ERP2110 Introduction to Enterprise Resource Planning (ERP)
Fall 2023

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		**LEAD Sessions**: Posted in http://canvas.mst.edu	

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 of 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 / Course Objectives	Communication Skills	Critical Thinking	Information Technology	Teamwork & Leadership	Global & Multicultural Issues	Integrate Business Areas
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

ERP2110 Introduction to Enterprise Resource Planning (ERP)
Fall 2023

TEXTBOOK(S) AND MATERIALS FOR THE 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: *9781323979440),* Custom Textbook Pearson Publishing.
   o Option 1 ($43.92): direct purchase from Pearson Publishing
     at https://console.pearson.com/enrollment/qozyzh
   o Option 2 ($52.70): purchase an access code from the Missouri S&T Bookstore
     at https://www.thesandtstore.com and redeem it at https://console.pearson.com/enrollment/qozyzh

2. Course pack: ***ERP2110 Course Notes and Assignments** (ISBN: 2810000298301),* can only be purchased from the Missouri S&T Bookstore ((http://www.thesandtstore.com or 573-341-7901)
   o This book has been approved to be a part of the S&T AutoAccess program designed to reduce the cost of the course materials for students. Therefore, you are paying **$10** through the AutoAccess program instead of $70-$110 for this course pack.
   o The course pack will be automatically added to the "**VS Materials**" in your Canvas course site.
   o Additional AutoAccess program information, opt-out period, printed version availability, and FAQ can be viewed at https://www.thesandtstore.com/t-autoaccess_student.aspx. A printed copy is provided at the end of this syllabus.

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 arrive 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.

ERP2110 Introduction to Enterprise Resource Planning (ERP)
Fall 2023

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 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.
- The project grade distribution is shown below:

Project assignments	Points	Extra Credit
Team business strategy report	30 points	Up to 50% (or 15 points)
Team company setup report	30 points	
Round 1 Competition	15 points	Teams with net income: +4 points Team competition ranking • 1st: 6 points • 2nd: 4 points • 3rd: 2 points
Round 2 Competition	15 points	Teams with net income: +5 points Team competition ranking: • 1st: 7 points • 2nd: 5 points • 3rd: 3 points • 4th-6th: 1 point
Round 3 Competition	20 points	Teams with net income: +5 points Team competition ranking: • 1st: 8 points • 2nd: 6 points • 3rd: 4 points • 4th-6th: 2 point
Team Presentation Competition	60 points	Team presentation ranking: • 1st: 8 points • 2nd: 6 points • 3rd: 4 points • 4th-6th: 2 point
Total	**170 points**	**plus extra credit earned**

ERP2110 Introduction to Enterprise Resource Planning (ERP)
Fall 2023

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, develop debugging skills, and 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 extra credits are awarded 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 essential factors 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.

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 the University of Missouri policy to distribute such recordings without my authorization and the permission of others who are recorded. More information is provided online.

ERP2110 Introduction to Enterprise Resource Planning (ERP)
Fall 2023

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, and visit http://dss.mst.edu/ for information.

Student Honor Code and Academic Integrity

- **The instructor does not tolerate academic dishonesty of any type**. You don't get a second chance. You don't get to redo work or be forgiven for academic misconduct. You will be assigned a 0 for any assessment where you perform academic misconduct and the instructor is **required to report the incident to the Department and the University for disciplinary actions** which may include dismissal from the University. You may seek and give assistance on an assignment or project. You may not copy or plagiarize someone else's assignments, including assignments from previous semesters. You may not copy work from anyone else. You may not give someone else your answers. You may not submit someone else's work as your own. This **includes work done by an AI**. You may not do someone else's work for them. If you are caught receiving or giving an answer, this is considered academic dishonesty under university rules. Helping means helping someone figure out the solution themselves. It does not mean giving them the answers. If you don't know or don't want to spend the effort to actually teach someone else how to do something, don't help them. You will get in trouble. **Please note that there are elements designed into this course to cause your cheating to be revealed** (adopted from Dr. Cecil Huang Chua's policies).

- 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.

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.

COVID Update on Classroom Instruction
- For the Fall 2023 semester, in-person courses and assessments are scheduled without distancing between students.
- To protect our campus community and each other from the risks of COVID-19 transmission, it is strongly encouraged that students, faculty, and staff to become fully vaccinated and boosted. A combination of vaccination, masking, social distancing, staying home when you are sick, being cautious about spending time in large groups, and seeking testing when you have symptoms of COVID-19 will be our most effective measures to mitigate against the spread of the virus.
- There is no requirement to provide proof of immunization, but students may report vaccination information at https://studenthealth.mst.edu/.

Contingency Information
- Students should contact Student Health Services (mstshs@mst.edu), 573-341-4284, if they are quarantined, become ill, or are unable to attend class or take tests on campus.
- If a student is isolating or quarantining, the student will receive an absence note from Student Health and not Student Support and Community Standards (Care Management). The student will be responsible for forwarding the absence note to their instructors.

