



College Document # \_\_\_\_\_

UCC Document # 167

Review Type:    Edit    Exp XX Full

CATALOG YEAR 15-16

COLLEGE/SCHOOL/SECTION: ARSSB/DIBTS

Course: Add:  Delete:    Delivery:    MIS4320  
(check all that apply) Change: Number    Title    SCH    Description    Prerequisite   

**Response Required:** New course will be part of major  minor    as a required     
or elective    course

**Response Required:** New course will introduce   , reinforce   , or apply    concepts

**Response Required:** Grade Type    Normal (A-F)    CR/NC    P/F

**Shortened Course Format:** Equivalent Student Learning Outcomes verified:   

If new, provide Course Prefix, Number, Title, **Measurable** Student Learning Outcomes, SCH Value, Description, prerequisite, and lecture/lab hours if applicable. If in current online catalog, provide change and attach text with changes in red and provide a brief justification.

**Program:** Delete:    Add:    Change:    Attach new/changed Program of Study description and 4-year plan. If in current online catalog, provide change and attach text with changes in red.

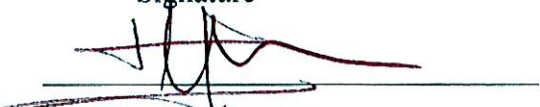

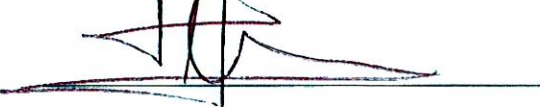
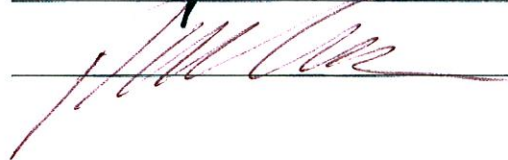
**Program Learning Outcomes:** Add:    Change:    Attach listing of program learning outcomes.

**Minor:** Add:    Delete:    Change:    Attach new/changed minor. If in current online catalog, provide change and attach text with changes in red.

**College Introductory Pages:** Add information:    Change information:     
Attach new/changed information. If in current online catalog, provide change and attach text with changes in red.

**Other:** Add information:    Change information:    Attach new/changed information. If in current online catalog, provide change and attach text with changes in red.

Approvals:

	Signature	Date
Chair Department Curriculum Committee		<u>2/11/2015</u>
Chair Department		<u>2/12/2015</u>
Chair College Curriculum Committee		<u>2/11/2015</u>
Dean	<u>R. Stephen Sears</u>	<u>2/23/2015</u>
Provost		<u>  </u>

**TEXAS A&M INTERNATIONAL UNIVERSITY**  
**A.R. SANCHEZ, JR. SCHOOL OF BUSINESS**  
**DIVISION OF INTERNATIONAL BUSINESS AND TECHNOLOGY STUDIES**

**COURSE SYLLABUS**

- Course:** MIS-4320-101 Data Mining and Business Intelligence
- Class Time/Location:** Day, Time @ Room
- Instructor:** Dr. Thant Syn
- Office Hours:** Day, Time
- E-mail:** thant.syn@tamiu.edu
- Required Text:** Business Intelligence and Analytics: Systems for Decision Support, 10/E  
Ramesh Sharda, Dursun Delen, Efraim Turban  
Prentice Hall  
ISBN: 9780133050905
- Recommended:** Additional readings will be announced in an ongoing basis.
- Prerequisite:** DS-3210 or approval by the instructor
- Course Description:** This course will introduce students to various statistical techniques frequently used in analyzing data to generate information useful in business decision-making. Advanced data-analytic techniques such as mathematical optimization, data mining, and artificial intelligence models will also be introduced using software-based data analytic tools.
- Course Goals:** The primary aim of this course is to provide students with hands-on experience in analyzing data for decision-making in businesses using commonly available data mining and business intelligence tools.
- Learning Objectives:** At the completion of this course, students should be able to:
1. Determine the data analytic techniques appropriate for various decision-making scenarios,
  2. Use commonly available analytic tools to analyze data and present information in the most effective manner, and
  3. Devise and recommend a solution based on the information provided by the data analytic tools.

**Grading Policy:**

Grades will be determined based on the students' individual and group performance in the following components of the course:

Attendance & Participation .....	10 points
Midterm Exam.....	20 points
Final Exam.....	30 points
Project .....	40 points
Total.....	100 points

**Letter Grades**

The letter grades will be assigned based on the following grading scheme:

90 - 100% .....	A
80 - 90%.....	B
70 - 80%.....	C
60 - 70%.....	D
below 60%.....	not passing

**Attendance Policy:**

Students are required to attend and participate in classes. Attendance will be taken regularly and participation will be recorded for every activity in the class.

**Other Course Policies:**



Detailed policies of the exams, group project, and other assignments will be made available in an ongoing basis in class.

