**Department Mission**

"Capitalizing on the strong technological emphasis of Missouri S&T, the Department of Business and Information Technology educates individuals 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."

**INSTRUCTOR AND COURSE INFORMATION**

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Bih-Ru Lea, Ph.D.</th>
</tr>
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<tbody>
<tr>
<td>Office:</td>
<td>Fulton 102A</td>
</tr>
<tr>
<td>Phone:</td>
<td>573-341-6436</td>
</tr>
<tr>
<td>E-Mail:</td>
<td><a href="mailto:leabi@mst.edu">leabi@mst.edu</a></td>
</tr>
<tr>
<td>Course Credit:</td>
<td>3 semester hours of credit</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>ERP 2110 or (preceded or accompanied by ERP 5110)</td>
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**Class Hours:** 4 pm – 6:30 pm W  
**Class Room:** Fulton 107A  
**Office Hours:** Monday & Wednesday: 11 am – 12 am  
Tuesday: 12 noon – 1 pm  
and by appointment (suggest a time via email)  
**Class Web:** [http://blackboard.mst.edu](http://blackboard.mst.edu)

**COURSE CATALOG DESCRIPTION:**

The course studies the need for supply chain integration and the challenges of managing complex interfaces. This course focuses on the systems approach to the planning, analysis, design, development, and evaluation of supply chain. The course discusses activities that lead to integration of information and material flows across multiple organizations.

**COURSE OBJECTIVES**

As a result of taking this course, students are expected to:

<table>
<thead>
<tr>
<th>Course Objectives</th>
<th>Program Learning Objectives</th>
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<tbody>
<tr>
<td><strong>Course Objectives</strong></td>
<td><strong>Program Learning Objectives</strong></td>
</tr>
<tr>
<td>Be able to describe and explain fundamentals of Supply Chain</td>
<td>X X</td>
</tr>
<tr>
<td>Be able to make reasonable decisions for supply chain design and management problems using IT enabled decision-support systems;</td>
<td>X X X X X</td>
</tr>
<tr>
<td>Be aware of Supply Chain practices</td>
<td>X X X X</td>
</tr>
<tr>
<td>Understand the fundamentals of ERP systems applied to Supply Chain Management</td>
<td>X X X X X X</td>
</tr>
<tr>
<td>Understand applications of visualization, analytics, and Mobility on Supply Chain Management</td>
<td>X X X</td>
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TEXTBOOK(S) AND MATERIALS FOR COURSE

- Required Textbook (Students **MUST** bring their textbook when attending class):

GRADING POLICIES AND PROCEDURES:

<table>
<thead>
<tr>
<th>Test 1</th>
<th>100 pts</th>
<th>Homework, Labs, Quizzes</th>
<th>710 pts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 2</td>
<td>80 pts + take home lab</td>
<td>(note: a few labs will be used as take</td>
<td></td>
</tr>
<tr>
<td>Final Exam</td>
<td>110 pts + take home lab</td>
<td>home computer operation sets)</td>
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</table>

**Grading Scale:**

A: \( \geq 895 \) pts  
B: \( 795 – 894 \) pts  
C: \( 695 – 794 \) pts  
D: \( 595 – 694 \) pts  
F: \(< 594 \) pts

**General Grading Policies:**

1. **ALL ASSIGNMENTS AND TESTS ARE INDIVIDUAL WORKS UNLESS OTHERWISE SPECIFIED.**
2. All assignments should be handed in at the beginning of class on the date announced. **NO LATE ASSIGNMENTS WILL BE ACCEPTED.**
3. Please make every effort to make it to class on time. It is disruptive to the class to have members arriving late.
4. 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.
5. The instructor will assign NO incompletes in lieu of a regular grade.

**Exams, Tests, and Quizzes**

1. There will be two tests and one final examination. **All exam materials may become property of the instructor after completion.**
2. 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.
3. 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.
4. All in-class quizzes and tests are closed books and closed notes unless otherwise specified.

**Assignments**

Assignments will mostly involve completion of concept, computations, and SAP exercises and, unless otherwise informed, are due on the following class period in which it was assigned.

