

**Missouri University of Science and Technology**  
**Department of Business and Information Technology**

**Department 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 and 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 Information**

**Instructor:** Yu-Hsien Chiu, MS-MIS                      **Office:** 112 Fulton Hall  
**Office Phone:** 573-341-6907                              **Email:** [chiuyu@umsystem.edu](mailto:chiuyu@umsystem.edu)  
**Office Hours:** 2:30 – 3:30PM Tue. and 3:30-4:30PM Thu. or by appointment

**Course Information**

**Course Title:** ERP 5110 ERP Systems Design and Implementation  
**Semester/Year:** Fall 2024                              **Credit Hours:** 3 credits  
**Instruction Mode:** In-person / Wholly online asynchronous  
**Classroom:** 209 Computer Science                      **Days and Times:** TuTh 12:30 - 1:45 PM

**Catalogue Description**

The course provides a technical overview of Enterprise Resource Planning systems and their impact on organizations. SAP ECC is introduced to illustrate the concepts, fundamentals, framework, general information, technology context, the technological infrastructure, and integration of business enterprise-wide applications.

**Extended Description:**

This course is designed to prepare students to either join ERP implementation projects or maintain an ERP system in an organization later after they graduate. Thus two themes are embedded in this course. The first theme is to understand how the ERP software is used in an organization to support day-to-day transactions as well as decision making. The students will be introduced with four major business processes supported by the ERP software.

The second theme of this course is to guide the students thru an ERP implementation life cycle. Topics like the implementation project life cycle, implementation methodologies, project organization chart, and system cut-over strategies will be studied.

**Course Prerequisites**

ERP 2110 or graduate standing.

**Required Materials**

1. *Enterprise Systems for Management, 2e* – Luvai F. Motiwalla, Jeff Thompson, Pearson Prentice Hall
2. *Course pack:* SAP Lab Book by Prof. Chiu. Available at [vitalsource.com](http://vitalsource.com)

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**Instructional Methods**

Class instructions will include lectures and software operations. Classroom activities will include individual work on cases study and lab exercises. **Each student is expected to complete the required pre-work or study cases before the scheduled class discussion.** All assigned material may not be covered in the lecture, therefore, it is the student’s responsibility to bring up for discussion any material he or she does not completely understand.

Distance students – There will be video recordings posted every week. You are expected to watch the video recordings on weekly basis, if not twice a week. Along with watching the videos, you are expected to complete assignments (see Assignments), class participation (see Class Participation), take-home quizzes (see Quizzes), and/or any other pop-up announcement on timely manner.

**Course Learning Objectives**

By completing this course, students are expected to be able to:

Course Objectives	Program Learning Objectives				
	Oral Communication	Written Communication	Critical Thinking	IT Impact	Leadership
Understand the basic concepts, architecture and terminology of an ERP system.	X	X		X	
Understand and communicate the need and examine the capabilities of an enterprise resource planning system.	X	X		X	
Understand the business process view of an organization through the process of ERP system.				X	
Understand and communicate the impact of events, activities, and transactions across the functions of an organization.				X	
Recognize the life-cycle of an ERP implementation project.				X	X
Master life-long learning ability in the area of ERP			X	X	
Recognize the impact of recent emerging technologies has on the ERP system. Digital innovations like Robotic Processing Automation, Machine Learning, IoT and Blockchain, and Low maintenance code will be discussed in the class.			X	X	X

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## **Grading Policy and Grading**

### **Grading Scale**

A final letter grade is to be awarded to each enrolled student in accordance with the standard grading scale system:

A:  $\geq 90\%$     B: 80% – 89.9%    C: 70% - 79.9%    D: 60% – 69.9%    F: <59.9%

### **Grading Plan**

Exams (50*2)	26.3%	100 points
Assignments	42.1%	160 points
Project (Individual) (40x2)	21.0%	80 points
Quizzes (5x4)	5.3%	20 points
Attendance/Participation	5.3%	<u>20 points</u>
		<u>380 points</u>

### **Grade Determination**

#### **Exams**

During the course of the semester, there will be two exams. Each of the exam accounts for 50 points. All exams will take place in the regular lecture room. If you are going to miss an exam for a legitimate reason (e.g. official University business), you must notify the instructor 5 school days before the test date. A make-up test may be given only if the case of legitimate reasons and with proper documentation. If you are going to miss an exam due to illness, you must notify the instructor before the test date. Proper documentation is required.

