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BMIS 373.01: Business System Analysis and Design

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Course Information

Dates: Monday - Wednesday
Times: Section 1: 12:30 p.m. – 2:00 p.m.
Venue: Gallagher Business Building 119

Professor Information

Professor: Dr. David Firth
E-mail: david.firth@umontana.edu
Web Site: <http://www.business.umt.edu/faculty/firth>
Phone: (406) 243-5979
Office: Gallagher Business Building 360
Office Hours: **Mon/Wed 2:00 p.m. – 3:00 p.m.**
Or by appointment made via e-mail

Mission of the UM School of Business Administration

The University of Montana's School of Business Administration is a collegial learning community dedicated to the teaching, exploration, and application of the knowledge and skills necessary to succeed in a competitive marketplace.

School of Business Administration/Assessment and Assurance of Learning

As part of our assessment process and assurance-of-learning standards, the School of Business Administration has adopted five learning goals for our undergraduate students:

Learning Goal 1: SoBA graduates will possess fundamental business knowledge.

- Students will demonstrate fundamental business knowledge on a nationally normed test or a locally prepared test.
- Students will demonstrate fundamental business knowledge of business concepts while working in an internship.

Learning Goal 2: SoBA graduates will be able to integrate business knowledge.

- In a business plan and/or business simulation game, students will integrate concepts from several of the functional areas of business.

Learning Goal 3: SoBA graduates will be effective communicators.

- Students will demonstrate the ability to write effectively.
- Students will deliver professional quality oral presentations.
- Students will demonstrate writing skills in internships.

Learning Goal 4: SoBA graduates will possess problem solving skills.

- Students will use appropriate tools to identify the root cause of a business problem.
- Students will use brainstorming tools to identify relevant alternatives for solving a business problem.
- Students will effectively analyze alternatives using quantitative tools.
- Students will effectively analyze alternatives using qualitative tools.
- Students will use appropriate tools to select a solution from competing alternatives.
- Students will identify metrics that will indicate the success or failure of the implemented solution.
- Students will demonstrate problem solving skills in internships.

Learning Goal 5: SoBA graduates will have an ethical awareness.

- Students will demonstrate moral reasoning on a nationally normed test.
- In a case, students will recognize potential ethical dilemmas in a business situation.
- In a case, students will identify the consequences of different ethical perspectives when applied to an ethical dilemma in a business situation.
- Students will recognize potential ethical dilemmas in internship situations.

Learning Goal 6: SoBA graduates will be proficient users of technology.

- Students will understand the role of technology in creating business innovations and in obtaining competitive advantage.
- Students will make appropriate use of spreadsheets (formulas, tables, and graphs).
- Students will effectively use spreadsheets and other technology in an internship situation.
- Students will design and construct a web page.

Learning Goal 7: SoBA graduates will understand the global business environment in which they operate.

- Students will understand how globalization impacts U.S. economic conditions and workforce dynamics (e.g., employment opportunities, etc.)
- Students will understand how different operating and cultural conditions affect the general conduct of business in different areas of the world.
- Students will demonstrate global business knowledge on a nationally normed test.

Course Description

The focus of this course is the study of systems, and the principles of systems analysis and design. This course introduces you to organizational systems analysis and design, and presents ideas that provide powerful insights about a large spectrum of analysis and design issues. This course aims to give you a feeling for the problems and techniques of systems analysis and design, and the application of such techniques to real life business analysis problems.

Learning Objectives

- The foundations for systems development including its environment, origins of software, and managing the information systems project.
- The **planning** phase identifying, selecting, and planning systems development projects.
- The **analysis** phase of determining system requirements, structuring system process requirements, and building system data requirements.
- The **design** phase of structuring the databases, forms and reports, interfaces and dialogues, and distributed and internet systems.
- The **implementation** and maintenance of systems.
- Key diagrams and techniques for systems analysis and design
- Basic programming of a system using an object oriented programming application
- Application of techniques for object oriented system analysis and design.

