CURRICULUM PROPOSAL

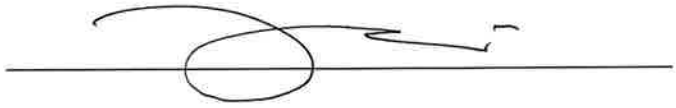
APPROVAL PAGE

Proposal Title: Creation of new course: CIS 3305

College: Business Administration **Department: Accounting and Information Systems**

DEPARTMENT CHAIR- Zuobao Wei

I have read the enclosed proposal and approve this proposal on behalf of the department.



10/27/2021

Signature **Date**

COLLEGE CURRICULUM COMMITTEE CHAIR – Feixue Xie

I have read the enclosed documents and approve the proposal on behalf of the college curriculum committee.

11/05/2021

Signature **Date**

COLLEGE DEAN – James Payne

I have read the enclosed documents and approve the proposal on behalf of the college. I certify that the necessary funds will be allocated by the college in support of this proposal.

11/8/21

Signature **Date**

UNDERGRADUATE CURRICULUM CHANGE MEMO

Date: 10/26/2021

From: Godwin Udo, Accounting and Information Systems

Through: Zuobao Wei, Accounting and Information Systems

Through: James Payne, College of Business

To: Chair, Undergraduate Curriculum Committee

Proposal Title: Addition of a new Course: CIS 3305

We propose a new course, CIS 3305, that reflects the needs of all majors in the college. The course covers the emerging skill set expected of managers in the current and future business environment. CIS 3305 will be an introduction to the principles and concepts of information systems and business analytics. This course covers the role and impact of modern analytics and information technologies in supporting business processes and major enterprise-wide strategic initiatives. It examines how organizations can use business intelligence and advanced analytics to make data-driven decisions in the digital firm. Students will learn to solve real-world business problems using leading and modern analytic tools.

COURSE ADD

All fields below are required

College : Business Administration **Department :** Accounting & Information Systems

Rationale for adding the course:
A new course, CIS 3305 is needed that reflects the needs of all majors in the college. The course covers the emerging skill set expected of managers in the current and future business environment.

All fields below are required

Subject Prefix and # CIS 3305

Title (29 characters or fewer): Foundations of Info Sys & BA

Dept. Administrative Code : 0050

CIP Code 11.0103.00

Departmental Approval Required ☐Yes ☒No

Course Level ☒UG ☐GR ☐DR ☐SP

Course will be taught: ☒ Face-to-Face ☐ Online ☐ Hybrid

How many times may the course be taken for credit? (Please indicate 1-9 times): 1

Should the course be exempt from the "Three Repeat Rule?" ☐Yes ☒No

Grading Mode: ☒Standard ☐Pass/Fail ☐Audit

Description (600 characters maximum):
This is an introduction of the principles and concepts of information systems and business analytics. This course covers the role and impact of modern analytics and information technologies in supporting business processes and major enterprise-wide strategic initiatives. It examines how organizations can use business intelligence and advanced analytics to make data-driven decisions in the digital firm. Students will learn to solve real-world business problems using leading and modern analytic tools.

Contact Hours (per week): 3 Lecture Hours Lab Hours Other

Types of Instruction (Schedule Type): Select all that apply

☒A	Lecture	☐ H	Thesis
☐ B	Laboratory	☐ I	Dissertation
☐ C	Practicum	☐ K	Lecture/Lab Combined
☐ D	Seminar	☐ O	Discussion or Review (Study Skills)
☐ E	Independent Study	☐ P	Specialized Instruction
☐ F	Private Lesson	☐ Q	Student Teaching

Fields below if applicable

If course is taught during a part of term in addition to a full 16-week term please indicate the length of the course (ex., 8 weeks):

TCCN (Use for lower division courses) :

Prerequisite(s):		
Course Number/ Placement Test	**Minimum Grade Required/ Test Scores**	**Concurrent Enrollment Permitted? (Y/N)**
N/A	**N/A**	**N/A**
QMB 2301	**C**	
ACCT 2301	**C**	

Corequisite Course(s):
N/A

Equivalent Course(s):
N/A

Restrictions:	
Classification	
Major	**ACCT, CIS, ECON, Fin, genb, inbu, infs, is, mgmt.,oscm**

CIS 3305 – Foundations of Information Systems and Business Analytics

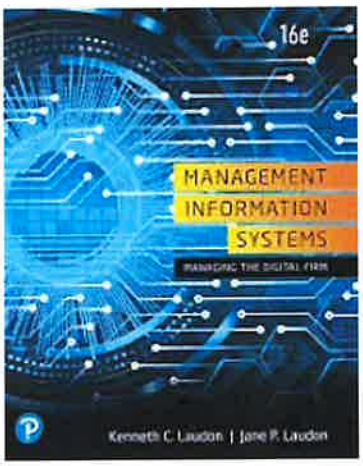
Course Description:

This is an introduction of the principles and concepts of information systems and business analytics. This course covers the role and impact of modern analytics and information technologies in supporting business processes and major enterprise-wide strategic initiatives. It examines how organizations can use business intelligence and advanced analytics to make data-driven decisions in the digital firm. Students will learn to solve real-world business problems using leading and modern analytic tools.