Distance student on online asynchronous mode - With special permission, you will be able to take the exam at different time but within 24 hours the exam has been held. Please contact the instructor for arrangement.

#### **Assignments**

You will spend a significant amount of time for this course on the SAP S/4HANA system. During the course of the semester you will be expected to do seven SAP lab assignments. The assignments are expected to be completed with individual efforts. You may only discuss the operation of any SAP transaction with others. However, you need to write up assignments all by yourself with your own screenshots or observation and interpretation.

There will be a few (two or three) end-of-chapter short essay assignments as well. These assignments are locked with passcode. If you do not attend the class, you are not given the passcode to work on the short essay assignments. Giving access code to someone else and using code given by someone are seen as a violation to academic integrity. Violations may result in academic penalties in addition to receiving an "F" on the assignment or activity in question.

#### **Project**

The **individual project** is to demonstrate the master of the system processes and reports that you learn in this semester. Details will be provided in the class.

#### **Quizzes**

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End-of-Chapter Quizzes are designed for you to review the lecture materials right after the lecture and bring questions for discussion in the next lecture time. Each quiz consists of true/false and/or multiple-choice questions. There will be four to five quizzes. Each accounts for 5 points. In the occasion of a take-home quiz is given, though conducting via Canvas, the quiz will be locked by passcode. Passcode will be given to the students who are supposed to attend the class lively and attend the class. If you are absent from the class, you will receive a zero score to the specific quiz automatically.

Distance student on online asynchronous mode - you will be able to take the exam at different time but within 24 hours the quiz has been held.

**Class Attendance/Participation**

Pop-up activities will be given from time to time. If you do not attend the class, you are not allowed to make up these activities.

Distance student on online asynchronous mode - You will be given different way(s) or due dates to participate.

The table below is the tentative schedule for all items:

Description	Type	Weights	Date Assigned	Date Due
End of Chapter Assignment, Chapter 1	Assignment	10	8/27	4pm, Friday, 8/30
Hands-On Assignment, SAP Navigation	Assignment	10	8/29	4pm, Wed., 9/4
Hands-On Assignment, P2P Process, Part 1	Assignment	20	9/5	4pm, Wed., 9/11
Hands-On Assignment, P2P Process, Part 2	Assignment	15	9/12	4pm, Wed., 9/18
Hands-On Assignment, PP&PE Process, Part 1	Assignment	20	9/17	4pm, Wed, 9/25
EoC Assignment, Chapter 5	Assignment	5	9/19	4pm, Fri., 9/27
Hands-On Assignment, PP&PE Process, Part 2	Assignment	20	9/26	4pm, Wed., 10/2
Exam 1	Exam	50	10/10	In the class
Hands-On Assignment, O2C Process, Part 1	Assignment	20	10/17	4pm, Wed, 10/23
EoC Assignment, Chapter 7	Assignment	5	10/22	4pm, Fri, 10/25
Hands-On Assignment, O2C Process, Part 2	Assignment	15	10/29	4pm, Fri, 11/1
Hands-On Lab Assignment, FI&CO	Assignment	20	11/1	4pm, Wed., 11/13
Project, checkpoint 1	Project	40	11/7	4pm, Wed., 11/27
Exam 2	Exam	50	11/21	In the class
Project, checkpoint 2	Project	40	11/26	4pm, Fri., 12/6

**Course Policies**

**Use of Learning Management System**

Course materials, homework, schedule, and grades can be found on school's Learning Management System. You will be either alerted by e-mail and announcement when there are changes, additions, or assignments on the Learning Management System.

