MIS 6900: Information Systems Development  
Spring 2018

Instructor & Course Information

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Katherine M. Chudoba, PhD</th>
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<tbody>
<tr>
<td>Phone</td>
<td>435.797.2344</td>
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<tr>
<td>E-Mail</td>
<td><a href="mailto:kathy.chudoba@usu.edu">kathy.chudoba@usu.edu</a></td>
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<tr>
<td>Office</td>
<td>EBB 703</td>
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<td>Course Location</td>
<td>HH 170</td>
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<tr>
<td>Course Website</td>
<td><a href="http://canvas.usu.edu">http://canvas.usu.edu</a></td>
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<tr>
<td>Office Hours</td>
<td>M-T-W-Th 10:30-12noon</td>
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Introduction

Welcome! Information System Development is an exciting and rewarding field, and I hope you are looking forward to our class this semester. The purpose of this class is to educate MIS graduate students in the growing field of Project Management and Systems Analysis and Design. The primary goal of this course is to prepare students to create information systems effectively and efficiently using the system development techniques and approaches taught in this class. In addition to well-known agile principles, several quantitative models often adopted by project management professionals (PMP) certifiers for project schedule management, project cost management, software quality management, system reliability management, and system test ROI management will be rigorously discussed and tested. The objectives of this class are mapped to the IDEA center course evaluation objectives used by USU as shown below. Please note that you will be asked to rate this course at the end of the semester based on the IDEA Center objectives listed.

Course Objectives

Upon completion of this course, students should master the following knowledge and skills:

<table>
<thead>
<tr>
<th>IDEA Center Learning Objectives</th>
<th>MIS 6900 Learning Objectives</th>
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<tr>
<td>Objective 1 (Essential): Gaining factual knowledge (terminology, classifications, methods, trends)</td>
<td>1. Understand agile manifesto and main characteristics that distinguish agile methods such as Scrum from traditional systems development methods such as waterfall approach.</td>
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<td>Objective 2 (Important): Learning fundamental principles, generalizations, or theories</td>
<td>2. Understand the structure and requirement of user stories and their conditions of satisfaction.</td>
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<td>3. Understand multi-level planning, size estimation of user stories in story points and ideal days, incremental and iterative development, and management characteristics of agile methods such as Scrum.</td>
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<td>4. Identify the players (e.g., product owner, scrum master, development team, and stakeholders), their roles, and the skills needed to be successful in agile methods such as Scrum.</td>
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5. Understand various quantitative methods for project schedule management, project cost management, project quality management, system test ROI management, and system reliability management.

**Objective 3 (Essential)**: Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course

**Objective 4 (Important)**: Learning to apply course material (to improve thinking, problem solving, and decisions)

| 1. Practice an agile approach (e.g., Scrum) to develop user stories of the new system with user stories and estimate project duration and team velocity. |
| 2. Manage the system development process and monitor the progress with daily Scrum, Sprint and Release for planning and evaluation. |
| 3. Develop and present a working system as a team, incrementally and iteratively. |
| 4. Present and monitor team progress graphically using Sprint and Release burndown charts and a task board. |
| 5. Develop an understanding of group dynamics and facilitation of interactive teamwork required in organizational system development efforts. |

### Required and Recommended Textbooks

**Required textbooks**

| Title: | *Essential Scrum* |
| Authors: | Kenneth S. Rubin |
| Publisher: | Addison-Wesley Pearson Education |

| Title: | *User Story Mapping* |
| Authors: | Jeff Patton |
| Publisher: | O’Reilly Media |

| Title: | Agile Estimating and Planning (free pdf version available) |
| Authors: | Mike Cohn |
| Publisher: | Prentice Hall |
| ISBN: | 978-0-13-147941-8 |

### Required Software

Your team and you may use MSProject and MSVisio in class for our exercises. Free student versions can be downloaded at [http://e5.onthehub.com/WebStore/ProductsByMajorVersionList.aspx?ws=3ab8aab6-bf9b-e011-969d-0030487d8897&vsro=8](http://e5.onthehub.com/WebStore/ProductsByMajorVersionList.aspx?ws=3ab8aab6-bf9b-e011-969d-0030487d8897&vsro=8). The course fee for MIS 6900 ($30) is used to provide lab support, hardware maintenance and software licensing support.
Prerequisite
MIS 6230 Database Management

Course Materials/Access:
I will use Canvas (http://canvas.usu.edu) to post course material, including lecture notes, assignments, grades, etc. It is very important that you access Canvas early and regularly in the semester, since you will be responsible any course material, change, or notification that is posted there.

Grading Policy
Final grades will be determined as follows:

<table>
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<tr>
<th>Component</th>
<th>Weight</th>
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<tr>
<td>Midterm Exam</td>
<td>20%</td>
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<tr>
<td>Final Exam</td>
<td>30%</td>
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<tr>
<td>Semester group project</td>
<td>30%</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Class activities</td>
<td>8%</td>
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<tr>
<td>Professional conduct</td>
<td>2%</td>
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</tbody>
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Grades:
- A: >93%
- A-: >90%
- B+: >87%
- B: >83%
- B-: >80%
- C+: >77%
- C: >73%
- C-: >70%
- D+: >67%
- D: >60%
- F: <60%

Exams (50%)
There will be two exams which will consist of multiple-choice, fill-in-blank, and/or short essay questions that cover the material presented in your textbooks and lecture notes. It is crucial that you read your textbooks and lecture notes to perform well on the exams, as some material may not be covered during class.

