



DEPARTMENT of COMPUTING

College of Business & Technology

EAST TENNESSEE STATE UNIVERSITY

CSCI3700-001 Enabling Business with Information Systems

Course Syllabus v1.3

Course Information

Instructor

Dr. Doug Battleson, PMP
Assistant Professor

Office: Brinkley Center 165
Office Hours:

M: 1:00 PM – 3:00 PM (Office & Zoom)

<https://etsu.zoom.us/j/87142691785?pwd=g5gb9Df8TO5LI16SqnVIPdiYqfqB2S.1>

T: 3:00 PM – 5:00 PM (Office & Zoom)

<https://etsu.zoom.us/j/87622285736?pwd=LisTAQ08BuYsQlcaJXRDR8q7sYdgIN.1>

W: 1:00 PM – 3:00 PM (Office & Zoom)

<https://etsu.zoom.us/j/87142691785?pwd=g5gb9Df8TO5LI16SqnVIPdiYqfqB2S.1>

Other Times by Appointment

Email: battleson@etsu.edu

Mr. Henry Bailey
Professor of Practice

Office: Brinkley Center 164
Office Hours:

M: 8:00 AM – 9:00 AM (Office & Zoom)

Tuesday 10:30 AM – 12:30 PM, 1:30 PM – 3:30 PM (Office & Zoom)

Wednesday 8:00 AM – 9:00 AM (Office & Zoom)

Zoom: <https://etsu.zoom.us/j/83540852854?pwd=TxoiE2LvQmKa0yirimjjKlmyn6iuoA.1>

Other Times by Appointment

Email: baileywh@etsu.edu

Section Information

CSCI 3700-001 Enabling Business with Information Systems

Monday, 9:25 AM – 11:25 AM, Brinkley Center **137A**

Wednesday, 9:25 AM – 11:25 AM, Brinkley Center **230 Lab**

Catalog Description

This course demonstrates that enterprise systems (ES) are comprised of computer hardware and software, business processes and people. It also provides an introduction to the components of management information systems (MIS) and investigates why enterprise systems are a necessity for business success and growth. Students are introduced to business scenarios such as procurement, fulfillment, production and integrated business processes, including hands-on exercises using SAP. This experiential learning of enterprise resource planning (ERP) concepts, principles and functions are transferable to other enterprise systems, such as Oracle, Salesforce, Workday, etc. Business ethics is included in case-like situations.

Prerequisite: ([MGMT 3000](#) or C- or better in [CSCI 2020](#)) and [CSCI 1100](#)

Learning Outcomes

After successfully completing this course, students will be able to:

1. Describe and explain the role of information systems in the organization and their career.
2. Define and explain functional and information system silo effects.
3. Define and explain different information system and enterprise system architectures.
4. Describe and explain the organizational structure, processes, roles and data in enterprises.
5. Describe and explain the flows in business processes.
6. Define, explain and demonstrate key business processes in an Enterprise Resource Planning system.
7. Define, explain and demonstrate the integration of key business processes in an Enterprise Resource Planning system.
8. Define and explain Business Intelligence and information systems.

Major Course Topics

- Introduction to Information Systems
- Hardware and Software Components
- Cloud Computing
- Data
- Database
- Business Processes
- Business Process Modeling and Tools
- Enterprise Resource Planning (ERP)
- SAP S/4HANA
- Customer Relationship Management (CRM)
- Analytics
- System Development
- System Implementation
- Ethics
 - Categorical Imperative
 - Utilitarianism
- Advanced Technologies
 - Artificial Intelligence
 - Robotics
- Industry Certifications

- Career Opportunities
- Professional Networking

Course Materials

Required Textbook

1. McKinney, E. H. Jr. and Kroenke, D. *Processes, Systems, and Information: An Introduction to MIS, 4E*, Upper Saddle River, NJ: Pearson Education, 2022. ISBN 13: 978-0-13-692623-8
 - a. Only the eTextbook is required: <https://www.pearson.com/en-us/subject-catalog/p/processes-systems-and-information-an-introduction-to-mis/P200000001477/9780136926078>
 - b. **Do not purchase the MyLab**
 - c. You can purchase from Pearson or the ETSU bookstore