**Late Work**

All assignments are due at the beginning of the class on its due date. Grades on late work will be reduced by 25%, if turn in late at the same due date. Late penalty is incremented by 25% for every 24 hours late. No assignment will be accepted if submitted four days after the due date.

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Exception will only be given to student with a legitimate reason and he/she notifies the instructor 5 school days before the due date.

Distance students on online asynchronous mode: Under the normal situation, you will be given the same due time/date for all assignments and project, unless specified. You are responsible to initial discussions with the instructor should special arrangement be considered due to your circumstance.

**Grade**

The grade of each individual grading item, including exam, assignment, etc. should be reviewed by the student promptly. If you are not satisfied with your grade on any given exam/quiz/assignment, you must bring your concerns to the attention of your instructor within one week after I publish your grade. Do not expect me to review your old exam grades during the last week of the semester (or right before drop date!). Student also has the responsibility to check the accuracy the grade posted on Canvas.

Your grade will reflect how you have mastered the material, including the ability to use your knowledge to solve complex problems. I will make the score for each grading item available to help you evaluate your performance and your relative position in the class, but please don't expect me to be able to tell you what final letter grade you will get prior to the end of the course.

**Attendance**

Attendance is required. The instructor monitors the attendance in several ways. To name a few, call the roll, pop-up activities, etc.

There will be 21 class meetings, excluding breaks and group presentation days. If you miss more than 4 meetings, you will result in a loss of a letter grade. For example, if your grade is a B and you have missed 5 meetings 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 10 class meetings.

**Contingency Information**

**Instructor Illness or Unavailability**

Instructor will make an announcement using Canvas if the instructor is ill or otherwise unable to attend class in person. Under a circumstance that the instructor is unable to reach to Canvas, the department will send someone to the classroom to announce the cancellation. Worst case scenario, if the instructor does not appear 15 minutes after the class time begins, the class is cancelled.

**Student Illness**

Students should contact Student Health Services ([mstshs@mst.edu](mailto:mstshs@mst.edu)), 573-341-4284, if they become ill or are unable to attend class or take tests on campus.

If a student is isolating, the student will receive an absence note from Student Health and not Student Support and Community Standards (Care Management). The student will be responsible of forwarding the absence note to their instructors.

**Campus Policies**

**Copyright, FERPA, and Use of Video**

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It is vitally important that our classroom environment promote the respectful exchange of ideas. This entails being sensitive to the views and beliefs expressed during discussions, whether in class or online. Please obtain instructor permission before recording any class activity. It is a violation of University of Missouri policy to distribute such recordings without authorization and the permission of all who are recorded. More information is provided [online](#).

**Student Honor Code and Academic Integrity**

- **The instructor is very serious about this. Ethical behavior is extremely important in all facets of life.**
- All students are expected to follow the [Honor Code](#).
- [Student Academic Regulations](#) 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, sabotage, and **unauthorized use of artificially generated content**, any of which will be reported to the Dean of Students.
- Other resources for students regarding academic integrity can be found [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 Accessibility and Testing at (573) 341-6655, email [dss@mst.edu](mailto:dss@mst.edu), or visit <https://saat.mst.edu/> for information.

**Student Mental Health and Well-Being**

Your well-being is important, and it contributes to your success in this course. At S&T, we provide resources to support your mental, physical, and social well-being. Any of us can experience challenges that make learning difficult. If you are struggling, take advantage of the following resources offered by the university:

**Student Well-Being (<https://wellbeing.mst.edu/>)**

Student Well-Being provides counseling services, health promotion initiatives, and prevention programs to empower the S&T community to thrive and enhance personal, academic, and professional success. Department office hours are Monday-Friday, 8 a.m. – 5:00 p.m. On the website, you can find information related to confidential individual and group counseling, wellness consultations and trainings, case management services, resources for many health and wellness topics, and help for mental health crisis situations. For the 988 Suicide and Crisis Lifeline, call or text 988, or visit [missouri988.org](http://missouri988.org) For the National Suicide Prevention Lifeline, call or text 988, or visit [missouri988.org](http://missouri988.org).