Textbooks and Material

There is no required textbook purchase for this class!

Instead, we will use two free books:

1. The New Software Engineering by Sue Congers, The Global Text Project 2008, ISBN: 0534171435

Download:

<http://dl.dropbox.com/u/31779972/The%20New%20Software%20Engineering.pdf>

2. App Inventor: <http://www.appinventor.org/book2>

Instructor's Expectations

In general, the students should assist the instructor in creating a positive, supportive environment for learning. Consulting in the business world depends on a successful "team" approach. Characteristics of successful teams include: diversity in background and skills; tolerance of diversity, uncertainty and ambiguity; clear and complete communication; and mutual respect of others views. Therefore students are expected to attend classes on a regular basis, arrive to class on time, remain in class until it ends, participate in discussions when appropriate, turn in assignments on their assigned due date. Most importantly, all participants in the class should be considerate of the other class participants and treat them (and their opinions) with respect. Insensitivity in this area will not be tolerated.

Wireless devices, including computers, PDA's, cell phones, and pagers, may not be turned on or in use during the class period unless approved in advance by the professor.

Students with disabilities documented through U of M Disability Services for Students (DSS) will be accommodated and have the responsibility to contact the instructor to initiate the appropriate actions. Please see me to discuss any concerns on this matter. The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). “Reasonable” means the University permits no fundamental alterations of academic standards or retroactive modifications. For more information, please consult <http://www.umt.edu/disability>.

Course Requirements and Expectations

The course will consist of some or all of the following:
lectures, in-class activities, homework assignments, group project assignments.

Lectures

The majority of the course content will be delivered via lectures, in-class demonstrations, and students working tutorials. Since it has not been possible to find a textbook that adequately addresses the material we want to cover in this course, we will not be using one. As a result, other material has been selected to expand your exposure to various aspects of Object Oriented Systems Analysis & Design. It is your responsibility to access this material from Moodle, print it off (if desired) and read it. Since there is no textbook, the costs of printing are offset.

In-Class Exercises and Discussions

Students are expected to read the assigned material and/or perform the assigned activities prior to coming to class. These activities and exercises are designed to reinforce the lecture material. Therefore, failure to do so will severely hamper your understanding of the lecture and, ultimately, your class participation.

Exams

There will be no exams. This is offset by an extensive and in-depth group project.

Group Project

Since there are no exams, the group project takes on added significance. Effort and strength in the group project will substantially impact your final grade. Group project peer reviews will help me assess your effort and strength.

Group Meeting

The final element of your group project will be a meeting with me. The idea behind the client meeting is to see how you as a team analyze and then present the analysis of your system in a situation that mimics real-life meetings. You should expect the questions you receive to be hard focused, and to press you on your thinking. Thinking nimbly and articulating your thoughts on-the-fly is a critical skill that we'll test here.

Homework

The requirements for homework are best articulated by the points given for the homework and other assignments. Specifically, homework is the *App Inventor for Android* and *Five Things I Learned* items, in addition to the Group Project covered above.

| Item topic | Item Identity | Item Description | Points |
|--------------------------|---------------|-------------------------------------|--------|
| Group Project | 1 | Plan and Proposal | 10 |
| Group Project | 2 | Use Case Diagram | 5 |
| Group Project | 3 | Use Case Narrative | 5 |
| Group Project | 4 | Class Diagram | 5 |
| Group Project | 5 | Entity Relationship Diagram | 5 |
| Group Project | 6 | Group meeting | 15 |
| Group Project | 7 | Complete and indexed packet | 5 |
| App Inventor for Android | 0 | What is App Inventor? | 5 |
| App Inventor for Android | 1 | <i>I Have A Dream App</i> | 5 |
| App Inventor for Android | 2 | <i>Paint Pot App</i> | 5 |
| App Inventor for Android | 3 | <i>Android Mash App</i> | 5 |
| App Inventor for Android | 4 | <i>President's Quiz App</i> | 5 |
| App Inventor for Android | 5 | <i>No Texting While Driving App</i> | 5 |
| App Inventor for Android | 6 | <i>Stock Market App</i> | 5 |
| App Inventor for Android | 7 | <i>Android Logo App</i> | 5 |
| Five Things I Learned | 1 | ATG | 5 |
| Five Things I Learned | 2 | FAST Enterprises | 5 |