Articles per the Instructor's Guidance During the Semester

1. Battleson, Douglas A. and Mathiassen, Lars (2020) "How to Turn Around a Failing ERP Implementation: Project Management Routines as Boundary Objects," *Engaged Management ReView*: Vol. 4: Iss. 1, Article 1. Available at: <https://doi.org/10.28953/2375-8643.1051>
2. Battleson, D., West, B., Kim, J., Ramesh, B., and Robinson, P. (2015), "Achieving dynamic capabilities with cloud computing: an empirical investigation," *European Journal of Information Systems*, advance online publication, November 25; doi: 10.1057/ejis.2015.12.
3. B. West, D. Battleson, J. Kim, and B. Ramesh, "Achieving Dynamic Capabilities with Cloud Computing," *IT Pro*, Nov/DEC 2014, pp. 18-24.
4. T. Davenport, "Putting the Enterprise into the Enterprise System," *Harvard Business Review*, Jul/Aug 1998, pp. 121-131.
5. Additional literature may be required and obtained through the library.

Required ERPsim License

This semester, we will be utilizing business simulation software, called ERPsim (Enterprise Resource Planning simulator), to better understand ERP concepts. The simulation allows students to run a business, and compete against other businesses, by performing some of the business processes commonly found in a manufacturing company using a fully functional ERP system (SAP). To participate, students must purchase a license for the simulator. The cost is \$57CAD (~\$42 USD).

Detailed information about the license purchase will be shared during class. Do not purchase before class discussion.

1. ERPsim Purchase Link: <https://erpsim.hec.ca/apps/register/?event=17229&qj=D59EF2>
2. Purchase before **Monday, March 23, 2026**, to be assigned to a team. Failure to do so will result in a zero for the grade as you will not be able to participate.
3. You may need to contact your credit card company for an international purchase.
4. Debit cards are not accepted.
5. You can purchase a license voucher number from the ETSU bookstore.
 - a. This is normally much more expensive than purchasing it directly due to a surcharge.
 - b. ETSU bookstore vendor historically does not procure vouchers in a timely manner; so, expect a delay.
 - c. You are just purchasing a voucher number which is then used to register in our ERPsim class, instead of using your credit card to register directly in our ERPsim class.

Technology Resources

This course may require certain software packages to be installed. This software includes (but may not be limited to) the following. Students may use other tools as they deem necessary to complete an activity.

- Microsoft Office Software:
 - Access (database)

- Excel
- PowerPoint
- Word
- For free student access, visit <https://www.etsu.edu/365/benefits.php>.
- Modern Web Browser (Chrome is recommended) for SAP Fiori
- Tableau
 - For free student access, visit <https://www.tableau.com/academic/students>.

Course Format and Evaluation Policies

Course Format

This course is an in-person classroom modality. All course activities will be organized using Module- Based Learning. Online components will include content and assessment and other assignments for all students.

All course materials and assignments will be available through the course website: <https://elearn.etsu.edu>. The student should check this site daily for updates and announcements. The course schedule is in this syllabus and is subject to change with updates from the instructor.

Grading Policies

Undergraduate Grade Scale

A	A-	B+	B	B-	C+	C	C-	D+	D	F
100-93	92-90	89-87	86-83	82-80	79-77	76-73	72-70	69-67	66-60	<60

Definition of Grade Levels

Letter	Description
A	Exceptional. Able to define terminology, perform analysis of topics, and synthesize information by relating topics from different domains. Performs exceptionally in project work by going above and beyond the minimum requirements consistently.
B	Above Average. Able to define basic terminology associated with the course content and perform analysis of topics in the same domain. Performs work toward the goals of a project. Occasionally goes above the minimum requirements.
C	Average. Able to define basic terminology associated with the course work. Performs work in projects but does not demonstrate above average work. Meets minimum requirements with no errors.
D	Poor/Below Average. Provides few insights into course materials.
F	Failed to meet the minimum requirements of the problem, instructions not followed. Performs little to no work or performs work very poorly.

Evaluation Policy

The final grade in the course is based on these main categories. The percentage breakdown and an explanation of each category follows.

Evaluation/Assessment:

The grade weight of course deliverables are available by referencing the syllabus and the D2L Brightspace grades.