**Health and Well-Being Canvas Course (<https://umsystem.instructure.com/enroll/G3LY3G>)**

The Health and Well-Being Canvas Course features trainings, presentations, and other health and well-being resources for students. The course is free for all students, is non-credit, and students can enroll at any point in the semester.

**Student Emergency Fund (SEF)**

The SEF is administered by the Division of Student Success to help ensure Missouri S&T students have access to the support and resources they need to successfully recover from an unforeseeable financial emergency. The goal of this fund is to prevent one small emergency or

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unexpected expense from derailing a student's progress toward degree completion.

**Nondiscrimination, Equity, and Title IX**

Missouri S&T is committed to the safety and well-being of our campus community, and to creating an environment free from discrimination and harassment.

The University prohibits discrimination and harassment 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. Sexual harassment violations of this law include quid pro quo, hostile environment, sexual assault, dating/domestic violence, and stalking. The U.S. Department of Education has stated the prohibition on discrimination on the basis of sex includes sexual orientation and gender identity.

Students who are experiencing pregnancy or pregnancy-related conditions, including the birthing parent and non-birthing parent, have rights protected under Title IX. Students should contact Student Accessibility and Testing or the Office of Equity and Title IX to learn more about their rights and pregnancy-related assistance/accommodations provided by the University to ensure equitable access to University educational programs and activities.

In accordance with the University of Missouri's Collected Rules and Regulations, all faculty and staff are required to report any information concerning discrimination disclosed through communication including, but not limited to, direct conversation, email, social media, classroom papers and homework exercises to the Equity Officer/Title IX Coordinator.

For more information regarding support for those that have been impacted or to report an incident of discrimination or harassment as defined by Chapter 600 of the University's Collected Rules and Regulations, visit the Office of Equity and Title IX or visit their website at [equity.mst.edu](http://equity.mst.edu).

Office of Equity and Title IX  
Equity Officer and Title IX Coordinator: Dr. Paul Hirtz  
Phone: (573) 341-7734  
Location: 900 Innovation Drive, Suite 500  
E-mail: [equity@mst.edu](mailto:equity@mst.edu)

**Classroom Egress Map**

Please familiarize yourself with the classroom egress maps posted at <http://designconstruction.mst.edu/floorplan/> so you will know where emergency exits are located.

**University Libraries**

The Curtis Laws Wilson Library is the place to gather on campus, offering group meeting spaces, quiet study carrels and reservable conference rooms. The library provides students and faculty with physical and electronic books, journals, articles and databases as well as recreational reading, games and DVDs. We also have technology to check out, from laptops to chargers to calculators and everything in-between. Librarians create library and course guides to help

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navigate searching for resources. Talk to us one-on-one via chat, email, phone or in person for any assistance regarding library services or finding peer-reviewed, credible research materials for study and research needs. Find out more information and connect with the library here:

[library.mst.edu](http://library.mst.edu).

**Writing and Communication Center**

The Writing and Communication Center’s mission is to assist all students in their efforts to become better writers, communicators, and critical thinkers. The Center’s peer consultants and coaches provide free individualized one-on-one and small-group conversations to offer meaningful feedback and guidance to students across all disciplines. More information can be found on our website, through email: [writing@mst.edu](mailto:writing@mst.edu) or stop by Curtis Laws Wilson Library 314–315.