Group Project (30%)
Students will work on a real-world software development project that analyzes, designs, implements, and delivers the final outputs by the end of the semester. Forming and working with a great team is one of the most important factors to determine whether your team project will succeed or fail, which will naturally lead to your final grade. Groups will be formed in the class and specific information will be given. Typical team size may include four or five members and may include at least one international and one female student, if possible. Due dates of intermediary deliverables will be noted on the Canvas.

Quizzes (10%)
There will be multiple quizzes, both announced and unannounced, to check the progress of students. Each student is solely responsible for each quiz. One lowest quiz score will be dropped.

Class Activities (8%)
There will be several class activities and each student or a group will be required to complete such activities during the class.

Professional Conduct (2%)
Professionalism implies positive participation in class discussions and an appropriate attitude for learning. I request that you always demonstrate professionalism in this course, in your work as well as in your conduct. I expect that you will demonstrate professionalism in your work by:
1. Submit your work on time. All assignments are typically due at 11:59pm, but you are allowed to upload your work by 5AM of the following day without any penalty. Remember you can submit an incomplete version and replace it with new one. Always check to make sure you uploaded the final version. I will deduct 0.5% from your professional conduct credit (2% of overall grade) each time when you ask for an extension of the due date of assignments for the following or similar reasons:
   - You (including your babies, dogs, and cats) accidentally deleted or corrupted your file
   - You forgot to submit your work on time due to an annual family event or fatigue
   - You submitted an incomplete or incorrect version of your work (check to make sure it is the final version)
   - You have slow or lost Internet connection around midnight on due date (plan ahead)
   - You could not complete assignment because your computer was suddenly broken, stolen, or malfunctioned for hardware or software reasons.

2. Come to class regularly and on time. Although I may not take roll every class and I understand if you need to miss class periodically, I expect that you will attend class consistently.

3. Participate in class discussions and exercises.

4. Don’t engage in activities that show disrespect to me or to your fellow students, including talking/texting on cell phones or browsing the Internet during class.

5. The Utah State University General Bulletin states that: “A student is expected to attend all meetings of a class for which he or she is registered. A student may be dropped from a course by the Dean if absences are repeated and the instructor recommends this action. A student can gain readmission only with permission of both the Dean and the instructor. A student dropped from a course receives an ‘F’ which counts as work attempted whenever grade point ratio calculations are made. Students with absences in excess of 10% of scheduled class meetings may be administratively withdrawn from the class with a grade of F which will count as work attempted whenever grade point ratio calculations are made.”

6. Display integrity by doing your own work; never plagiarize the work of others, including the textbook, or cheat on quizzes or exams.

7. Submit college graduate-level work. Your writing should consist of complete sentences, and should be free from spelling and grammatical errors. It should demonstrate to me that you understand the material and that you can thoughtfully justify your answers.

UNIVERSITY POLICIES & PROCEDURES

Academic Freedom and Professional Responsibilities
Academic freedom is the right to teach, study, discuss, investigate, discover, create, and publish freely. Academic freedom protects the rights of faculty members in teaching and of students in learning. Freedom in research is fundamental to the advancement of truth. Faculty members are entitled to full freedom in teaching, research, and creative activities, subject to the limitations imposed by professional responsibility. Faculty Code Policy #403 (Links to an external site) further defines academic freedom and professional responsibilities.

Academic Integrity – "The Honor System"
Each student has the right and duty to pursue his or her academic experience free of dishonesty. The Honor System is designed to establish the higher level of conduct expected and required of all Utah State University students.

The Honor Pledge (Links to an external site)
To enhance the learning environment at Utah State University and to develop student academic
integrity, each student agrees to the following Honor Pledge:

"I pledge, on my honor, to conduct myself with the foremost level of academic integrity."

A student who lives by the Honor Pledge is a student who does more than not cheat, falsify, or plagiarize. A student who lives by the Honor Pledge:

- Espouses academic integrity as an underlying and essential principle of the Utah State University community;
- Understands that each act of academic dishonesty devalues every degree that is awarded by this institution; and
- Is a welcomed and valued member of Utah State University.

**Academic Dishonesty**

The instructor of this course will take appropriate actions in response to Academic Dishonesty, as defined the University’s Student Code. Acts of academic dishonesty include but are not limited to:

- **Cheating**: using, attempting to use, or providing others with any unauthorized assistance in taking quizzes, tests, examinations, or in any other academic exercise or activity. Unauthorized assistance includes:
  - Working in a group when the instructor has designated that the quiz, test, examination, or any other academic exercise or activity be done “individually;”
  - Depending on the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments;
  - Substituting for another student, or permitting another student to substitute for oneself, in taking an examination or preparing academic work;
  - Acquiring tests or other academic material belonging to a faculty member, staff member, or another student without express permission;
  - Continuing to write after time has been called on a quiz, test, examination, or any other academic exercise or activity;
  - Submitting substantially the same work for credit in more than one class, except with prior approval of the instructor; or engaging in any form of research fraud.