**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.
GENERAL COURSE POLICIES:

US Federal Law Title IX

Missouri University of Science and Technology is committed to the safety and well-being of all members of its community. US Federal Law Title IX states that no member of the university community shall, on the basis of sex, be excluded from participation in, or be denied benefits of, or be subjected to discrimination under any education program or activity. Furthermore, in accordance with Title IX guidelines from the US Office of Civil Rights, Missouri S&T requires that all faculty and staff members report, to the Missouri S&T Title IX Coordinator, any notice of sexual harassment, abuse, and/or violence (including personal relational abuse, relational/domestic violence, and stalking) disclosed through communication including but not limited to direct conversation, email, social media, classroom papers and homework exercises.

Missouri S&T’s Title IX Coordinator is Vice Chancellor Shenethia Manuel. Contact her directly (manuels@mst.edu; (573) 341-4920; 113 Centennial Hall) to report Title IX violations. To learn more about Title IX resources and reporting options (confidential and non-confidential) available to Missouri S&T students, staff, and faculty, please visit http://titleix.mst.edu.

Academic Dishonesty: http://registrar.mst.edu/academicregs/index.html

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. 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/ and http://stuco.mst.edu/about/honor.shtml.

Disability Support Services: 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://designconstruction.mst.edu/floorplan/

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

KEY DATES:

- The last day to add this course is Tuesday, September 6, 2016.
- The last day to withdraw from this course without a “WD” showing on transcript is Monday, October 3, 2016
- The last day for dropping this course is Friday, November 11, 2016.
<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
<th>Readings</th>
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</table>
| 1 8/24  | Course Overview  
End users  
Introduction: Operations and Supply Chain  
Course Preparation Tasks  
Assignment 1: Production Planning Concepts Review and Exercises | Ch. 1 handouts |
| 2 8/31  | Supply Chain Foundations: System Slack and Related Concepts  
Demand Management: Processing, Influencing, and Anticipating Demand  
Assignment 2: Demand Forecasting | Ch. 3  
Ch. 4 |
| 3 9/7   | Supply Management: Trends, Technologies, and Tactics  
Assignment 3: Interactive Forecasting Exercise in an ERP Environment | Ch. 4 |
| 4 9/14  | Information Technology: ERP Systems, SCA Systems, and E-Commerce  
Assignment 4: SAS Visual Analytics & Visual Statistics in Forecasting | Ch. 2 Handout |
| 5 9/21  | Test 1 on 9/28  
Inventory Management I: Deterministic  
Assignment 6: Inventory Management exercise | Ch. 6 |
| 6 9/28  | Liner Regression (Visual Statistics)  
Production Management: Flow Control and Scheduling  
Assignment 7: Master Data Preparation – Part I | Ch. 9 |
| 7 10/5  | Supply Chain Management in ERP Environment  
Assignment 8: Master Data Preparation – Part 2 | Course Pack |
| 8 10/12 | Test 2 on 11/2 (the computer operation part is a take home exam)  
Assignments 10: Extending Master Data for SCM Part 2  
Transportation Management: Elements and Insights | Course Pack  
Ch. 10 |
| 9 10/19 | Master Data and Transactional Data Transfer and Mapping  
Assignments 9: Extending Master Data for SCM Part 1 | Course Pack |
| 10 10/26| Assignments 10: Extending Master Data for SCM Part 2  
Transportation Management: Elements and Insights | Course Pack  
Ch. 10 |
| 11 11/2 | Test 2 on 11/2 (the computer operation part is a take home exam)  
Assignments 11: Extending Master Data for SCM Part 3 & Transportation | |
| 12 11/9 | Assignment 12: Transportation and Quota Management  
Supply Network Deployment | Course Pack |
| 13 11/16| Supply Network Deployment  
Assignment 13: Interactive Supply Network Planning (SNP) | Course Pack |
| 14 11/23| Thanksgiving Holiday (no class) | Course Pack |
| 15 11/30| Capacity Management: Analysis and Psychology  
Assignment 14: Capacity Check and Leveling | Ch. 8 |
| 16 12/7 | Supply Chain Strategy: Frameworks and Synthesis  
Course Review | Ch. 12 |
| 17 12/14| Final Exam  
- **In class:** 7 pm to 9 pm, Wednesday, December 14 (the computer operation part is a take home exam)  
- **Take home due date:** 12 noon, Friday, December 16 | |

**Note:** * it is possible, 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.