

ERP2110 Introduction to Enterprise Resource Planning (ERP) Spring 2021

Department of Business & Information Technology Mission

“To serve the economic interests of industry and the evolving needs of society in a challenging, rapidly-changing, global environment, the Department of Business & Information Technology capitalizes on the strong technological emphasis of Missouri S & T to enable individuals to excel in a technology-centric business world. Recognizing this rapid evolution of the marketplace, we create and disseminate knowledge impacting the theory and practice of business.”

INSTRUCTOR AND COURSE INFORMATION

Instructor: Bih-Ru Lea, Ph.D.	Class Web: http://canvas.mst.edu
Office: Fulton 102A	Class Hours: Tuesday & Thursday 9:30 – 10:45 am
Phone: 573-341-6436	Classroom: McNutt 234
E-Mail: leabi@mst.edu	Office Hours: Tuesday & Thursday 11:30 am – 1 pm
Course Credit: 3 semester hours of credit	or by appointment (suggest a time via email)
Prerequisite: IST 1750	

COURSE CATALOG DESCRIPTION:

The course provides an overview of Enterprise Resource Planning (ERP) software systems and their role within an organization. It introduces key concepts integrated information systems and explains why such systems are valuable to businesses. In addition to lecture, students will be guided through several hands-on activities of various business processes in SAP ECC and S/4HANA software product. The course will also provide a discussion on various business cases in which ERP concepts can be applied. An overview of Business Intelligence (BI) and analytics in the ERP context will also be addressed.

PLANNED LEARNING OBJECTIVES

Course Objectives	Program Learning Objectives					
	Communication Skills	Critical Thinking	Information Technology	Teamwork & Leadership	Global & Multicultural Issues	Integrate Business Areas
An understanding of basic business functional areas and be able to explain how they are related.	X	X		X		X
The ability to illustrate how fragmented information systems fail to support business decisions.	X	X	X			X
The ability to illustrate and explain how integrated information systems can help a company prosper by providing business managers with accurate, consistent, and current data.	X	X	X			X
Understand how Enterprise Resource Planning (ERP) software is used to optimize business processes.		X	X	X		X
Acquire experience in using commercial ERP software that can be applied in further work.			X		X	
Understand analytics and business intelligence applications in an integrated enterprise system environment	X	X	X			X

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TEXTBOOK(S) AND MATERIALS FOR COURSE

Students **MUST** bring the required textbook and Course Notes to each class.

1. Textbook: *ERP 2110 Introduction to Enterprise Resource Planning (ERP)* (digital collection ISBN: 9781323923481), Custom Textbook Pearson Publishing.
 - Option 1 (\$43.92): direct purchase from Pearson Publishing at <https://console.pearsoned.com/enrollment/pp0bsz>
 - Option 2 (\$57.30): purchase an access code from the Missouri S&T Bookstore at <https://www.thesandtstore.com> and redeem it at <https://console.pearsoned.com/enrollment/pp0bsz>
2. Course pack: *ERP2110 Course Notes and Assignments* (ISBN: _____), can only be purchased from the Missouri S&T Bookstore (<http://www.thesandtstore.com> or 573-341-7901)

GRADING POLICIES AND PROCEDURES:

Test 1	100 pts	Class Project	170 pts
Test 2	100 pts	Assignments, quizzes, and Labs	510 pts
Test 3	100 pts	Discussion board participation	20 pts

Grading Scale:

A: ≥ 890 B: 790 – 889 C: 690 - 789 D: 590 – 689 F: < 590

General Grading Policies:

- **ALL ASSIGNMENTS AND TESTS ARE INDIVIDUAL WORKS UNLESS OTHERWISE SPECIFIED.**
- Assignment must be submitted at the beginning of the class period on the assigned date due. All homework assignments are due at the beginning of the class on its due date. The grade will be reduced by 15% if the assignment is turned in within 24 hours later than its due time/date. Late penalty is incremented by 15% for every 24 hours late. No work will be accepted if submitted five days after the due date, including weekends. Exception will only be given to student with a legitimate reason and he/she notifies the instructor **five days before the due date**.
- 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** (use digital submission link provided in Canvas, ask a friend to turn it in for you if a hard copy is required, 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.

