

**ERP 5310 Supply Chain Management Systems in an ERP Environment**  
**Course Syllabus – Fall 2017**

**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, to serve the economic interests of industry and the evolving needs of society."*

**INSTRUCTOR AND COURSE INFORMATION**

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

**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:

Course Objectives	Program Learning Objectives					
	Communication Skills	Critical Thinking	Information Technology	Teamwork & Leadership	Global & Multicultural Issues	Integrate Business Areas
Be able to describe and explain fundamentals of Supply Chain	X	X			X	X
Be able to make reasonable decisions for supply chain design and management problems using IT enabled decision-support systems;		X	X	X		X
Be aware of Supply Chain practices	X	X	X		X	X
Understand the fundamentals of ERP systems applied to Supply Chain Management	X	X	X	X	X	X
Understand applications of data visualization, analytics, and Mobility on Supply Chain Management			X		X	X

## TEXTBOOK(S) AND MATERIALS FOR COURSE

- Required Textbook (Students **MUST** bring their textbook when attending class):
  - Principles of Supply Chain Management by Scott Webster, 2nd Edition, 2009, Dynamic Ideas (ISBN-10: 0975914677, ISBN-13: 978-0975914670).
  - ERP5310 Course Pack (ISBN: 281000017560B, only available at the Missouri S&T Bookstore, <http://www.mstbookstore.com>)

## GRADING POLICIES AND PROCEDURES:

Test 1	100 pts	Homework, Labs, Quizzes	710 pts
Test 2	80 pts + take home lab	(note: a few labs will be used as take	
Final Exam	110 pts + take home lab	home computer operation sets)	

### 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 ([manuel@mst.edu](mailto:manuel@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>.

### Accessibility and Accommodations: <http://dss.mst.edu>

It is the university's goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please contact Disability Support Services at (573) 341-6655, [dss@mst.edu](mailto:dss@mst.edu), or visit <http://dss.mst.edu/> for information, or go to [mineraccess.mst.edu](http://mineraccess.mst.edu) to initiate the accommodation process.

### Student Honor Code and Academic Integrity: <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/>
- [http://grad.mst.edu/media/administrative/grad/documents/AcademicMisconductProcessOutline\\_Graduate.pdf](http://grad.mst.edu/media/administrative/grad/documents/AcademicMisconductProcessOutline_Graduate.pdf)
- <http://stuco.mst.edu/about/honor.shtml>.

### 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>

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 Friday, September 1, 2017.
- The last day to withdraw from this course without a "WD" showing on transcript is Monday, October 2, 2017
- The last day for dropping this course is Friday, November 10, 2017.

### ERP 5310 Fall 2017 Course Schedule

Week of	Topic	Readings
<b>1</b> 8/23 <b>End users</b>	Course Overview Introduction: Operations and Supply Chain Course Preparation Tasks Assignment 1: Production Planning Concepts Review and Exercises	Ch. 1 handouts
<b>2</b> 8/30	Supply Chain Foundations: System Slack and Related Concepts Demand Management: Processing, Influencing, and Anticipating Demand Assignment 2: Demand Forecasting	Ch. 3 Ch. 4
<b>3</b> 9/6	Demand Management: Processing, Influencing, and Anticipating Demand Visualization Analytics in Forecasting (SAS Visual Analytics) Assignment 3: Interactive Forecasting Exercise in an ERP Environment	Ch. 4
<b>4</b> 9/13	Information Technology: ERP Systems, SCA Systems, and E-Commerce Assignment 4: SAS Visual Analytics & Visual Statistics in Forecasting	Ch. 2 Handout
<b>5</b> 9/20	Supply Management: Trends, Technologies, and Tactics Assignment 5: Ch 4 & Ch. 5 Problem set	Ch. 5
<b>6</b> 9/27	<b>Test 1 on 9/27</b> Inventory Management I: Deterministic Assignment 6: Inventory Management exercise	Ch. 6
<b>7</b> 10/4 <b>Developer</b>	Liner Regression (Visual Statistics) Production Management: Flow Control and Scheduling Assignment 7: Master Data Preparation – Part I	Ch. 9
<b>8</b> 10/11	Supply Chain Management in ERP Environment Assignment 8: Master Data Preparation – Part 2	Course Pack
<b>9</b> 10/18	Master Data and Transactional Data Transfer and Mapping Assignments 9: Extending Master Data for SCM Part 1	Course Pack
<b>10</b> 10/25	Assignments 10: Extending Master Data for SCM Part 2 Transportation Management: Elements and Insights	Course Pack Ch. 10
<b>11</b> 11/1	<b>Test 2 on 11/1</b> (the computer operation part is a take home exam) Assignments 11: Extending Master Data for SCM Part 3 & Transportation	
<b>12</b> 11/8	Assignment 12: Transportation and Quota Management Supply Network Deployment	Course Pack
<b>13</b> 11/15 <b>End Users</b>	Supply Network Deployment Assignment 13: Interactive Supply Network Planning (SNP)	Course Pack
<b>14</b> 11/22	Thanksgiving Holiday (no class)	
<b>15</b> 11/29	Capacity Management: Analysis and Psychology Assignment 14: Capacity Check and Leveling	Ch. 8
<b>16</b> 12/6	Supply Chain Strategy: Frameworks and Synthesis Course Review	Ch. 12
<b>17</b> 12/13	<b>Final Exam</b> <ul style="list-style-type: none"> <li>• <b>In class: 7 pm to 9 pm, Wednesday, December 13</b> (the computer operation part is a take home exam)</li> <li>• <b>Take home due date: 12 noon, Friday, December 15</b></li> </ul>	

**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.



[http://www.mmh.com/article/top\\_20\\_supply\\_chain\\_management\\_software\\_suppliers/](http://www.mmh.com/article/top_20_supply_chain_management_software_suppliers/)

[http://www.gartner.com/it/section.jsp?type=press\\_releases&format=xhtml&year=2011&show\\_archived=true](http://www.gartner.com/it/section.jsp?type=press_releases&format=xhtml&year=2011&show_archived=true)

## **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 ([manuel@msst.edu](mailto:manuel@msst.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.msst.edu>.

## **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 ([manuel@msst.edu](mailto:manuel@msst.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.msst.edu>.