534 CRN 10167 Spring 2006**  
**Dr. France Bélanger**

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**Class Hours:** T-TH 11:00 - 12:15 PAM 1002

**Office Hours:** T-TH 9:30-10:30 and other times by appointment.

**Catalog Description:**

Study of theoretical and pragmatic approaches to the development of computer-based information systems. The emphasis is on the management of the systems development process. Strategies for managing the complexity of information systems are explored. The building of logical and physical models of systems through traditional non-executable models and executable computer prototypes.

**Prerequisites:** ACIS 1504 or ACIS 5514

**Course Approach:**

This class uses the active learning model in which students become active participants in the learning process. The class includes lecture material, but learning will also occur through student leadership in class discussion, teamwork, and out-of-class preparation. You are expected to attend class and participate in discussions, and to ask questions. You will have access to substantive information from the assigned textbook, readings, and class lectures. However, you will need to complement this information with new knowledge that can be found in news articles and on the Web. As an IS graduate student, it is important to develop an understanding of the systems development process which, to many, is the cornerstone of the IS discipline. An awareness of current topics facing IS developers and IS development managers is crucial.

**Required Texts:**

Software Engineering: A Practitioner's Approach, 6th edition, Roger S Pressman, 2005, McGraw-Hill, ISBN: 0072853182

**Required Readings:**

Course packet on Xanadu.com: <http://www.xanadu.com/login.shtml?PackId=247775>

1. Simon, J. and Davenport, T. "Managing Information Technology: System Development, Jan. 19, 1989, HBS 9-189-132
2. Davenport, T., "The Coming Commoditization of Processes," Harvard Business Review, June 2005, p. 1-9, HBS R0506F
3. Richard Ivey School of Business, "IIS and Quadteams Creating a Custom CRM," 2004, 904E30.
4. Upton, D.M. and Fuller, V.A., "Wipro Technologies: The Factory Model," Oct 25, 2005, HBS 9-606-021.
5. American Airlines: Object Oriented Flight Dispatching Systems, HBS 9-195-046.

Refer to the class course on Blackboard for the following readings:

1. Lindquist, C., "Fixing the Requirements Mess," *CIO Magazine*, November 15, 2005.
2. Levinson, M., "Testing, 1, 2, 3...", *CIO Magazine* November 15, 2005.

### **Grading Policy:**

The course grade will be based on the following components:

|                                      |         |
|--------------------------------------|---------|
| 1. Examination # 1                   | 100 pts |
| 2. Examination # 2                   | 100 pts |
| 3. Case Analysis                     | 50 pts  |
| 4. Class participation & assignments | 50 pts  |
| Total Points for Semester:           | 300 pts |

*Grades will be assigned as follows:*

A (>93%), A- (>90%), B+ (>87%), B (>83%), B- (>80%), C+ (>77%), C (>73%), C- (>70%), D (>60%), and F (<60%).

*Tests:* There will be two tests this semester. A mid-term exam will be given approximately half way into the semester and a final test will be given towards the end of the semester. Both tests are comprehensive essay exams covering all material, discussions, presentations, and readings for the class. No makeup exam will be given unless a documented physician approved medical condition occurs (not a visit to the Health Center!).

*Case Analysis:* Students will be asked to prepare a case analysis in teams of two students. Details will be provided later in the semester.

*Class participation and assignments:* Several very short assignments will be given during the semester. Late assignments will not be accepted for ANY reason. Participation grades will take into account assignments turned in, as well as class attendance and discussion. Full participation grades are not given simply for being in class... you must participate in discussions! Readings must be completed before they are assigned for class.

### **Honor Code:**

All university policies regarding cheating, plagiarism, falsification, nonattendance, and illnesses will be strictly applied. Read your catalog regarding these policies. **The Honor Code will be strictly enforced.**

### **Disability:**

If you suffer from a disability and would like to make arrangements for exams, assignments, or projects, please contact the instructor before the end of the third week of classes.

## Tentative Schedule

|         | <b>DATES</b> | <b>Lecture</b>                             | <b>Readings</b>  |
|---------|--------------|--|--|
| Week 1  | 1/17-19      | Course introduction                        | <ul style="list-style-type: none"> <li>• Chapter 1</li> <li>• Simon &amp; Davenport 1989</li> </ul>  |
| Week 2  | 1/24-26      | Software and processes                     | <ul style="list-style-type: none"> <li>• Chapter 2</li> <li>• Chapter 3</li> </ul>   |
| Week 3  | 1/31-2/2     | Agile development                          | <ul style="list-style-type: none"> <li>• Chapter 4</li> <li>• Davenport 2005</li> </ul>  |
| Week 4  | 2/7-9        | Systems engineering                        | <ul style="list-style-type: none"> <li>• Chapter 5</li> <li>• Chapter 6</li> </ul>   |
| Week 5  | 2/14-16      | Requirements engineering                   | <ul style="list-style-type: none"> <li>• Chapter 7</li> <li>• Lindquist 2005</li> <li>• Chapter 8</li> </ul>   |
| Week 6  | 2/21-23      | Design                                     | <ul style="list-style-type: none"> <li>• Chapter 9</li> <li>• Chapter 10</li> </ul>  |
| Week 7  | 2/28-3/2     | In class case analysis                     | <ul style="list-style-type: none"> <li>• American Airlines case</li> <li>• <b>Exam # 1</b> – Tentative - 3/1 6-9 PM</li> <li>• NO CLASS 3/2</li> </ul> |
|         | 3/7-9        | <b>SPRING BREAK (enjoy!!)</b>              |  |
| Week 8  | 3/14-16      | User Interface Design                      | <ul style="list-style-type: none"> <li>• Chapter 11</li> <li>• Chapter 12</li> </ul>   |
| Week 9  | 3/21-23      | Software metrics<br>In class case analysis | <ul style="list-style-type: none"> <li>• Chapter 15</li> <li>• IIF Case</li> </ul>   |
| Week 10 | 3/28-30      | Software Testing                           | <ul style="list-style-type: none"> <li>• Chapter 13</li> <li>• Chapter 14</li> <li>• Levinson 2005</li> </ul>  |
| Week 11 | 4/4-6        | Web design                                 | <ul style="list-style-type: none"> <li>• Chapter 16</li> <li>• Chapter 17</li> </ul>   |
| Week 12 | 4/11-13      | Web design                                 | <ul style="list-style-type: none"> <li>• Chapter 18</li> <li>• Chapter 19</li> <li>• Case analysis due</li> </ul>                                      |
| Week 13 | 4/18-20      | Web testing                                | <ul style="list-style-type: none"> <li>• Chapter 20</li> </ul>   |
| Week 14 | 4/25-27      | Trends                                     | <ul style="list-style-type: none"> <li>• Chapter 32</li> <li>• <b>Exam # 2</b> – Tentative - 4/26 6-9 PM</li> </ul>                                    |
| Week 15 | 5/2          | <b>NO CLASS</b>                            |  |

- Additional readings can be assigned during the semester.
- This schedule is tentative. Any changes will be announced in class. Guest speakers may replace scheduled lectures. In such cases, students will be responsible for covering the material on their own.