The timing for homework submission is based off of the schedule in Moodle. However, the schedule in Moodle is almost certain to change. Actual homework due dates and times will be given in class. .

Grading

The "Homework" item above gives a breakdown of points for each gradable item for this class.

It is important to recognize that grading necessarily reflects the instructor's judgment regarding the quality of your work. Although an objective criterion for grading exists, all grading is somewhat subjective. If you have a question about a grade, please see me. However, requests for re-grading are likely to meet with skepticism unless an obvious grading mistake or unfairness is presented.

Grades will be conferred on a \pm basis and comply with the ranges shown below.

| <i>Overall Percentage</i> | <i>Letter Grade</i> |
|-------------------------------|-------------------------|
| pct >= 93% | A |
| 93% > pct >= 90% | A- |
| 90% > pct >= 87% | B+ |
| 87% > pct >= 83% | B |
| 83% > pct >= 80% | B- |
| 80% > pct >= 77% | C+ |
| 77% > pct >= 73% | C |
| 73% > pct >= 70% | C- |
| 70% > pct >= 67% | D+ |
| 67% > pct >= 60% | D |
| 60% < pct | F |

Class Attendance

Class attendance is extremely important to succeed in this course. Attendance is mandatory, meaning that you are expected to attend each class period. However, the professor understands that there will be times when personal issues are unavoidable and take priority. Therefore, each student will be allowed three (3) excused absences without penalty.

Since students are allowed three excused absences, there is no need to contact the professor to explain an absence. If you are absent, it is your responsibility to obtain missed material from your peers, so establish contact with other students in the class immediately.

If **for any reason** (including illness, be it supported or not by a doctor's note) more than three absences occur during the course of the semester, the student will receive a negative adjustment to their final grade down by one full letter grade.

Class will start on time. You are expected to be at your assigned seat, if one is assigned. Attendance will be taken on a random basis. The professor may take attendance at any time during the class session. Students are considered to be in attendance when the professor takes attendance. **If you are not in your assigned seat when attendance is taken, you will not be given credit for attending that day.** If you need to leave class early, which I don't recommend, please notify the professor at the beginning of class. Failure to do so may result in the loss of attendance for that day.

Name tents will be distributed to all students. Students must bring their name tents to each class session. If students lose their name tents, it is their responsibility to replace their name tents with a professional-looking version, which specifies your full name and section number. Hand-written name tents are not acceptable in a business setting, just as a hand-written business card is not. **Failure to bring an acceptable name tent to class will result in the loss of attendance for that day.**

Academic Integrity

Integrity and honesty are hallmarks of the consulting profession. It is your duty to abide by the University's academic policies, and it is the instructor's duty to enforce those policies. Cheating of any sort will not be tolerated. Cheating, failure to follow instructions, and/or failure to follow course policies may result in a reduced grade or a failing grade at the instructor's option. The following message about academic integrity comes from the Provost's office: *"All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at http://life.umt.edu/vpsa/student_conduct.php."*

Email

According to University policy, faculty may only communicate with students regarding academic issues via official UM email accounts. Accordingly, students must use their GrizMail accounts (netid@grizmail.umt.edu or fname.lname@umontana.edu). Email from non-UM accounts will likely be flagged as spam and deleted without further response. To avoid violating the Family Educational Rights and Privacy Act, confidential information (including grades and course performance) will not be discussed via phone or email.