- **Falsification**: altering or fabricating any information or citation in an academic exercise or activity.

- **Plagiarism**: representing, by paraphrase or direct quotation, the published or unpublished work of another person as one’s own in any academic exercise or activity without full and clear acknowledgment. It also includes using materials prepared by another person or by an agency engaged in the sale of term papers or other academic materials.

**Sexual Harassment**

Sexual harassment is defined by the Affirmative Action/Equal Employment Opportunity Commission as any "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature." If you feel you are a victim of sexual harassment, you may talk to or file a complaint with the Affirmative Action/Equal Employment Opportunity Office located in Old Main, Room 161, or call the AA/EEO Office at (435) 797-1266.

**Withdrawal Policy and "I" Grade Policy**

Students are required to complete all courses for which they are registered by the end of the semester. In some cases, a student may be unable to complete all of the coursework because of extenuating circumstances, but not due to poor performance or to retain financial aid. The
term ‘extenuating’ circumstances includes: (1) incapacitating illness which prevents a student from attending classes for a minimum period of two weeks, (2) a death in the immediate family, (3) financial responsibilities requiring a student to alter a work schedule to secure employment, (4) change in work schedule as required by an employer, or (5) other emergencies deemed appropriate by the instructor.

Students with Disabilities
Students with ADA-documented physical, sensory, emotional or medical impairments may be eligible for reasonable accommodations. Veterans may also be eligible for services. All accommodations are coordinated through the Disability Resource Center (DRC) in Room 101 of the University Inn, (435)797-2444. Please contact the DRC as early in the semester as possible. Alternate format materials (Braille, large print, digital, or audio) are available with advance notice.

Contact the Disability Resource Center (DRC):

- On Campus: Room 101 of the University Inn
- Phone: 435-797-2444
- Website: [http://www.usu.edu/drc/](http://www.usu.edu/drc/) (Links to an external site)

For additional information about the application process, accommodations for Online & Regional Campus Students, confidentiality, free and low cost accessibility apps, and the services provided by the DRC, please visit the Students section of the Disability Resource Center website. (Links to an external site).

Diversity Statement
Regardless of intent, careless or ill-informed remarks can be offensive and hurtful to others and detract from the learning climate. If you feel uncomfortable in a classroom due to offensive language or actions by an instructor or student(s) regarding ethnicity, gender, or sexual orientation, contact:

- Student Services: [http://www.usu.edu/studentservices/](http://www.usu.edu/studentservices/) (Links to an external site), 435.797.1712, studentservices@usu.edu, TSC 220
- Student Advocates: [https://ususa.usu.edu/resources/legal-services/](https://ususa.usu.edu/resources/legal-services/) (Links to an external site), 435.797.2912, TSC 340,
- Access and Diversity: [http://www.usu.edu/accesscenter/](http://www.usu.edu/accesscenter/) (Links to an external site), 435.797.1728, access@usu.edu; TSC 315
- Multicultural Programs: [http://www.usu.edu/accesscenter/multiculture/](http://www.usu.edu/accesscenter/multiculture/) (Links to an external site), 435-797-1728, TSC 315
- LGBTQA Programs: [http://www.usu.edu/accesscenter/lgbtqa/](http://www.usu.edu/accesscenter/lgbtqa/) (Links to an external site), 435-797-GAYS, TSC 314
- Provost's Office Diversity Resources: [https://www.usu.edu/provost/diversity/](https://www.usu.edu/provost/diversity/) (Links to an external site), (435) 797-8176

You can learn about your student rights by visiting:
The Code of Policies and Procedures for Students at Utah State University: [http://www.usu.edu/studentservices/studentcode/](http://www.usu.edu/studentservices/studentcode/) (Links to an external site)

Grievance Process
Students who feel they have been unfairly treated may file a grievance through the channels and procedures described in the Student Code: [Article VII. Grievances](http://www.usu.edu/provost/diversity/) (Links to an external site).
Full details for USU Academic Policies and Procedures can be found at:

- Student Conduct (Links to an external site)
- Student Code (Links to an external site)
- Academic Integrity (Links to an external site)
- USU Selected Academic Policies and Procedures (Links to an external site)
- USU Academic Policies and Procedures (Links to an external site)
- Academic Freedom and Professional Responsibility Policy (Links to an external site)

**Emergency Procedures**

In the case of a drill or real emergency, classes will be notified to evacuate the building by the sound of the fire/emergency alarm system or by a building representative. In the event of a disaster that may interfere with either notification, evacuate as the situation dictates (i.e., in an earthquake when shaking ceases or immediately when a fire is discovered). Turn off computers and take any personal items with you. Elevators should not be used; instead, use the closest stairs.