**Student Success Center**

The Student Success Center (SSC) offers peer tutoring and success coaching to help students succeed in their academic goals. Additionally, we work as a resource hub and can connect you to the campus resources necessary to help you dig deeper and finish the semester strong. Visit the SSC in Room 117 Innovation Lab and contact us at [ssc@mst.edu](mailto:ssc@mst.edu) or 573-341-7590. To learn more about the SSC, visit <https://ssc.mst.edu/>

**S&T Tutoring Opportunities**

The Student Success Center (SSC) helps you with your studies in three ways:

- **LEAD Drop-in:** Our LEAD Drop-in service provides convenient access to experienced peer learning assistants for a multitude of courses across campus. No appointments necessary. Simply check our tutoring schedule to discover when support for your specific course is available: <https://ssc.mst.edu/leaddrop-in/>
- **LEAD Group Sessions:** Our LEAD Group sessions offer after-hours group tutoring, facilitated by our dedicated peer learning assistants in partnership with faculty members. Explore the LEAD Group schedule to see if your course is featured and join us at the next session: <https://ssc.mst.edu/leadgroup/>
- **Knack Tutoring:** If your schedule clashes with our LEAD offerings, or if your course isn’t covered, Knack is your solution. Request a tutor for either a virtual meeting or an in-person session on campus, ensuring you get the help you need, when you need it. To sign up for your FREE Knack account, visit: <https://ssc.mst.edu/knacktutoring/>

**Student Veterans Resource Center**

The Student Veterans Resource Center (SVRC) is the nexus of resources and support for student veterans at S&T. The SVRC provides student veterans with a “safe space” and a familiar atmosphere. The center’s Veteran Consuls provide one-on-one consultations to guide students to various resources on campus, while its advisor provides students with VA health and benefits resources. Visit the SVRC at Harris Hall, Suite G10, and contact us at [svrc@mst.edu](mailto:svrc@mst.edu).

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**COURSE OUTLINE**

The following is our tentative schedule for the semester. The instructor reserves the right to modify course schedule and/or class mode in the event of circumstances beyond her control.

<b>Wk</b>	<b>Date</b>	<b>Lecture Topic</b>
1	Tu., 8/20/24	Introduction – Course objectives, policies, and requirements
	Th., 8/22/24	Chapter 1, Intro to ERP
2	Tu., 8/27/24	Chapter 1, Intro to ERP
	Th., 8/29/24	Lab: SAP Navigation and Introduction to Case – Global Bike Inc.
3	Tu., 9/3/24	Lab: Procure to Pay
	Th., 9/5/24	Lab: Procure to Pay
4	Tu., 9/10/24	Chapter 4, Development Life Cycle
	Th., 9/12/24	Lab: Plan to Produce
5	Tu., 9/17/24	Lab: Plan to Produce
	Th., 9/19/24	Chapter 5, Implementation Strategies
6	Tu., 9/24/24	<i>Fall Career Fair. No class.</i>
	Th., 9/26/24	Lab: Plan to Produce
7	Tu., 10/1/24	Chapter 6, Software and Vendor Selection
	Th., 10/3/24	Review for Exam 1
8	<b>Tu., 10/8/24</b>	<b>Exam 1 (Ch. 1 &amp; 4~6 &amp; Labs P2P &amp; PP&amp;PE)</b>
	Th., 10/10/24	<i>Fall break. No class.</i>
9	Tu., 10/15/24	Lab: Order to Collect
	Th., 10/17/24	Lab: Order to Collect
10	Tu., 10/22/24	Catch-up Day
	Th., 10/24/24	Chapter 7, Operational and Post-implementation
11	Tu., 10/29/24	Lab: FI & CO
	Th., 10/31/24	Lab: FI & CO
12	Tu., 11/5/24	Lab: FI & CO
	Th., 11/7/24	Chapter 8, Program and project management
13	Tu., 11/12/24	Chapter 9, Business Process Reengineering
	Th., 11/14/24	Catch-up Day
14	Tu., 11/19/24	Review for Exam 2
	<b>Th., 11/21/24</b>	<b>Exam 2 (Chapters 7~9 &amp; Labs O2C &amp; FI&amp;CO)</b>
15	Tu., 11/26/24	<i>Thanksgiving week. No class.</i>
	Th., 11/28/24	
16	Tu., 12/3/24	ERP Trends. Wrap-up
	Th., 12/5/24	Project clinic