Grading

Study Questions and Exercises	ERPsim Presentation	Midterm Exam	Final Exam
45%	5%	25%	25%

Chapter Study Questions

Study questions and class activities ensure you are meeting the learning objectives covered in weekly lectures, discussions and readings. These activities will also give you the opportunity to gain valuable hands-on experience with the material. Collaboration is not allowed for study questions.

Study questions use the D2L quiz functionality and are graded as completed. Late assignments are not accepted.

Exercises

Exercises are completed and submitted to the respective D2L assignment folder (Dropbox). Late assignments are not accepted.

Students can collaborate to complete the SAP exercises but each student must complete their own work deliverables. **Fabrication of test results is academic misconduct.**

There may be impromptu graded class exercises. These cannot be made up except for an excused absence.

ERPsim Presentation

At the end of the simulation, you and your team will be required to provide a 20- minute presentation on your team's progress in the simulation competition. You will need to use visualizations in order to tell your company's story. See requirements and grading rubrics below schedule.

Midterm Exam

The midterm exam is completed using the D2L quiz functionality and assignment folder if a deliverable is due (e.g., SAP configuration exercise). You must be present and accounted for before the exam begins. Late admittance and makeup exams are not granted.

Final Exam

The final exam is completed during finals week and uses the D2L quiz functionality and assignment folder if a deliverable is due (e.g., SAP configuration exercise). You must be present and accounted for before the exam begins. Late admittance and makeup exams are not granted.

Late and Makeup Work Policy

All work is due at the date and time specified on the assignment specification. If the due date or time changes for any reason, you will be notified either via email or D2L or both.

Accepting makeup work is at the instructor's discretion. You should make every reasonable attempt to complete the work on-time to ensure proper progress through the course. If you are unable to complete an activity by the due date listed on D2L, you will need to contact the instructor before the deadline to discuss opportunities to submit items past the due date.

The Grade of Incomplete

The College of Graduate & Continuing Studies policy on Incomplete Grades states:

A grade of "I" (incomplete) indicates that a student was passing the course at the end of the semester, but due to circumstances beyond the student's control, was unable to complete the course requirement. It also indicates that the student has received consent from the instructor to complete the work for which an "I" is assigned. The "I" grade cannot be used to allow a student to do additional work to raise a deficient grade or to repeat a course. An "I" grade must be removed no later than one calendar year from the time the grade is awarded. Time extension requests for removal of "I" grades must be submitted to and approved by the Dean of the School of Graduate

Studies before the allotted time expires. An "I" grade not removed under the guidelines noted above will be converted to an "F." When an "I" grade converts to an "F" after one calendar year, the GPA is adjusted retroactively; consequently, a student may be subject to dismissal without a probationary term. A student cannot withdraw from or drop a course after a grade of "I" has been assigned or after one year has elapsed. To remove an "I" grade, the student must complete the work independently and must not register for the course a second time or attend the same course at a later time in order to complete the course requirements.

In general, the grade of incomplete is only given in the cases of serious, uncontrollable situations that will prevent the student from completing the assigned coursework. A request for a grade of incomplete must be submitted in writing with the reason for the request and any appropriate documentation. Instructors reserve the right to discuss your request with the department chair or other university employees. Remember that an incomplete could have financial aid or graduation implications; check into those issues before you make a request.

Syllabus Attachment Information

Syllabus Attachment Information: The University's approved Syllabus Attachment Information page provides information about relevant University and Academic Policies that all students should know.

<https://www.etsu.edu/curriculum-innovation/syllabusattachment.php>

Communication Policy

Students must make every reasonable effort to contact the instructor as soon as possible to discuss any issues that arise. Please respect posted office hours. However, if office hours do not align with your schedule, make an appointment.

Email is the best way to communicate. Responses will be given within 1-2 business days. You might not receive responses to electronic communications late at night, early in the morning, or on weekends. If you do not receive a response after 2 business days, please resend your email to ensure it was not missed. Start your deliverables early so you have enough time to finish and to ask questions. *Generally, you will not receive a response to questions about an assignment within 12 hours of the due date/time unless related to a submission problem. In other words, start early so you have ample time to finish and to ask questions.*

Disability Services Policy

It is the policy of ETSU to accommodate students with disabilities, pursuant to federal law, state law and the University's commitment to equal educational opportunities. Any student with a disability who needs accommodation, for example note taking assistance, exam time adjustment or seating placement, should meet with Disability Services. Faculty accommodation forms are provided to eligible students and should be shared with the instructor as early in the semester as possible. Disability Services can be reached via telephone at (423) 439-8346 or web at <https://www.etsu.edu/students/ds/>.

