

Missouri University of Science & 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 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.”

Course: ERP 5110 ERP Systems Design and Implementation

Semester: Spring 2020

Days and Times: T Tr 9:30 – 10:45 AM

Room: 107 A Fulton Hall

Instructor’s Name: Claybaugh, Craig, Ph.D.

Office Location: 107C

Office Phone: 573-341-4569

Email: claybaughc@mst.edu

Web Locations: <http://canvas.mst.edu>

Office Hours: Tuesday, 11 AM to 1 PM, Thursday 2 PM to 4 PM and by appointment

COURSE INFORMATION

Catalog 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 and processes.

Extended Description: N/A

Course Prerequisites: Preceded or accompanied by ERP 2110; or Graduate Standing and computer programming knowledge.

Required Materials: ERP Simulation License Fee, everything else distributed through Canvas

Optional Textbook: 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.

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 Knowledge	Teamwork	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	X	X	

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Understand and communicate the impact of events, activities, and transactions across the functions of an organization			X	X	X	
Recognize the life-cycle of an ERP implementation project				X	X	
Master life-long learning ability in the area of ERP			X	X	X	X
Apply critical thinking skills to information presented from multiple sources	X		X	X	X	

COURSE ASSIGNMENTS

Attendance, Quizzes, and Participation:

Five times throughout the semester, attendance and/or a quiz will be taken. Each attendance/quiz is worth ten points for a total of 50 points. Please note that attendance may be taken at the start, during the middle, or near the end of class on random dates throughout the semester. Some activities in the class do require students to be present to participate. Participation is based on participation in the group project. Participation will be docked if feedback from peers is negative. Participation is worth 50 points.

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. Live participation is required on certain dates in this class. The instructor reserves the right to drop students from the class for lack of participation/attendance.

For on-campus students, you are expected to attend all classes, be on time, and participate in classroom discussion. If you are absent, it is your responsibility to obtain any class materials and announcement. No archived recording will be offered, unless special pre-approved condition.

For distance students, live participation is not required but encouraged.

Midterm Exam

There will be one Midterm Exam. All exam materials will become property of the instructor after completion. Failure to take the exam on the assigned day/time results in automatic failure of the course. Cheating on the exam will result in automatic failure of the course.

Assignments

You will spend a significant amount of time for this course on the SAP R/3 system. During the course of the semester you will be expected to do six SAP lab assignments, one HR negotiation assignment, and one research assignment. The assignments are expected to be completed with **individual efforts**. You may 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.**

Group Project

A **group project** is required instead of a final exam. Each project team will consist of three to eight students. The group project is comprised of a presentation and a paper (Graduate students only). More details will be provided in the class. Students who do not contribute to the group project in a satisfactory fashion can be removed from the group (instructor’s approval required). These students will take a cumulative final exam.

Simulation Game

During the semester, you will be put in a situation in which you have to run your business using an ERP system. Each team operates a fictitious company and competes with other teams to gain the largest profit. ERP system will be used to make business decision. Each team will consist of four to five students. Details will be provided in the class. Participation is mandatory and requires each student to pay a fee to get access.

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Plant Tour

One tour will be conducted outside of the class. The class will take a tour of a vacuum plant located in St. James, Mo. Students are expected to provide/find their own transportation to and from this event. More details will be provided in class.

COURSE POLICIES AND GRADING

Attendance: See **Attendance and Participation** section above

General Grading Policies:

1. ALL ASSIGNMENTS AND THE EXAM ARE INDIVIDUAL WORKS UNLESS OTHERWISE SPECIFIED.
2. All assignments should be handed in at the beginning of class on the date announced. NO LATE ASSIGNMENTS WILL BE ACCEPTED.
3. Please make every effort to make it to class on time. It is disruptive to the class to have members arriving late.
4. Attendance is encouraged and randomly graded. If you are unable to attend a class, you need to turn in assignments in advance. You are also responsible for finding out what was covered in class and what announcements were made as well as obtaining handouts.
5. The instructor will assign NO incompletes in lieu of a regular grade.

Use of Canvas

Course materials, homework, schedule, and grades can be found on Canvas. **Discussion Board** of Canvas can be used as a virtual problem solving channel. (See **Supporting of SAP Lab** section for detail information.)

Supporting of SAP Lab

There are several options to assist you in solving SAP technical problem. **Office hours** should be the first choice. To better assist you in solving SAP technical problem, in addition to the office hours, additional **SAP Help session** can be arranged by the instructor. Please note that while e-mail is an option of answering SAP system related questions, be aware your question may not be answered promptly outside of the instructor's working hours; these are 8:00 AM to 5:00 PM, Monday to Friday.

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

Virtual Desktop (VDI) Access

Virtual Desktop (VDI) is used to access SAP systems for this course. Please be aware the time for applying Windows updates to these servers is Thursday nights from 11:00 PM to 2:00 AM. Service might not be available during this time.

Academic Dishonesty/Ethics/Integrity Statement (<http://registrar.mst.edu/academicregs/index.html>):

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. Violations may result in academic penalties in addition to receiving an "F" on the assignment in question.

