Department of Business & Information Technology Mission

“Capitalizing on the strong technological emphasis of Missouri University of Science & Technology (S&T), the Department of Business and Information Technology prepares professionals for careers in modern business organizations. The Department emphasizes management through technology with particular focus on information systems and their application in a fast-changing, global and competitive environment.

Through innovative instruction and research, the Department serves the economic interests of industry and the evolving needs of society. The Department provides distance education opportunities utilizing advanced learning technologies”

INSTRUCTOR AND COURSE INFORMATION

| Instructor: | Bih-Ru Lea, Ph.D. |
| Office: | Fulton 102A |
| Phone: | 573-341-6436 |
| E-Mail: | leabi@mst.edu |
| Course Credit: | 3 semester hours of credit |
| Prerequisite: | ERP 2110 or preceded or accompanied by ERP 5110 |

Class Hours: MWF 9 am – 9:50 pm
Class room: Fulton 107A
Office Hours: Monday & Wednesday: 10 am – 11 am
Tuesday: 11 am – 12 noon
and by appointment (suggest a time via email)

Class Web: http://blackboard.mst.edu

COURSE CATALOG DESCRIPTION:

This course will study different performance management systems including dashboards, management cockpit, scorecards, and strategy maps in an organization. SAP's BW, Business Objects Xcelsius, Crystal Reports, Sybase Unwired Platform will be used to develop the applications.

COURSE OBJECTIVES

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Program Learning Objectives</th>
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<tbody>
<tr>
<td></td>
<td>Communication Skills</td>
</tr>
<tr>
<td>Understand and communicate underlying fundamental concepts of various performance measurement matrices</td>
<td>X</td>
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<tr>
<td>Understand and communicate common reporting functions available in an ERP environment and their roles in data visualization and corporate performance management</td>
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<tr>
<td>An understanding of key components, tools, and techniques in a strategic management systems, including key performance indicators, performance dashboard, balanced scorecard, value based management, etc.</td>
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<tr>
<td>Gain hands-on experience on common performance monitoring, dashboards, scorecard systems, and data visualization techniques in the Big Data context and in an ERP environment</td>
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<tr>
<td>Understanding and communicate impact of mobile technology and in-memory computing on performance management systems in the Big Data context</td>
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TEXTBOOK(S) AND MATERIALS FOR COURSE

- Required Textbook: *ERP5210 Course Pack* (can only be purchased from the university bookstore, [http://www.mstbookstore.com/](http://www.mstbookstore.com/) or 573-341-4705). Students **MUST** bring their textbook when attending class.

GRADING POLICIES AND PROCEDURES:

<table>
<thead>
<tr>
<th>Test 1</th>
<th>100 pts</th>
<th>Team/individual Project &amp; Presentation</th>
<th>180 pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 2</td>
<td>100 pts</td>
<td>• Project in-progress report (60 pts)</td>
<td></td>
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<tr>
<td>Final Exam</td>
<td>110 pts</td>
<td>• Project Presentation (60 pts)</td>
<td></td>
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<tr>
<td>Assignments (lab, quizzes, etc.)</td>
<td>510 pts</td>
<td>• Project Prototype &amp; Report (60 pts)</td>
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**Grading Scale:**

- A: ≥ 895 pts
- B: 795 – 894 pts
- C: 695 – 794 pts
- D: 595 – 694 pts
- F: < 594 pts

**General Grading Policies:**

- **ALL ASSIGNMENTS AND TESTS ARE INDIVIDUAL WORKS UNLESS OTHERWISE SPECIFIED.**
- All assignments should be handed in at the beginning of class on the date announced. **NO LATE ASSIGNMENTS WILL BE ACCEPTED.**
- Please make every effort to make it to class on time. It is disruptive to the class to have members arriving late.
- Attendance is encouraged. If you are unable to attend a class, you need to **turn in assignments in advance** (ask a friend to turn it in for you, use digital drop box provided by blackboard, etc.). You are also responsible for finding out what was covered in class and what announcements were made as well as obtaining handouts.
- The instructor will assign NO incompletes in lieu of a regular grade.

**Exams, Tests, and Quizzes**

- There will be two tests and one final examination. **All exam materials may become property of the instructor after completion.**
- It is possible to have announced and pop quizzes throughout the semester. Student will be given the date of announced quizzes one week in advance.
- Exam dates and quizzes are a part of the class schedule. Failure to appear for an exam/quiz will result in the assignment of a zero for that exam/quiz. If you are going to miss an exam with a legitimate reason (e.g., scheduled surgery, official University business, etc.), contact the instructor **PRIOR** to the administration of that exam/quiz.
- A make-up quiz/test may be allowed **during the final exam period** only if convincing reasons and proper documentations (such as a doctor's note in case of a surgery/illness) are given for the absence. The make-up exam will be a comprehensive exam covering the material from throughout the course.
- All in-class quizzes and tests are closed books and closed notes unless otherwise specified.