Tests and Quizzes

- There are three tests and each test will consist of a written test and a computer operation test. **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 and quizzes dates are a part of the class schedule. Failure to appear for a test/quiz will result in the assignment of a zero for that test/quiz. If you are going to miss a test/scheduled quiz with a legitimate reason (e.g., scheduled surgery, official University business, job interview), contact the instructor **PRIOR** to the administration of that test/quiz. A make-up test may be allowed 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 test will be a comprehensive exam covering the material from throughout the course.
- All in-class quizzes and exams are closed books and closed notes unless otherwise specified.

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Project

- A business simulation team project will be assigned during the semester and accounts for 170 points of the final grade.
- Your team will form a company and operate your business using a SAP S/4HANA system, a commercial ERP system. ERP system will be used to record operation results and to make business decisions.
- A team member who is not contributing to the game may be dropped by the team. Every team member's effort in the project will be evaluated by both the instructor and his/her team members.

Discussion Board Participation

The sheer size of the SAP ERP 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 in the *Canvas Learning Management System*. **All technical support for assignments, exams, and project are provided through the Discussion Board** and will **NOT** be answered through e-mail by the instructor.

- 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.
- Before post a question on the Discussion Board, it is the student's responsibility to check and ensure no same question has been posted previously.
- By the end of the semester, every student is expected to have asked and answered 10-15 questions. These discussions will account for 20 points of your 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.
- The discussion board participation grade is computed based on the analysis of the following content categories during the semester:

Categories	Percentage
Original Posts & follow up posts	30%
Reply to original posts or follow-up posts	30%
instructor endorsement	10%
Posts viewed	15%
Instructor survey/poll participated/voted	20%
Total	100%

Attendance and 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. You are responsible for making your contributions heard and your presence felt in class. You are encouraged to keep your remarks relevant, timely, and constructive.
- 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 meeting times.

GENERAL COURSE POLICIES:

Statement about Copyright, FERPA, and Use of Video

It is vitally important that our classroom environment promote the respectful exchange of ideas. This entails being

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sensitive to the views and beliefs expressed during discussions whether in class or online. Please speak with me before recording any class activity. It is a violation of University of Missouri policy to distribute such recordings without my authorization and the permission of others who are recorded. More information is provided [online](#).

Accessibility and Accommodations

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 a disability, please contact Student Disability Services at (573) 341-6655, sdsmst@mst.edu, visit <http://dss.mst.edu/> for information.

Student Honor Code and Academic Integrity

- The Honor Code all students are expected to follow can be found at this link: <http://stuco.mst.edu/honor-code/>.
- 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 and sabotage (<http://registrar.mst.edu/academicregs/index.html>), **all of which will be reported to the Vice Provost for Academic Support.**
- Additional guidance including the University's Academic Dishonesty Procedures is available at <http://academicsupport.mst.edu>.
- Other resources for students regarding ethics and integrity can be found at <http://academicsupport.mst.edu/academicintegrity/studentresources-ai>.

Well-Being and UCARE (<https://go.mst.edu/ucare-report>)

Any of us may experience strained relationships, increased anxiety, feeling down, alcohol/drug misuse, decreased motivation, challenges with housing and food insecurity, etc. When your mental well-being is negatively impacted, you may struggle academically and personally. If you feel overwhelmed or need support, please make use of S&T's confidential [mental health services](#) at no charge. For a quick guide to campus resources that address specific issues please visit our Well-Being Referral Guide, available as a website at <https://minerwellness.mst.edu/well-being-referral-guide/>. If you are concerned about a friend or would like to consult with a Care Manager, please make a UCARE referral for support and assistance. <https://stuaff.mst.edu/ucare/>.

