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
Office Hours:	2:00-3:00PM M; 2::00-3:00PM R; or by appointment		

Course Information

Course Title:	**ERP 5110 ERP Systems Design and Implementation**		
Semester/Year:	Fall 2023	**Credit Hours:**	3 credits
Instruction Mode:	In-person / Wholly online asynchronous		
Classroom:	260 Toomey Hall	**Days and Times:**	TuTh 9:30 - 10:45 AM

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.

Course Prerequisites

ERP 2110 or graduate standing.

Required Materials

Enterprise Systems for Management, 2e – Luvai F. Motiwalla, Jeff Thompson, Pearson Prentice Hall

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 two 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

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 (30*2)	15.0%	60 points
Assignments	30.0%	120 points
Project (Individual)	20.0%	80 points
Quizzes	10.0%	40 points
Class Participation	5.0%	20 points
Research Paper (Individual)	12.5%	50 points
Research Presentation (Group)	7.5%	30 points
		400 points

Grade Determination

Exams

During the course of the semester, there will be two exams. Each of the exam accounts for 30 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 students, with special permission, will be able to take the exam at different time but within 24 hours the exam bas 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. Assignment must be submitted at the beginning of the class period on the assigned date due.

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.

Projects

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.

The table below is the tentative schedule for all items:

Type and Description	Weights	Date Assigned	Date Due
EoC Assignment, Chapter 1	5	8/24	Monday, 8/28
Hands-On Lab Assignment, Introduction to the case lab	5	8/31	**Tuesday, 9/5**
Hands-On Lab Assignment, P2P Process, Part 1	20	9/5	Monday, 9/11
EoC Assignment, Chapter 4	5	9/7	Monday, 9/11
Hands-On Lab Assignment, P2P Process, Part 2	15	9/12	Monday, 9/18
Research Topic Sign-up		9/14	Thursday, 9/28
Hands-On Lab Assignment, Production Planning Process Lab	20	9/29	Wednesday, 10/4
Hands-On Lab Assignment, Production Execution Process Lab	15	10/10	Monday, 10/16
Hands-On Lab Assignment, O2C Process, Part 1	20	10/17	Monday, 10/23
Hands-On Lab Assignment, O2C Process, Part 2	15	10/24	Monday, 10/30
Individual Research Paper	50	10/3	Monday, 10/30
Individual Project checkpoint 1	40	10/31	Monday, 11/13
Individual Project checkpoint 2	40	11/7	Monday, 11/20
Group Research Presentation	30	10/26	Monday, 11/27

Quizzes

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 10 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.

For distance students, you will receive different due dates.

Class Participation

One-minute memo participation – You will have to submit one-minute memo at the end of a chapter. In the memo, students are expected to answer two questions:

- What is the most significant thing(s) you learned in this chapter?
- What question is uppermost in your mind at the end of this chapter?

If you do not attend the class, you are not allowed to submit one-minute memo.

For distance students, you will receive different due dates.

Research Paper (Individual)

To understand the emerging trends and how these would affect ERP career are crucial for future job placement. The research is to extend the study of ERP design and implementation to some emerging trends in the ERP industry. We will study and present the findings in the class. Each student needs to submit a research paper individually.

Research Presentation (Group)

Your groups will be formed by the instructor based on the research topic you chose to write in the individual research paper. You will be working in teams of 2-3 people on this presentation. Your group research paper—though benefiting from the individual write-ups submitted earlier by each of your team members—should go further in presenting your joint views.

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 altered 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. 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: You are responsible to follow the specific deadline of each assignment, which may be different from those for in-class students.

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 and Class Mode

This class is designed to be delivered in-person for on campus students and wholly online asynchronous mode for distance learning students. However, my expectation for the distance learning section is that students regularly attend class via Zoom during the scheduled class time. As such, a student would need special permission from the instructor to not be present in any of the live Zoom meetings. This includes the exam days.

If you are unable to comply with the expectation, you must bring the attention with the presentation of evidence to the instructor within the first week of the semester.

COVID-19 Related Policies

Students are advised to contact Student Health Services (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. Under the normal situation, the student will receive a Zoom link provided by the instructor and will be expected to attend the class via Zoom. Exceptions could be made case by case.

Academic Dishonesty

Incidents involving behaviors such as cheating, plagiarism, sabotage, or unauthorized use of artificially generated content in an academic context must be reported to the instructor's department chair and the Vice Provost of Undergraduate Education as violations of the Student Academic Regulations. Such reporting is in addition to, and separate from, grade penalties for these violations.

Copyright, FERPA, and Use of Video

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. 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. Incidents involving behaviors such as cheating, plagiarism, sabotage, or unauthorized use of artificially generated content in an academic context must be reported to the instructor's department chair and the Vice Provost of Undergraduate Education as violations of the Student Academic Regulations. Unauthorized use of artificially generated content without consent of the instructor, for example, content generated by ChatGPT and other AI systems, violates University Student Academic Standards. Violations may result in academic penalties in addition to receiving an "F" on the assignment in question.

