

ERP2110 Introduction to Enterprise Resource Planning (ERP)

Fall 2022

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: Toomey CLC 251
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 of integrated information systems and explains why such systems are valuable to businesses. In addition to the lecture, students will be guided through several hands-on activities of various business processes in SAP ECC and S/4HANA software products. 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

AACSB Accreditation Program Learning Objectives	Communication Skills	Critical Thinking	Information Technology	Teamwork & Leadership	Global & Multicultural Issues	Integrate Business Areas
Course Objectives						
The ability to explain what basic business functional areas are and how they are related to each other.	X	X		X		X
The ability to explain and 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
The ability to explain and operate Enterprise Resource Planning (ERP) software to optimize business processes.		X	X	X		X
Acquire experience in using commercial ERP software that can be applied in further work.			X		X	
The ability to create 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.pearson.com/enrollment/hvbqrs>
 - 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.pearson.com/enrollment/tr2bfm>
2. Course pack: *ERP2110 Course Notes and Assignments (ISBN: 281000027060B)*, 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	530 pts
Test 3	100 pts	Discussion board participation	Extra credit: up to 20 points (2%)

Grading Scale:

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

General Grading Policies:

- **ALL ASSIGNMENTS AND TESTS ARE INDIVIDUAL WORKS UNLESS OTHERWISE SPECIFIED.**
- The 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 their due date. The grade will be reduced by 15% if the assignment is turned in within 24 hours later than its due time/date. The 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. The exception will only be given to a 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 the 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 the property of the instructor after completion.**
- It is possible to have announced and pop quizzes throughout the semester. The student will be given the date of the announced quizzes one week in advance.
- Exam and quiz 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 for 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

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documentation (such as a doctor's note in case of surgery/illness) are given for the absence. The make-up test will be a comprehensive exam covering the material throughout the course.

- All in-class quizzes and exams are closed books and closed notes unless otherwise specified.

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 an SAP S/4HANA system, a commercial ERP system. ERP system will be used to record operating 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 concepts and complexity of ERP software limit the instructor from covering every aspect and screen that we will be using this semester. To help students better understand course materials, to develop debugging skills, and to learn from each other, the instructor has enabled a discussion board in the *Canvas Learning Management System*. **All technical support for assignments, exams, and projects 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 posting 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 **earn you up to 20 extra credit points (or 2%) toward the course grade**. Straightforward 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 in 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, reply posts and follow-up posts	45%
Endorsement from the instructor and peers	10%
Posts viewed	15%
Instructor posted topics/survey/poll participated/voted	30%
Total	100%

Attendance and Participation

- Overall, student participation and discussion are 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 absence will result in the 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.

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GENERAL COURSE POLICIES:

Statement about Copyright, FERPA, and Use of Video

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

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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.

Report violations of the university's nondiscrimination policies, including Title IX to the Missouri S&T's Equity Officer and Title IX Coordinator at equity@mst.edu or (573) 341-7734 located at 900 Innovation Drive - Suite 500 Rolla, MO 65409. 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 Sunday, September 4.
- The last day to withdraw from this course without a "WD" showing on the transcript is Monday, October 3
- The last day for dropping this course is Friday, November 11.

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ERP 2110 Course Schedule

Ch: Textbook chapter CP: Course Pack

Week	Topic	Readings & Notes	
		Textbook	Coursepack
0 Before 8/23	Course Preparation & Setup assignment		125-135
1 8/23, 8/25	Introduction to ERP 2110		3-8
	SAP System Access & Display Settings		129-135
	SAP Navigation Review and Exercises		136-150
	ERP Concepts and SAP ERP Overview		9-30
	Understand the Company's Supply Chain (SAP Navigation)		158-209
	Assignment: Ch. 3 Review Question Sets Lab 1: SAP Navigation and Supply Chain	Canvas	210-214
2 8/30, 9/1	Ch. 3 Business Processes, Information Systems, and Information	119-146	31-40
	Ch. 1 Accounting and Business Environment	1-54	42 – 55
	Financial Accounting Information System		215 – 259
	Assignments: <ul style="list-style-type: none"> • Ch. 1 Review Question Sets • Lab 2: Financial Transaction Recording and Financial Statement 	Canvas	275 - 279
3 9/6, 9/8	Financial Accounting Information System- Adjustment Entries		260 - 268
	Ch. 2 Recording Business Transactions	55 – 118	55 - 66
	Assignment <ul style="list-style-type: none"> • Ch. 2 Review Question Set • Lab 3: Financial Transaction Recording: Adjustment Entries 	Canvas	289 – 291
4 9/13, 9/15	Ch. 4 Using IS to Improve Processes	147-176	67-72
	Ch. 5 Supporting Processes with ERP Systems	177 – 208	73-84
	Ch. 4 & Ch. 5 Review Question Sets	Canvas	
	9/15 Test 1: Concept test & Computer Operation		
5 9/20, 9/22	Procurement Process		299 – 373
	Assignment: Lab 4: Procurement Process		374 – 387
6 9/27, 9/29	Procumbent Planning & Production Planning		389 – 403
	Ch. 6 Supporting the procurement Process with SAP	209 – 242	85-92
	Assignment: <ul style="list-style-type: none"> • Ch. 6 Review Question Set • Assignment: Lab 5 Procurement Process with Forecast 	Canvas	404 – 410
7 10/4, 10/6	Sales and Distribution Process 10/6 Fall Break, no class		411 - 436
	Maple Syrup Distribution Case & Team Project Report 1		621-646 649-652

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Week	Topic	Readings & Notes	
		Textbook	CP
8 10/11, 10/13	Sales and Distribution Process – Transaction		437 -471
	Assignment: Lab 6 Sales and Distribution Process		479 – 492
9 10/18, 10/20	Sales and Distribution Process – Transaction		471 – 477
	Ch. 7 Supporting the Sales Process with SAP	243- 272	93-100
	Assignments: <ul style="list-style-type: none"> • Ch. 7 Review Question Set • (Extra Credit) Lab 7 Procurement Process Transactions -Test Review Exercise 	Canvas	493 – 495
10 10/25, 10/27	10/25: Reference: Company Setup Transactions Team project report 2: Company Setup		653 – 678 679 - 680
	10/27 Test 2 Concept test & Computer Operation		
11 11/1, 11/3	Improve Performance Utilizing Business Intelligence (Real-Time Analytics & Data Visualization)		497 – 554
	Ch. 8 Business Intelligence and IS	273-310	101 - 120
	Assignments <ul style="list-style-type: none"> • Ch. 8 Review Question Set • Lab 8 Part 1 Real-time business analytics using oData Service 	Canvas	555 - 559
12 11/8, 11/10	11/8 Team Project Competition 1		699 - 707
	Production Processes & Exercises		
	Assignment: Lab 8 part 2 Real-time business analytics using oData Service		559
13 11/15, 11/17	Production Processes & Exercises		571 - 611
	11/17: Team Project Competition 2		708 – 712
	Assignment: Production process exercises		612 – 613
14 11/22, 11/24	Thanksgiving Break (NO CLASS)		
15 11/29, 12/1	11/29: Team Project Competition 3		713 – 718
	12/1 Course Review		721 - 729
	Assignment: <ul style="list-style-type: none"> • Team Project Presentation • Lab 9 Sales Process: Order to Cash Cycle - Test Review 		719 - 720 614 - 617
16 12/6, 12/8	Project presentation		719 – 720
17 12/13 – 12/16	Final Exam: 10:00 am – 12:00 pm, Thursday, December 15		

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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.pearson.com/enrollment/tr2bfm>).

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>	
Index	311

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