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 or sabotage. Additional guidance for faculty, including the University's Academic Dishonesty Procedures, is available on-line at <http://ugs.mst.edu>. Other informational resources for students regarding ethics, integrity and the student honor code can be found online at <http://ugs.mst.edu/academicintegrity/studentresources-ai> and <http://stuco.mst.edu/about/honor-code>.

IT IS THE STUDENT'S RESPONSIBILITY TO KNOW AND UNDERSTAND THE CAMPUS POLICIES FOR ACADEMIC INTEGRITY. FAILURE TO ADHERE TO THESE STANDARDS WILL RESULT IN PENALTIES RANGING FROM: GETTING A ZERO (0) ON THE ASSIGNMENT, GETTING A FULL LETTER GRADE DEDUCTION IN THE CLASS (FROM A TO B, B TO C, ETC.), HAVING AN ACADEMIC INTEGRITY VIOLATION IN THEIR PERMANENT STUDENT FILE, OR EVEN BEING KICKED OUT OF THE SCHOOL/PROGRAM (NORMALLY THIS IS FOR REPEAT VIOLATIONS).

S&Tconnect Early Alert System: (<http://academicalert.mst.edu>):

Missouri S&T is committed to the success of its students by providing an environment conducive to teaching and learning. To ensure that every student takes full advantage of the educational opportunities and support programs on campus, the University has implemented an Early Alert System, a web-based application. The purpose of the System is to improve the overall academic success of students by:

- Improving communication between students, instructors, and advisors;
- Reducing the time required for students to be informed of their academic status;
- Informing students of actions they need to perform in order to meet the academic requirements in the courses they are taking.

To assist you, I will initiate an academic alert for students who are not meeting academic course requirements through poor performance on assignments or poor attendance. When an alert is initiated, an email is immediately sent to the instructor, student, and advisor. You are encouraged to respond quickly to all academic alerts. If you fail to open the alert within one week, email notification is sent to your advisor.

Missouri University of Science and Technology is committed to the safety and well-being of all members of its community. 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. Furthermore, in accordance with Title IX guidelines from the US Office of Civil Rights, Missouri S&T requires that all faculty and staff members report, to the Missouri S&T Title IX Coordinator, any notice of sexual harassment, abuse, and/or violence (including personal relational abuse, relational/domestic violence, and stalking) disclosed through communication including but not limited to direct conversation, email, social media, classroom papers and homework exercises.

Missouri S&T's Title IX Coordinator is Vice Chancellor Shenethia Manuel. Contact her directly (manuels@mst.edu; (573) 341-4920; 113 Centennial Hall) to report Title IX violations. To learn more about Title IX resources and reporting options (confidential and non-confidential) available to Missouri S&T students, staff, and faculty, please visit <http://titleix.mst.edu>.

Disability Support Services (<http://dss.mst.edu>):

If you have a documented disability and anticipate needing accommodations in this course, you are strongly encouraged to meet with me early in the semester. You will need to request that the Disability Services staff send a letter to me verifying your disability and specifying the accommodation you will need before I can arrange your accommodation. If you have a disability that might require academic accommodations, please visit Disability Support Services in 204 Norwood Hall (341-4211; dss@mst.edu) very early in the semester.

Classroom Egress Maps (<http://registrar.mst.edu/links/egress/>):

Please familiarize yourself with the classroom egress maps posted on line so you will know where emergency exits are located.

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Evaluation Methods

The course grade will be determined by the following components:

	Undergraduate	Graduate
Midterm Exam	100 points	100 points
Assignments/Labs	220 points	220 points
Attendance/Participation	100 points	100 points
Simulation Game	90 points	90 points
Plant Tour	40 points	40 points
Group Presentation	100 points	100 points
Group Term Paper	N/A	100 points
	<u>650 points</u>	<u>750 points</u>

Grading Scale:

A: $\geq 89.5\%$ B: 79.5 – 89.4% C: 69.5 – 79.4% D: 59.5 – 69.4% F: $< 59.4\%$

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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 procedures in the event of circumstances beyond his control.

Week of	Topic
1	Introduction – Course objectives and requirements, Chapter 1 ERP Intro
2	Chapter 2 Systems Integration, Chapter 3 Enterprise Systems Architecture,
3	Introduction to Case – Fitter Snacker, Lab 1 SAP R/3 Navigation
4	Lab 2 Purchase to Payment
5	Lab 2 Purchase to Payment (continued), Chapter 4 Development Cycle
6	Lab 3 Production Planning and Execution,
7	Lab 3 Production Planning and Execution (continued), Chapter 6 Software and Vendor Selection, Plant tour (tentative)
8	Lab 4 Order to Collection, Chapter 5 Implementation Strategies, Spring Recess No class 3/14
9	Lab 5 Financial Management,
10	Spring Break
11	Midterm Exam – 3/31 – Covers Chapters 2-6; Labs 1-5, HR Salary Negotiations (4/2).
12	Lab 6 – Human Resources, ERP Simulation Game (Practice 1)
13	ERP Simulation Game (Practice 2), ERP Configuration and Modification,
14	ERP Simulation Game Extended Round 1 and Round 2 (Extra Credit), Testing for Readiness,
15	ERP Simulation Game Platinum Round 1 and Round 2 (Extra Credit), Chapter 10 Ethics and Security Management
16	Group Presentations
17	Group Presentations, No Final Exam