

Missouri University of Science & Technology
Department of Business and Information Technology
Fall 2016

Course: ERP 5410 Use of Business Intelligence

Days and Times: 11 am 12:15 pm, Tu Th

Room: 107A Fulton Hall

Instructor's Name: Dr. Wen-Bin "Vincent" Yu

Office Location: 106C Fulton Hall

Office Phone: (573) 341-7502

Email: yuwen@mst.edu

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

Office Hours: 9:30-10:30 am & 1- 2 pm, Tu, Th; or by appointment

COURSE INFORMATION

Catalog Description: This course introduces data-oriented techniques for business intelligence. Topics include Business Intelligence architecture, Business Analytics, and Enterprise Reporting. SAP Business Information Warehouse, Business Objects, or similar tools will be used to access and present data, generate reports, and perform analysis.

Prerequisites: Relational Database Experience (such as IST 3423) and ERP 5110 (may be taken concurrently) or ERP 2110.

Required Materials: Sharda et al, "Business Intelligence: A Managerial Perspective on Analytics" 3rd Ed., Prentice Hall 2014

Instructional Methods: A mix of lectures, SAP labs, discussions and student projects.

Course Learning Objectives:

Understand fundamental terminologies related to Business Intelligence.

Understand fundamental terminologies related to Data Warehousing.

Understand fundamental terminologies and perform analysis with Data Mining techniques, such as Clustering, Association analysis, and Decision Tree.

Understand fundamental terminologies related to Business Analytics, Reporting and Data Visualization.

Planned Learning Outcomes:

	Program Learning Objectives					
	Communication Skills	Critical Thinking	Information Technology	Teamwork & Leadership	Global & Multicultural Issues	Integrate Business Areas
Course Objectives						
Be able to understand terminologies related to Business Intelligence(BI).			X			
Be able to perform business analysis using data mining modules in an ERP system.			X			
Be able to create multi-dimensional data analysis using data warehousing and reporting modules in an ERP system.			X			
Be able to work as a team and conduct a research on current development of advanced BI technologies.	X	X	X	X		

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COURSE ASSIGNMENTS

Lab Assignments/Class exercises

The assignments are expected to be completed with **individual efforts**. You may only discuss the procedures of any SAP lab assignment with others. You need to write up the reports all by yourself with your own screenshots and results.

You will be required to turn in digital copies of your assignments and exercises to blackboard.

Any assignment is due at the BEGINNING of the class on its due date. Grades on late homework will be reduced by 20%, if turned in late at the same due date. No grade will be assigned for late homework past due date.

Quizzes/Exams

All the quizzes/exams will be Blackboard on-line tests. There will be three midterm exams but NO official final exam. The second and third midterm exams will emphasize the material covered after the previous exam. Make-up exam, should you need one, may be provided during the final exam week. The make-up exam is comprehensive.

Class Project: Only required for students taking this class as graduate credits

Class projects will be assigned at around the 6th week of the semester. The purpose of the projects is to let the students explore additional knowledge and/or gaining experiences in the fast-pacing field of Business Intelligence. Students will work in teams to either implement a real world project or conduct a research on the latest development on the topics related to the class. Requirements of the project will be announced when the project is given.

COURSE POLICIES AND GRADING

Attendance:

For on-campus students, you are expected to attend all classes, be on time, and participate in classroom discussions and exercises. If you are absent, it is your responsibility to obtain any class material and announcement.

For distance students, live participation is not required. You need to watch class archives when live participation does not fit into your work schedule.

Evaluation Methods:

Discussions and Participations 100 points Assignments and Labs 500 points

Quizzes 100 points Midterm Exams 300 points Project 100 points (graduate students only)

Grading Scale:

Final grades will be assigned according to the following criteria:

For graduate students or undergrad taking this course as graduate credits --

A = 990 - 1100 points; **B** = 880 - 989 points; **C** = 770 - 879 points; **F** = below 770 points.