**Class Participation:**

- Overall, student participation and discussion is essential to ensure that the course topics are understood and are made relevant to actual business situations encountered in the workplace. As such, attendance and participation are an essential factor in the learning process and a tool for assessing student learning. Therefore, you are encouraged and expected to attend all classes.
- Each 10% **unexcused absences will result in loss of a letter grade.** For example, if your grade is a B and you have missed 10% of classes without legitimate excuses, you will end up with a C.
- The instructor reserves the right to drop a student if a student has missed more than 20% of class time.
**Discussion Board Participation**

The sheer size of the SAP software limits the instructor from covering every aspect and screen that we will be using this semester. To help students to better understand course materials, to develop debugging skills, and to learn from each other, the instructor have enabled a discussion board on blackboard. **All technical support for SAP Labs and project will be provided through the Discussion Board on Blackboard.** SAP system related questions will NOT be answered through e-mail by the instructor.

a. If you do not understand a concept or encounter a problem/error that you do not know how to resolve yourself, you will need to post your questions on the discussion board. You are also expected to answer questions asked by your peers. Occasionally, the instructor will also post questions and answers.

b. Before post a question on the Discussion Board, it is the student’s responsibility to check and ensure no same question has been posted before.

c. By the end of the semester, every student is expected to have asked and answered 10-15 questions. These discussions **might earn you extra credit toward your course grade.** Straight forward questions (for example – how do I get to this transaction, where can I find this button etc) will not count. Do not post questions just for the case of posting.

**GENERAL COURSE POLICIES:**

**Academic Alert System:** [http://academicalert.mst.edu](http://academicalert.mst.edu)

Missouri S&T is committed to the success of its students by providing an environment conducive to teaching and learning. To ensure that every student takes full advantage of the educational opportunities and support programs on campus, the University has implemented an Academic Alert System, a web-based application. The purpose of the System is to improve the overall academic success of students by:

- Improving communication between students, instructors, and advisors;
- Reducing the time required for students to be informed of their academic status;
- Informing students of actions they need to perform in order to meet the academic requirements in the courses they are taking.

To assist you, the instructor will initiate an academic alert for students who are not meeting academic course requirements through poor performance on assignments or poor attendance. When an alert is initiated, an email is immediately sent to the instructor, student, and advisor. You are encouraged to respond quickly to all academic alerts. If you fail to open the alert within one week, email notification is sent to your advisor.

**Disability Support Services:** [http://dss.mst.edu](http://dss.mst.edu)

If you have a documented disability and anticipate needing accommodations in this course, you are strongly encouraged to meet with me early in the semester. You will need to request that the Disability Services staff send a letter to me verifying your disability and specifying the accommodation you will need before I can arrange your accommodation. If you have a disability that might require academic accommodations, please visit Disability Support Services in 204 Norwood Hall (341-4211; dss@mst.edu) very early in the semester.

**Lateness**

Normally, the instructor will be in class on time. However, if the instructor is late by more than fifteen minutes, students should check with the Department of Business Administration located in Fulton 101 whether the class will be canceled. Students are expected to be in class on time.

**Classroom Egress Maps:** [http://registrar.mst.edu/links/egress.html](http://registrar.mst.edu/links/egress.html)

Please familiarize yourself with the classroom egress maps posted on line so you will know where emergency exits are located.

Violations of the University’s academic code include, but are not limited to, possession of or use of unauthorized materials during quizzes or tests; providing unauthorized information to another student; or copying the work of another person. Violations may result in academic penalties in addition to receiving an “F” on the assignment in question.

Page 30 of the Student Academic Regulations handbook describes the student standard of conduct relative to the University of Missouri System's Collected Rules and Regulations section 200.010, and offers descriptions of academic dishonesty including cheating, plagiarism or sabotage. Additional guidance for faculty, including the University’s Academic Dishonesty Procedures, is available on-line at [http://ugs.mst.edu](http://ugs.mst.edu). Other informational resources for students regarding ethics, integrity and the student honor code can be found online at

- [http://ugs.mst.edu/academicintegrity/studentresources-ai](http://ugs.mst.edu/academicintegrity/studentresources-ai)
- [http://stuco.mst.edu/about/honor.shtml](http://stuco.mst.edu/about/honor.shtml)

General guidelines for course assignments are provided below (adopted from Assignment Policies developed by Dr. Berry Flachsbart):

There are two kinds of homework assignments for this course: Individual homework and Group Homework. Each assignment is generally due one week after being assigned (assignment dates are in the tentative schedule -- the assignments and due dates are posted and updated in “HW Due Dates” on Blackboard).

Individual Homework is to be done **individually** -- you may not receive help from any individual other than the Instructor, class peer assistants, and the Blackboard Discussion Forum and you may not use or look at any material generated by someone else, either in the past or present (e.g. "files"). You may not use online sources that provide answers to specific questions. You may use online sources that provide general tutorial information, but **must cite them if you use them**. Of course, you may not give your homework to anyone else or assist others, either. Note **especially** that this means you may NOT work as a team or group on any Individual Homework or discuss the Individual Homework while you are working on Group Project Homework! Students will be asked to sign a statement verifying individual work. Homework without the signed statement will receive no credit.