Academic Misconduct Policy

ETSU Honor Code

East Tennessee State University is committed to developing the intellect and ethical behavior of its students. Students found to be in violation of policies on plagiarism, cheating, and/or fabrication will be held accountable for their actions. Any knowledge of academic misconduct should be reported. Students are expected to act with honesty, integrity, and civility in all matters.

ETSU Honor Pledge

By becoming a member of the campus community, students agree to live by the standards of the honor code and thereby pledge the following: "I pledge to act with honesty, integrity, and civility in all matters."

Course Honor Policy

Academic Misconduct in any form will not be tolerated. East Tennessee State University defines Academic Misconduct as an offense “for which both individuals and organizations may be subject to disciplinary action.”

See these policies in the catalog, located at

<https://catalog.etsu.edu/content.php?catoid=37&navoid=1618#academic-and-classroom-misconduct>.

The University defines academic misconduct as follows:

Academic Misconduct. Plagiarism, cheating, fabrication. For purposes of this section the following definitions apply:

1. *Plagiarism. The adoption or reproduction of ideas, words, statements, images, or works of another person as one’s own without proper attribution,*
2. *Cheating. Using or attempting to use unauthorized materials, information, or aids in any academic exercise or test/examination. The term academic exercise includes all forms of work submitted for credit or hours,*
3. *Fabrication. Unauthorized falsification or invention of any information or citation in an academic exercise.*

If you observe or learn about a violation of academic integrity, it is your responsibility to report it. I will employ all means available to identify academic misconduct—including electronic plagiarism detection.

ETSU Student Disciplinary Policies, Part III Academic and Classroom Misconduct, Paragraphs B and C, state:

B. Plagiarism, cheating, and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly, through participation or assistance, are immediately responsible to the instructor of the class. In addition, to other possible disciplinary sanctions which may be imposed through the university’s academic misconduct policy as a result of academic misconduct, the instructor has the authority to assign an “F” or a zero (“0”) for the exercise or examination, or to assign an “F” in the course.

C. Students may appeal a grade assignment associated with a finding of academic misconduct, as distinct from a student disciplinary sanction, through the university’s academic misconduct procedure. Courses may not be dropped pending the final resolution of an allegation of academic misconduct. (See Part 5 Disciplinary Procedures, Paragraph F. Academic Misconduct Procedures).

Given these definitions and restrictions, this course will enforce the following policies regarding academic integrity violations.

- The first offense of academic misconduct will result in a grade of zero (“0”) on the assignment. A notice will be sent to the student, to the Office of the Dean of the College of Graduate and Continuing Studies, and to the Chair of the Department of Computing. University-wide records are kept for academic misconduct, and this offense will be reported through appropriate channels.
- The second offense of academic misconduct will result in a grade of “F” for the course. A notice will be sent to the student, to the Office of the Dean of the College of Graduate and Continuing Studies, and to the Chair of the Department of Computing. University-wide records are kept for academic misconduct, and this offense will be reported through appropriate channels.
- Be aware that ETSU Academic Misconduct Procedures state: “For a second academic misconduct offense the penalty may be permanent expulsion from the University.”
- A zero received as the result of academic misconduct cannot be dropped as a “lowest grade.”

• If you share your work with someone who copies your work, BOTH PARTIES are subject to the penalty for academic misconduct without regard to who copied whom.

- Know and understand your right to appeal.

General Course Guidelines

1. Check the D2L site and your ETSU email account frequently. I may post announcements throughout the week. By default, all course communication will be through the D2L site—and, in conjunction, your ETSU email address.