For undergraduate students --

A = 900 - 1000 points; **B** = 800 -899 points; **C** = 700 - 799 points;

D = 600 -699 points **F** = below 600 points

Note: for IST majors, the passing grade for this class is C and above.

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IMPORTANT INFORMATION

Department Mission Statement

"Capitalizing on the strong technological emphasis of Missouri S&T, the Department of Business and Information Technology educates individuals for careers in modern business organizations. The Department emphasizes management through technology with particular focus on information systems and their application in a fast-changing, global, and competitive environment. Through innovative instruction and research, the Department serves the economic interests of industry and the evolving needs of society."

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 203 Norwood Hall (341-6655; dss@mst.edu).

Classroom Egress Maps:

Students are expected to familiarize themselves with the classroom egress maps posted on-line at: <http://designconstruction.mst.edu/floorplan/>.

Student Honor Code and Academic Integrity:

The Honor Code developed and endorsed by the Missouri S&T Student Council can be found at this link: <http://stuco.mst.edu/honor-code/>. Please read and reflect upon the Honor code and its emphasis on HONESTY and RESPECT.

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 (<http://registrar.mst.edu/academicregs/index.html>). Other informational resources for students regarding ethics and integrity can be found online at <http://ugs.mst.edu/academicintegrity/studentresources-ai>.

S&Tconnect: <https://blackboard.mst.edu/> (S&Tconnect tab)

S&Tconnect provides an enhanced system that allows students to request appointments with their instructors and advisors via the S&Tconnect calendar, which syncs with the faculty or staff member's Outlook Exchange calendar. S&Tconnect will also facilitate better communication overall to help build student academic success and increase student retention. S&Tconnect Early Alert has replaced the Academic Alert system used by Missouri S&T.

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The Burns & McDonnell Student Success Center

The Student Success Center is a centralized location designed for students to visit and feel comfortable about utilizing the campus resources available. The Student Success Center was developed as a campus wide initiative to foster a sense of responsibility and self-directedness to all S&T students by providing peer mentors, caring staff, and approachable faculty and administrators who are student centered and supportive of student success. Visit the B&MSSC at 198 Toomey Hall; 573-341-7596; success@mst.edu; Face book: www.facebook.com/SandTssc ; web: <http://studentsuccess.mst.edu/>

Title IX

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>.

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COURSE OUTLINE

(Updated: 8/22/2016)

Week	Month	T R	Topic	Reading Assignment
1	Aug.	23, 25	Review of Syllabus. Information System Fundamentals, Decision support systems (A brief review)	
2	Aug./ Sept.	30, 1	Introduction to Business Intelligence, Analytics and Decision Support.	Ch 1
3		6, 8	Data Warehousing: Definitions, Concepts and Architectures	Ch 2
4		13, 15	Data Warehouse Development	
5		20, 22	Review Exam 1	
6	Sept	27, 29	(Fall Career Fair) Business Performance Management	Ch 3
7	Oct	4, 6	Business Reporting: OLAP Reports and Queries	
8		11, 13	Visual Analytics	
9		18, 20	Review Exam 2	
10		25, 27	Data Mining: Concepts and Applications	Ch 4.
11	Nov.	1, 3	Data Mining: Association Analysis	
12		8, 10	Data Mining: Clustering & Decision Tree	
13		15, 17	Review Exam 3	
14		19-27	Thanksgiving Holidays No Class	
15	Nov./ Dec.	29, 1	Big Data and Analytics	Ch 5.
16		6, 8	BI Emerging Trend and Future Impacts-- Student Project Presentation	Ch 7
17		12-16	Final Exam Week Optional Make-up exam: <i>Monday, Dec 12th 12:30 pm</i>	

Notes:

*The syllabus is **tentative and subject to change**. Any change will be announced in class and/or on the Blackboard class website.*

Students need to bring to my attention conflicts of scheduled exams and any religious and other holidays they wish to observe prior to the 3rd week of the class.