Nondiscrimination, Equity, and Title IX

Missouri University of Science and Technology is committed to the safety and well-being of all members of its community, and to creating an environment free from discrimination and harassment.

The University does not discriminate on the basis of race, color, national origin, ancestry, religion, sex, pregnancy, sexual orientation, gender identity, gender expression, age, disability, protected veteran status, and any other status protected by applicable state or federal law. As used in this policy, the word "sex" is also inclusive of the term "gender."

Additionally, 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. Violations of this law include sexual harassment, sexual assault, dating/domestic violence, and stalking.

In accordance with The Collected Rules and Regulations University of Missouri, Missouri S&T requires that all faculty and staff members report, to the Missouri S&T Equity Officer, any notice of discrimination disclosed through communication including but not limited to direct conversation, email, social media, classroom papers and homework exercises.

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Missouri S&T's Equity Officer and Title IX Coordinator is Chief Diversity Officer Neil Outar. Contact him (naoutar@mst.edu; (573) 341-6038; 203 Centennial Hall) to report violations of the university's nondiscrimination policies, including Title IX. To learn more about resources and reporting options (confidential and non-confidential) available to Missouri S&T students, staff, and faculty, please visit <http://titleix.mst.edu>.

Classroom Egress Maps

For all in-person instruction, faculty should explain where the classroom emergency exits are located. Classroom egress maps are posted at <http://designconstruction.mst.edu/floorplan/>.

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 & Information Technology located in Fulton 101 whether the class will be canceled. Students are expected to be in class on time.

KEY DATES:

- The last day to add this course is Monday, February 1
- The last day to withdraw from this course without a "WD" showing on transcript is Monday, March 1
- The last day for dropping this course is Friday, April 16

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ERP 2110 Course Schedule

Ch: Textbook chapter CP: Course Pack

Week	Topic	Readings & Notes	
		Textbook	CP
0 Before 1/19	Course Preparation & Setup assignment		121-128
1 1/19, 1/21	Introduction to ERP 2110		1-3
	SAP System Access & Display Settings		148-155
	SAP Operation Overview and Exercises		126-140
	ERP Concepts and SAP ERP Overview		5-27
	Understand the Company's Supply Chain (SAP Navigation)		156-199
	Assignment: Lab 1: SAP Navigation and Supply Chain		200-203
2 1/26, 1/28	Ch. 3 Business Processes, Information Systems, and Information	119-146	28 - 37
	Ch. 1 Accounting and Business Environment	1-54	44 - 56
	Financial Accounting Information System		204-248
	Assignments <ul style="list-style-type: none"> • Ch 1 & Ch. 3 Review Question Sets • Lab 2: Financial Transaction Recording and Financial Statement 	Canvas	265-267
3 2/2, 2/4	Financial Accounting Information System		248-263
	Ch. 2 Recording Business Transactions	55 – 118	57- 68
	Assignment <ul style="list-style-type: none"> • Ch. 2 Review Question Set • Lab 3: Financial Transaction Recording: Adjustment Entries 	Canvas	277-278
4 2/9, 2/11	Ch. 4 Using IS to Improve Processes	147-176	38-43
	Ch. 5 Supporting Processes with ERP Systems	177 – 208	69-80
	Ch. 4 & Ch. 5 Review Question Sets	Canvas	
	2/11 Test 1: Concept test & Computer Operation		297-334
5 2/16, 2/18	Procurement Process		285 - 359
	Assignment: Lab 4: Procurement Process		360 – 374
6 2/23, 2/25	Procumbent Planning & Production Planning		375-389
	Ch. 6 Supporting the procurement Process with SAP	209 - 242	81 - 88
	Assignment: <ul style="list-style-type: none"> • Lab 5 Procurement Process with Forecast • Ch. 6 Review Question Set 	Canvas	390-396
7 3/2, 3/4	Sales and Distribution Process		397 - 427
	Assignment: <ul style="list-style-type: none"> • Beverage Distribution Case & Team Project Report 1 • Lab 6 Sales and Distribution Process Part 1 		607 - 637 469- 477

