COLLEGE/SCHOOL/SECTION: ARSSB/DIBTS

Course: Add: X Delete: ___ Delivery: ___ MIS4380
(check all that apply) Change: Number___ Title___ SCH___ Description___ Prerequisite ___

Response Required: New course will be part of major X 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: Add: ___ Delete: ___ 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.


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:

Chair, Department Curriculum Committee

Chair, Department

Chair, College Curriculum Committee

Dean

Provost

2014

Signature

Date

2/11/2015

2/12/15

2/11/2017

2/23/2015
Course: MIS 4380 Business Decision Modeling
Meeting Time: TBA
Room: TBA
Instructor: (proposed by Haibo Wang)
Office Hours: TBA
Office: PH xxxx
E-mail: xxxx


Prerequisite: DS2310 or permission of instructor

Course Description: This course includes fundamental concepts of both statistics and decision theory. This course provides an introduction to generic modeling techniques that can be employed to address the complexity of business decision making.

Course Teaching Methods:
1. **Lectures**: Important material from the text and outside sources will be covered in class. Students should plan to take careful notes as not all material can be found in the texts or readings. In-class discussion is encouraged.

2. **Lab Session**: Occasional scheduled or unscheduled lab session will be given to help ensure students stay up with assigned material and learn to use software for research projects.

3. **Case Studies**: Finding the useful information from data and analyzing problems in business management by using the basic theories and methods learned from this course.

Learning Objectives:
1. Training students to solving the practical problems of business management by using statistics and mathematical programming;
2. Training students to apply analytical models, techniques, and frameworks to decision making or problem solving
3. Training students to be sensitive for numerical information and improving students' ability to deal with numerical information;
Grading Policy

Grades will be determined with the following weights for components:

<table>
<thead>
<tr>
<th>Assignments/Grading Items</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Sessions</td>
<td>10</td>
</tr>
<tr>
<td>Case Study</td>
<td>20</td>
</tr>
<tr>
<td>Group Project</td>
<td>30</td>
</tr>
<tr>
<td>Exams</td>
<td>40</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

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

Attendance Policy: participation will be evaluated through the ability of students to add to the material already provided by the instructor in power point audio files and assignment. Class participation: student participation in classroom discussions will be noted and students should strive to vary their types of class participation alternating between asking pertinent question, answering other students’ questions, and providing useful hints, tips about course resources. Class attendance will also be recorded and considered for the purpose of class participation grade.

Administrative Policies:
xxxxx-Twelfth Class Day; last day courses may be dropped without record.

graduation application and payment deadline. **NO REGISTRATION BEYOND THIS POINT.**

xxxxx- Last day to drop a course or withdraw from the University

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 TAMU 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. TAMU 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 comprehensive and be given on the day specified.

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

APPENDIX A: COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Assignments &amp; Readings</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data and Statistics</td>
<td>Lab session on Descriptive Statistics Using Excel Spreadsheet</td>
</tr>
<tr>
<td>2</td>
<td>Introduction to Probability</td>
<td>Case study</td>
</tr>
<tr>
<td>3</td>
<td>Interval Estimation.</td>
<td>Case study</td>
</tr>
<tr>
<td>4</td>
<td>Experimental Design and Analysis of Variance</td>
<td>Case study</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>5</td>
<td>Regression Analysis: Model Building</td>
<td>Case study</td>
</tr>
<tr>
<td>6</td>
<td>Time Series Analysis and Forecasting</td>
<td>Case study</td>
</tr>
<tr>
<td>7</td>
<td>Decision Analysis</td>
<td>Midterm</td>
</tr>
<tr>
<td>8</td>
<td>Linear Programming</td>
<td>Lab sessions on using Solver</td>
</tr>
<tr>
<td>9</td>
<td>Linear Programming Applications in Marketing, Finance and Operations Management</td>
<td>Case study</td>
</tr>
<tr>
<td>10</td>
<td>Distribution and Network Models</td>
<td>Case study</td>
</tr>
<tr>
<td>11</td>
<td>Integer Programming</td>
<td>Case study</td>
</tr>
<tr>
<td>12</td>
<td>Project Scheduling: PERT/CPM</td>
<td>Case study</td>
</tr>
<tr>
<td>13</td>
<td>Inventory Models</td>
<td>Case study</td>
</tr>
<tr>
<td>14</td>
<td>Multicriteria Decisions &amp; Data Envelopment Analysis</td>
<td>Project Presentation</td>
</tr>
<tr>
<td>15</td>
<td>Markov Processes (optional based on the semester schedule)</td>
<td>Final Exam and Project Due</td>
</tr>
</tbody>
</table>

**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.