Team assignment **IS** to be done by the assigned team members. -- but not to be shared or worked on outside of the designated team. The team is to follow the same prohibitions as listed in the section on individual homework. It is recommended that you do the Team Assignment first and discuss within your team the concepts learned while doing it. You will then individually be better prepared to tackle the Individual Homework. Submit **one** copy of the team assignment solution, with the names of all members of the team on it.

Homework is to be turned in at the start of the class period on the date due and NO LATE assignments will be accepted.

**KEY DATES:**

- The last day to add this course is Monday, February 2, 2015
- The last day to withdraw from this course without a “WD” showing on transcript is Monday, March 2, 2015
- The last day for dropping this course is Friday, April 17, 2015
Reading Assignments


ERP 5210 Spring 2015 Course Schedule

This is a tentative lecture schedule. The instructor will make a reasonable effort to adhere to this schedule. However, some changes will be necessary due to extenuating circumstances that exact coverage and sequencing of course content, grading criteria and weights may change. Students will be notified as far in advance of such changes.

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
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| 1       | Introduction to class (pp. 1-4)  
1/21, 1/23  
Performance Measurement (pp. 5-40)  
Course Preparation (pp. 481-512) and Review of ERP Basic Operations (pp. 513-528) |
| 2       | Quiz 1  
1/26, 1/28, 1/30  
Financial Performance: Financial Statements and Financial Ratios (pp. 41-122)  
Lab 1: Financial Statements Representation in ERP Environment (pp. 543-555)  
Lab 1: Financial Statements Representation in ERP Environment (pp. 529-542) |
| 3       | Mobile Applications Overview (pp. 123-144)  
2/2, 2/4, 2/6  
Lab 2: Mobile App: GL Account Balance (pp. 556-592, pp. 145-149) |
| 4       | Quiz 2  
2/9, 2/11, 2/13  
Performance Dashboards Overview (pp. 154-172)  
Lab 3: Mobile Analytics Dashboard (pp. 593-630, pp. 105-153) |
| 5       | Performance Dashboard Design & Implementation (193-206)  
2/16, 2/18, 2/20  
Lab 4: SAP BusinessObjects Dashboard 1 (pp. 632-639, pp. 193-206) |
| 6       | Test 1: 2/27 (Computer Operation)  
2/23, 2/25, 2/27  
Performance Evaluation and the Balanced Scorecard (pp. 207-241) |
| 7       | Test 1: 3/2 (Written Test)  
3/2, 3/4, 3/6  
Lab 5: SAP BusinessObjects Dashboard 2 (pp. 640-645, pp. 193-06)  
Strategy and Strategic management Process (pp. 242-276) |
| 8       | Visual Perception and Dashboard Design (pp. 277-306)  
3/9, 3/11, 3/13  
3/11: Quiz 3  
No class on March 13: Spring Recess |
| 9       | The Balanced Scorecard: Measures that Drive Performance (retrieve from the Library database)  
3/16, 3/18, 3/20  
Balanced Scorecard Implementation Examples (pp. 311-324)  
Project in-progress report & design Template due on 3/20 (pp. 685-691) |
| 10      | Spring Break (3/24 to 3/30)  
| 11      | In-Memory Computing Overview (pp. 325-332)  
3/30, 4/1, 4/3  
Business Analytics in Big Data (pp. 333-362)  
Lab 6: SAP Predictive Analysis: Visualization and Storyboards (week ____ document) |
| 12      | Test 2: 4/8 (Written Test) & 4/10 (Computer Operation)  
4/6, 4/8, 4/10  
Promising Trends in Information Visualization (pp. 363-380) |
| 13      | Business Information Warehouse (BW) Overview (pp. 381-392)  
4/13, 4/15, 4/17  
Lab 7: BW Query Reporting (pp. 661-662) |
| 14      | Reporting with SAP Business Object Crystal Report (pp. 393-404)  
4/20, 4/22, 4/24  
Lab 8: SAP BW Reporting, Xcelsius Dashboards, and Portal (pp. 663-671) |
| 15      | Course Review: Five Key Principle of CPPM, The Analytical Organization, Enhance Decision Making through Performance Dashboards & Scorecards (pp. 405-480)  
4/27, 4/29, 5/1  
Lab 9: Crystal Report (pp. 672-680, pp. 393-404) |
| 16      | Project Presentation  
5/3, 5/6, 5/8 |
| 17      | Final Exam: refer to Registrar Exam Schedule  
5/13 – 5/15  
Final Prototype Report due at noon on Thursday, May 15, 2014 |

CP: Course Pack  
R#: Reading Assignment number as listed in Course Pack