## Classroom Behavior

The A.R. Sanchez, Jr. School of Business encourages classroom discussion and academic debate as an essential intellectual activity. It is essential that students learn to express and defend their beliefs, but it is also essential that they learn to listen and respond respectfully to others whose beliefs they may not share. ARSSB will always tolerate diverse, unorthodox, and unpopular points of view, but it will not tolerate condescending or insulting remarks. When students verbally abuse or ridicule and intimidate others whose views they do not agree with, they subvert the free exchange of ideas that should characterize a university classroom. If their actions are deemed by the professor to be disruptive, they will be subject to appropriate disciplinary action, which may include being involuntarily withdrawn from the class.

## Copyright Restrictions

The Copyright Act of 1976 grants to copyright owners the exclusive right to reproduce their works and distribute copies of their work. Works that receive copyright protection include published works such as a textbook. Copying a textbook without permission from the owner of the copyright may constitute copyright infringement. Civil and criminal penalties may be assessed for copyright infringement. Civil penalties include damages up to \$100,000; criminal penalties include a fine up to \$250,000 and imprisonment.

*Copyright laws do not allow students and professors to make photocopies of copyrighted materials, but you may copy a limited portion of a work, such an article from a journal or a chapter from a book for your own personal academic use or, in the case of a professor, for personal, limited classroom use. In general, the extent of your copying should not suggest that the purpose or the effect of your copying is to avoid paying for the materials. And, of course, you may not sell these copies for a profit. Thus, students who copy textbooks to avoid buying them or professors who provide photocopies of textbooks to enable students to save money are violating the law.*

## Plagiarism and Cheating

Plagiarism is the presentation of someone else's work as one's own. Recently, the Internet has complicated the picture. Getting something from the Internet and presenting it as one's own is still plagiarism. Copying another student's paper or a portion of the paper - is usually called "copying". Neither plagiarism nor copying will be tolerated. Should a faculty member discover that a student has committed plagiarism, the students will receive a grade of 'F' in that course and the matter may, if necessary, be referred to the TAMIU Honor Council for possible disciplinary action.

## Students with Disabilities

Texas A&M International University seeks to provide reasonable accommodations for all qualified persons with disabilities. This University will adhere to all applicable federal, state, and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal education opportunity. It is the student's responsibility to register with the Disabilities Services Coordinator located in the Student Counseling Center and to contact the faculty member in a timely fashion to arrange for suitable accommodations.

## Safety and Security- You are the Difference

Your safety and security are of prime concern here at Texas A&M International University, and the University police department work hard to ensure the campus is a safe place to live, learn, work and play. TAMIU is not, however, exempt from crime. To be safe and secure, you must take common sense precautions. Be alert and aware of those around you; look out for the safety of others. Do not leave valuables unattended; do not attempt to touch or interfere with our wildlife.

## Student Responsibility for Dropping a Course

It is the responsibility of the STUDENT to drop the course before the drop date. Faculty are not responsible for dropping students who suspend class attendance.

## Final Examination

The University requires all final Examinations be given on the day specified.

### Course Calendar

Week	Date	Topics	Assignments	Learning Objective
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1	8/27	Introduction/An Overview of Business Intelligence, Analytics, and Decision Support <i>Reading:</i> Chapter 1		1, 3
2	9/3	Foundations and Technologies for Decision Making <i>Reading:</i> Chapter 2		1, 2, 3
3	9/10	Data Warehousing <i>Reading:</i> Chapter 3	Project Ideas	1, 2, 3
4	9/17	Business Reporting, Visual Analytics, and Business Performance Management <i>Reading:</i> Chapter 4		1, 2, 3
5	9/24	Techniques for Predictive Modeling <i>Reading:</i> Chapter 6		1, 2, 3
6	10/1	Project Proposal Presentation	Project Proposal	1, 2, 3
7	10/8	Chapters 1, 2, 3, 4, 6	Midterm Exam	
8	10/15	Data Mining <i>Reading:</i> Chapter 5		1, 2, 3
9	10/22	Web Analytics, Web Mining, and Social Analytics <i>Reading:</i> Chapter 8		1, 2, 3
10	10/29	Model-Based Decision Making: Optimization and Multi-Criteria Systems <i>Reading:</i> Chapter 9		1, 2, 3
11	11/5	Automated Decision Systems and Expert Systems <i>Reading:</i> Chapter 11	Project Report Draft	1, 2, 3
12	11/12	Big Data and Analytics <i>Reading:</i> Chapter 13		1, 2, 3
13	11/19	Project Presentation	Project Report Final	1, 2, 3
14	11/26	Thanksgiving Holidays		
15	12/3	Chapters 1, 2, 3, 4, 5, 6, 8, 9, 11, 13	Final Exam	

**THE INSTRUCTOR RESERVES THE RIGHT TO MAKE CHANGES TO THIS SYLLABUS AS NEEDED AND WITH NOTIFICATION TO STUDENTS**

**JUSTIFICATION:**

Modernization of the existing BBA in MIS Program to include a Data Analytics component, whereby students will learn various state-of-the-art techniques to compile and analyze data from various organizations and from the cloud. The goal of these analyses will be a better understanding of issues that can be used to improve the quality of goods and services in organizations, and the productivity with which those goods and services are generated and delivered to customers.