Reporting Non-Academic Misconduct

As outlined in the University of Missouri Collected Rules and Regulations Section 200.010, students must uphold all non-academic misconduct standards in addition to the academic standards. Instances of non-academic misconduct, which may include but are not limited to disruption, obstruction, failure to comply, and/or forgery shall be reported to Student Support and Community Standards using the online reporting form.

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, or visit https://saat.mst.edu/ for information.

Student Support and Community Standards is your "Google Maps" for support. During your time at S&T, you or a friend may need help navigating the student experience, facing a barrier,

or experiencing a challenge. You are not alone!

Student Support has a dedicated team and numerous resources such as UCARE and the student emergency fund to help you navigate the S&T experience and support your success. This includes support to address barriers related to academic, personal, emotional, medical, financial, or any other needs.

UCARE

UCARE is the central point of contact to connect a student who may be experiencing a personal, academic, financial, wellbeing, and/or other concern to support and resources. Sharing your concern with UCARE helps connect a student with solution-focused assistance to support their holistic well-being, success, and academic progress. A referral can be submitted at https://go.mst.edu/ucare-refer or by emailing ucare@mst.edu. For urgent matters, check out the after-hour and urgent resources.

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

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

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, resources for many health and wellness topics, and help for mental health crisis situations.

For the National Suicide Prevention Lifeline, call or text 988, or visit 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.

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 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.

> *Office of Equity and Title IX*
> *Equity Officer and Title IX Coordinator: Dr. Paul Hirtz*
> *Phone: (573) 341-7734*
> *Location: 900 Technology Drive, Suite 500*
> *E-mail: 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.

Writing Center

The Writing Center's mission is to assist all students in their efforts to become better writers, communicators, and critical thinkers. The Writing Center's peer consultants and writing 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 or stop by Curtis Laws Wilson Library 314–315.

Student Success Center

The Student Success Center (SSC) supports student development through peer Academic Mentoring focusing primarily on STEM courses, Peer-to-peer soft skill coaching which can also act as an accountability buddy, and campus programming – all while providing free coffee and hot beverages! All undergraduate students are encouraged to utilize the SSC's free services to get timely support and to enhance their S&T Miner Experience. Visit the SSC at 198 Toomey Hall, contact us at success@mst.edu OR 573-341-7590. To see the course offerings and times for SSC Tutoring, visit https://studentsuccess.mst.edu/academicmentoring/.

Knack Tutoring (https://mst.joinknack.com/)

With Knack Tutoring, any enrolled undergraduate student at S&T can get **FREE** help from a fellow miner who already took the class 24/7. You can choose to meet online on the Knack platform or on campus in person. If you've aced a course, sign up as a Knack Tutor to help your peers!

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.

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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.

Wk	Date	Lecture Topic
1	Tu., 8/22/23	Introduction – Course objectives and requirements
	Th., 8/24/23	Chapter 1, Intro to ERP
2	Tu., 8/29/23	Chapter 2, Systems Integration Chapter 3, Enterprise System Architecture
	Th., 8/31/23	Lab 1: Introduction to Case – Global Bike Inc.
3	Tu., 9/5/23	Lab 2: Procure to Pay
	Th., 9/7/23	Chapter 4, Development Life Cycle
4	Tu., 9/12/23	Chapter 5, Implementation Strategies
	Th., 9/14/23	Emerging Technologies and ERP Trends Lab 3: Plan to Produce
5	Tu., 9/19/23	Lab 3: Production Planning Review for Exam 1
	Th., 9/21/23	**Exam 1 (Ch. 1~5 & Labs 1 & 2)**
6	Tu., 9/26/23	*Fall Career Fair. No class.*
	Th., 9/29/23	Lab 3: Production Planning
7	Tu., 10/3/23	Chapter 6, Software and Vendor Selection
	Th., 10/5/23	*Fall break. No class.*
8	Tu., 10/10/23	Lab 3: Production Execution
	Th., 10/12/23	Chapter 7, Operational and Post-implementation
9	Tu., 10/17/23	Lab 4: Order to Collect
	Th., 10/19/23	*Instructor attends conference. No class.*
10	Tu., 10/24/23	Chapter 8, Program and project management
	Th., 10/26/23	Chapter 9, Business Process Reengineering
11	Tu., 10/31/23	Guest speech by RSM
	Th., 11/2/23	Chapter 10, Ethics and Security Management
12	Tu., 11/7/23	Review for Exam 2
	Th., 11/9/23	**Exam 2 (Chapters 6~10 & Labs 3 & 4)**
13	Tu., 11/14/23	Research meetings.
	Th., 11/16/23	Research meetings.
14	Tu., 11/21/23	*Thanksgiving week. No class.*
	Th., 11/23/23	
15	Tu., 11/28/23	Group Research presentation
	Th., 11/30/23	Group Research presentation
16	Tu., 12/5/23	Group Research presentation
	Th., 12/7/23	Group Research presentation