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Week	Topic	Readings & Notes	
		Textbook	CP
8 3/9, 3/11	Sales and Distribution Process – Transaction		428 – 468
	Assignment: Lab 6 part 2: Sales and Distribution Process		477- 482
9 3/16, 3/18	Ch. 7 Supporting the Sales Process with SAP	243- 272	89 - 96
	Production Processes		487 - 505
	Assignments <ul style="list-style-type: none"> • Ch. 7 Review Question Set • (Extra Credit) Lab 7 Procurement Process Transactions -Test Review Exercise 	Canvas	518-520
10 3/23, 3/25	Spring Break (3/21 to 3/28)		
11 3/30, 4/1	3/30: Reference: Company Setup Transactions Team project report 2: Company Setup		638-662 663 - 664
	4/1 Test 2 Concept test & Computer Operation		
12 4/6, 4/8	Production Processes		506 - 527
13 4/13, 4/15	4/13 Team Project Competition 1		671- 680 681 - 689
	Improve Performance Utilizing Business Intelligence (Real Time Analytics & Data Visualization)		528 – 586
	Assignment: Lab 8 Part 1 Real time business analytics using oData Service		587 - 591
14 4/20, 4/22	Ch. 8 Business Intelligence and IS	273-310	97 - 116
	4/22: Team Project Competition 2		690 685-689
	Assignments: <ul style="list-style-type: none"> • Ch. 8 Review Question Set • Lab 8 part 2 Real time business analytics using oData Service 	Canvas	591
15 4/27, 4/29	4/27: Team Project Competition 3		690 685-689
	4/29 Course Review		
	Assignment: <ul style="list-style-type: none"> • Team Project Presentation • Lab 9 Sales Process: Order to Cash Cycle - Test Review 		691-692 603-606
16 5/4, 5/6	Project presentation		
17 5/10 - 5/14	Final Exam: 10:00 – 12:00, Tuesday, May 11		

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Custom Textbook: *ERP 2110 Introduction to Enterprise Resource Planning (ERP)* (digital collection ISBN: 9781323923481), Custom Textbook Pearson Publishing. The textbook can be purchased from Pearson Publishing (<https://console.pearsoned.com/enrollment/usomgl>).

Chapter 1 - Accounting and the Business Environment	1
<i>Tracie L. Miller-Nobles / Brenda L. Mattison / Ella Mae Matsumura</i>	
Chapter 2 - Recording Business Transactions	55
<i>Tracie L. Miller-Nobles / Brenda L. Mattison / Ella Mae Matsumura</i>	
Chapter 3 - Business Processes, Information Systems, and Information ...	119
<i>Earl H. McKinney / David M. Kroenke</i>	
Chapter 4 - Using IS to Improve Processes	147
<i>Earl H. McKinney / David M. Kroenke</i>	
Chapter 5 - Supporting Processes with ERP Systems	177
<i>Earl H. McKinney / David M. Kroenke</i>	
Chapter 6 - Supporting the Procurement Process with SAP	209
<i>Earl H. McKinney / David M. Kroenke</i>	
Chapter 7 - Supporting the Sales Process with SAP	243
<i>Earl H. McKinney / David M. Kroenke</i>	
Chapter 8 - Business Intelligence and IS	273
<i>Earl H. McKinney / David M. Kroenke</i>	
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Note:

- Horngren's Accounting, The Financial Chapters, 12th Edition (ISBN-13:9780134490540), Tracie L. Miller-Nobles, Brenda L. Mattison, Ella Mae Matsumura
- Processes, Systems, and Information: An Introduction to MIS, 3rd Edition (ISBN-13: 9780134827001), by Earl H. McKinney and David M. Kroenke