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 3.
- The last day to withdraw from this course without a "WD" showing on the transcript is Monday, October 2
- The last day for dropping this course is Friday, November 10.

ERP2110 Introduction to Enterprise Resource Planning (ERP)
Fall 2023

ERP 2110 Course Schedule   **Ch**: Textbook chapter   **CP**: Course Pack

Week	Topic	Readings & Notes	
		Textbook	**Coursepack**
0 Before 8/22	Course Preparation & Setup Assignment		222-230
1 8/22, 8//24	Introduction to ERP 2110		16-32
	SAP System Access & Display Settings		254 - 264
	SAP Navigation Review and Exercises		136-150
	ERP Concepts and SAP ERP Overview		33 - 54
	Understand the Company's Supply Chain (SAP Navigation)		266 - 317
	Assignment: Ch. 3 Review Question Sets **Lab 1:** SAP Navigation and Supply Chain	Canvas	318 - 323
2 8/29, 8/31	Ch. 3 Business Processes, Information Systems, and Information	119-146	55 - 69
	Ch. 1 Accounting and Business Environment	1-54	70 - 92
	Financial Accounting Information System		324 - 365
	Assignments: • **Ch. 1** Review Question Sets • **Lab 2**: Financial Transaction Recording and Financial Statement	Canvas	381 - 394
3 9/5, 9/7	Financial Accounting Information System- Adjustment Entries		366 - 380
	Ch. 2 Recording Business Transactions	55 – 118	93 - 116
	Assignment • **Ch. 2** Review Question Set • **Lab 3**: Financial Transaction Recording: Adjustment Entries	Canvas	289 – 291
4 9/12, 9/14	Ch. 4 Using IS to Improve Processes	147-176	117 - 127
	Ch. 5 Supporting Processes with ERP Systems	177 – 208	128 - 151
	Ch. 4 & Ch. 5 Review Question Sets	Canvas	
	9/14 Test 1: Concept test & Computer Operation		
5 9/19, 9/21	Procurement Process		404 - 489
	Assignment: Lab 4: Procurement Process		490 – 502
6 9/26, 9/28	Procumbent Planning & Production Planning		503 – 518
	Ch. 6 Supporting the Procurement Process with SAP	209 – 242	152 – 167
	Assignment: • **Ch. 6** Review Question Set • **Assignment: Lab 5** Procurement Process with Forecast	Canvas	519 – 527
7 10/3, 10/5	Sales and Distribution Process **10/5 Fall Break, no class**		528 – 596
	Maple Syrup Distribution Case & Team Project Report 1		722 - 747 748 – 751

ERP2110 Introduction to Enterprise Resource Planning (ERP)
Fall 2023

Week	Topic	Readings & Notes	
		Textbook	CP
8 10/10, 10/12	Sales and Distribution Process – Transaction		549 – 596
	Assignment: **Lab 6** Sales and Distribution Process		597 – 609
9 10/17, 10/19	Sales and Distribution Process – Transaction		549 – 596
	Ch. 7 Supporting the Sales Process with SAP	243- 272	168 - 184
	Assignments: • Ch. 7 Review Question Set • **(Extra Credit) Lab 7** Procurement Process Transactions -Test Review Exercise	Canvas	610 - 612
10 10/24, 10/26	10/24: Reference: Company Setup Transactions **Team project report 2: Company Setup**		752 - 777 778 - 786
	10/26 Test 2 Concept test & Computer Operation		
11 10/31, 11/2	Improve Performance Utilizing Business Intelligence (Real-Time Analytics & Data Visualization)		613 - 642
	Ch. 8 Business Intelligence and IS	273-310	185 - 217
	Assignments • Ch. 8 Review Question Set • **Lab 8** Part 1 Real-time business analytics using oData Service	Canvas	643 - 648
12 11/7, 11/9	11/7 Team Project Competition 1		798 - 806
	Production Processes & Exercises		672 - 713
	Assignment: Lab 8 part 2 Real-time business analytics using oData Service		649 - 650
13 11/14, 11/16	Production Processes & Exercises		672 - 713
	11/16: Team Project Competition 2		807 – 811
	Assignment: Production process exercises		714 - 715
14 11/21, 11/23	Thanksgiving Break (NO CLASS)		
15 11/28, 11/30	11/28: Team Project Competition 3		812 - 817
	11/30 Course Review		820 - 827
	Assignment: • Team Project Presentation • **Lab 9** Sales Process: Order to Cash Cycle - Test Review		818 - 819 716 - 719
16 12/5, 12/7	Project presentation		818 - 819
17 12/13 – 12/16	**Final Exam: 10:00 am – 12:00 pm, Friday, December 15**		

ERP2110 Introduction to Enterprise Resource Planning (ERP)
Fall 2023

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/qozyzh**).

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