2. The course schedule is provided as a suggested outline. It will remain fluid throughout the semester to give extra time on certain concepts, account for any University closings, or provide a better information flow.
3. In general, you should expect to spend 2-3 hours each week working on content, and another 4-6 hours working on assignments. ETSU defines a credit hour as one hour of direct faculty instruction and a minimum of two hours of work out-of-class each week for approximately fifteen weeks. Therefore, a total of at least 9 hours should be devoted to this class each week. This may include content review (videos and reading), preparing for and taking module quizzes, completing reflective journals, and projects.
4. Assignments will be graded as promptly as possible—usually within one week after the due date.
5. Class Participation:
 - a. Cell phones must be off or set to silent mode in classrooms. Remove any headphones once class sessions begin. Surfing the Web, playing games, doing homework, and/or checking e-mail and social media are all activities disruptive to class. Should your conduct interfere with the learning environment, your instructor will ask you to leave.
 - b. Collegial participation and informed discussion in class are expected. Participation will include exercises given in class. This requires completing readings and assignments before class. Please be considerate not to interrupt. If in doubt, raise your hand to be recognized before speaking. The quality of your contributions to discussions will be evaluated using the following criteria:
 - i. Does the contribution represent a solid analysis and some insight into the class material or is it just a reiteration of assigned reading material facts?
 - ii. Does the contribution demonstrate an ability to listen to and build from what others have said?
 - iii. Does the contribution demonstrate useful ideas, coherently and succinctly expressed?
 - iv. Does the contributor regard, respect, and acknowledge other's contributions?
 - v. If the contributor disagrees with other's positions or analysis does s/he offer constructive disagreement?
 - vi. Does the contribution move the discussion to an important area or does it just rephrase what has already been said?
 - vii. If "cold called," was the student prepared?
 - viii. If you require an extended discussion, see me during office hours.
 - ix. If you disagree with something, be professional and tactful in your response.
6. Unexcused Absences:
 - a. This policy is applied consistently and fairly to all students.
 - b. Students are expected to attend all classes and for the entire duration.
 - c. If you accumulate three unexcused absences, your course letter grade may be downgraded one level (e.g., B- to C+).
 - d. Three tardiness's count as one unexcused absence.
 - e. Poor quality of participation may count as an unexcused absence.
7. Excused absences are university approved (e.g., athletics) or documented emergencies and illnesses.
8. Inform the instructor of any accessibility issues.

Course Schedule

Course Outline/Schedule (subject to change with notification from instructor)

Week	Lecture Topics	Readings	Deliverables Due (See times in D2L)
1 1/19-1/23 1/19: No class (MLK Holiday)	1. Introduction (230 Lab) 2. Intelligent Enterprise (IE) 3. D2L Review 4. Course Syllabus 5. Pearson Textbook Access 6. Management Information Systems (MIS) 7. Enterprise Systems (ES)	1. Processes, Systems, and Information (PSI) Chapter 1: The Importance of MIS	1.
2 1/26-1/30	1. Business Process Information (137A) 2. Information Systems (IS) Careers (230 Lab) 3. https://learning.sap.com (230 Lab)	1. PSI Chapter 1: The Importance of MIS 2. PSI Extension 1: IS Careers 3. PSI Chapter 2: BP, IS and Information	1. PSI Chapter 1 Study Questions
3 2/2-2/6	1. Manufacturing Paper Game (137A) 2. Information, AE 2-1 (230 Lab) 3. Hardware and Software	1. PSI Application Exercise (AE) 2-1, pg. 421, in class exercise (230 Lab) 2. PSI Extension 2: HW and SW	1. PSI Chapter 2 Study Questions 2. Paper Game 3. Reflection Paper 3. AE 2-1
4 2/9-2/13	1. Cloud Computing (137A) 2. Database (137A, 230 Lab) 3. Database Exercise (230 Lab)	1. PSI Chapter 3: Networks and the Cloud 2. PSI Chapter 4: Database Processing 3. PSI Application Exercise 4-3, pg. 426, in class exercise.	1. PSI Chapter 3 Study Questions 2. PSI Chapter 4 Study Questions 3. AE 4-3
5 2/16-2/20	1. AI and Robots (137A) 2. SAP Signavio (230 Lab)	1. PSI Chapter 5: AI and Robots	1. PSI Chapter 5 Study Questions 2. Signavio Exercise
6 2/23-2/27	1. Supporting Processes with ERP Systems (137A) 2. S/4HANA Introduction (230 Lab) 3. Midterm Exam Review (230 Lab)	1. PSI Chapter 8: Supporting Processes with ERP Systems 2. S/4HANA PPT	1. PSI Chapter 8 Study Questions 2. S/4HANA Study Questions
7 3/2-3/6	1. Manufacturing Paper Game (137A) 2. Midterm Exam: Wednesday (230 Lab)	1.	1. Paper Game Reflection Paper 2. Midterm Exam
8 3/9-3/13	1. SAP Procurement (137A) 2. SAP Fiori Navigation Exercise (230 Lab) 3. SAP Procurement Exercise (230 Lab)	1. PSI Chapter 9: Procurement Process with SAP (137A) 2. SAP Fiori Navigation	1. PSI Chapter 9 Study Questions 2. Procurement Exercise

Week	Lecture Topics	Readings	Deliverables Due (See times in D2L)
9 3/16-3/20 No Classes (Spring Break)			
10 3/23-3/27	1. SAP Sales Process (137A) 2. SAP Sales Process Exercise (230 Lab)	1. PSI Chapter 10: Supporting the Sales Process with SAP	1. PSI Chapter 10 Study Questions 2. Sales Exercise
11 3/30-4/3 4/3: No class (Good Friday)	1. Analytics and IS (137A) 2. Excel and SAP Business Builders (230 Lab)	1. PSI Chapter 12: Analytics and IS	1. PSI Chapter 12 Study Questions 2. Analytics Exercises
12 4/6-4/10	1. ERPsim Manufacturing Game Introduction and Team Assignments (137A) 2. ERPsim Manufacturing Game Practice Rounds (230 Lab)	1. ERPsim Manufacturing Game Participants Guide	1. ERPsim Game Reflection Paper 1 2. ERPsim Study Questions
13 4/13-4/17	1. ERPsim Manufacturing Game Competition Preparation (137A) 2. ERPsim Manufacturing Game Competition (230 Lab)	1. ERPsim Manufacturing	1. ERPsim Game Reflection Paper 2
14 4/20-4/24	1. ERPsim Manufacturing Game Review and PPT Preparation (137A) 2. ERPsim Sustainability Game (230 Lab)	1. ERPsim Manufacturing 2. ERPsim Sustainability	1. ERPsim Game Reflection Paper 3
15 4/27-5/1	1. ERPsim Company Presentations with Student Evaluations (Monday & Wednesday) (137A and 230 Lab) 2. Final Exam Review (Wednesday)		1. ERPsim Company Presentation
16 5/4-5/8	1. Final Exam: Monday, May 4, from 8:00 AM to 10:00 AM in BC 230 Lab. Lab is reserved.		1. Final Exam

ERPsim Manufacturing Game Company Presentation Requirements and Grading

Each company prepares no more than 12 PowerPoint slides for a 20-minute presentation with:

1. Executive Summary
2. Company's Performance
3. Strategy, ERP, Business, and Analytical Terms and Tools
4. Lessons Learned

Consider this presentation an example of project work being discussed during a job interview. For example:

1. What did you learn from this experience?
2. In what ways does this experience allow you to add value to the gaining organization?

Upload one presentation per company to D2L no later than the due date and time. The naming convention is *ERPsim Business Analytics Company Name (e.g., A, B) Presentation*. Include student names on slides. Late submissions will receive a 10% penalty towards the grade.

Grading
Company: _____

Contents	Points
Executive Summary	10
Company's Performance	10
Strategy, ERP, Business, and Analytics Terms and Tools	60
Lessons Learned	20
Total	100

Content Grading Criteria Rubrics

Criteria	Maximum points earned	51% or greater than of the maximum points earned	50% or less than of the maximum points earned	0 points earned
Content	Demonstrates a full understanding of the content and provides adequate relevant facts to support requirements.	Demonstrates a full understanding of the content and provides less than adequate relevant facts to Support requirements.	Demonstrates partial understanding of the content and provides less than adequate relevant facts to Support requirements.	Content was not attempted or was not answered correctly.

Following Assignment Instructions Grading Criteria Rubrics

Criteria	0 points deducted	1-2 points deducted	4-3 points deducted	5 points deducted
Following Assignment Instructions	Zero errors.	1-2 error.	4-3 errors.	5+ errors.