Text Books: The following book is required:

1. Management Information Systems; Kenneth Laudon and Jane Laudon, 16eth edition, Pearson

ISBN-13: 978-0-13-519179-8



2. Supplementary material and lab manuals will be provided in class.

Course Objectives:

Upon successful completion of this course, the students will be able to:

- evaluate the role and impact of analytics and information systems in today's competitive business environment;
- describe how organizations use analytics and information systems for competitive advantage;
- know the fundamentals of analytics and information technology architecture;
- understand the emerging technology-related issues facing organizations;
- understand and apply the concepts and methods of business analytics;
- use emerging analytics tools to perform data analytics;
- make data-driven business decisions;

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. Discussion is encouraged as is student-procured outside material relevant to topics being covered.
2. Technology @ Work: Students are expected to participate in hands-on lab exercises. Lab materials will be provided.
3. Assignments: End of chapter activities and online activities will be assigned weekly to reinforce material in the text. These assignments may require the application of various software packages.
4. Quizzes: Occasional unannounced quizzes will be given to help ensure students stay up with assigned material.
5. Exams: Three learning assessments (Exams) will be given.

COURSE RESOURCES:

Blackboard

You must have access to BLACKBOARD for this course. You can login to BLACKBOARD at http://my.UTEP.edu. Our 'virtual classroom' in BLACKBOARD will include items such as:

- The course syllabus, schedule, and assignments
- Announcements
- Messages from fellow students
- Grades

Computer

A computer with access to Internet and a printer is required. Exams are taken on-line via Blackboard, and all assignments must be uploaded and/or completed in Blackboard in order to receive credit. This course is Blackboard-assisted, and many activities, such as file distribution, emails, assignment submission, and announcements between classes, are taking place exclusively through Blackboard. Therefore, students are expected to have access to computer, Internet, and Microsoft Office this course. If you do not have your own, computers are available to all UTEP students in the labs across the campus.

Evaluation:

Grades are not given; they are **EARNED**. You must work for it. Your grade will be based on results rather than on effort—your performance is an indicator of your ability to master the topic. Decide to work **NOW** for the grade you want. Students who keep up with the materials, do all of the assignments, and participate in the learning experiences typically do well.

Your grade will be based on the total number of points that you earn for each assignment group. The weight associated with each of the graded areas, and the total points required to earn the various grades, are shown below.

Assignment Group	Weight
Exams	70%

Technology @ Work Labs	30%
Total	**100%**

You will be able to check the status of your grade at any point during the semester by accessing 'My Grades' section of the BLACKBOARD classroom.

Your grade will be calculated using the following scale:

Grade	Level of Work	Percentage Range
A	Excellent, distinguished	90 – 100%
B	Very good, above average	80 – 89%
C	Average, Normal	70 – 79%
D	Below Average	60 - 69%
F	Failing	<60%

A grade of **"I" (Incomplete)** will be assigned only in circumstances in agreement with the current UTEP Undergraduate Catalog.

Exams: Each exam will consist of a combination of multiple choice and True/False questions which may involve the concepts discussed in your textbook, materials covered in your assigned projects and labs, and operation procedures and rules of the System being studied. Each exam will contain questions from the material covered since the last exam. Make up exams are only allowed in the case that the student provides an evidence of valid reasons such as health issues or unexpected events in the life of the student. A make-up exam may be held within one week from the original exam date.

Technology @ Work Lab Exercises:

There will be 5 lab exercises using analytics tools such as SQL, Tableau, Power BI, Python, and ArcGIS. Lab materials will be provided including supplemental reading.

Incomplete: University policy states that a grade of "I" may be given only when a student is currently receiving a passing grade in the course. An incomplete is meant for hardship cases where you are unable to complete the course requirements due to circumstances beyond your control. It is not meant to accommodate students who decide that the workload is too heavy. Adequate evidence of such hardship must be presented when requesting an "I" grade.

Inappropriate Behavior. Inappropriate behavior distracts other students and interferes with their learning experience. Rude and inappropriate behavior will not be tolerated. Since it is my responsibility to provide an environment that is conducive to learning for everyone is the class, I will deduct points from the final grade of a student who chooses to repeatedly distract others. In particularly egregious cases, I will have the student permanently removed from the class.

Academic Integrity. The University of Texas at El Paso prides itself on its standards of academic excellence. In all matters of intellectual pursuit, UTEP faculty and students must strive to achieve based on the quality of the worked produced by the individual. In the classroom and in all other academic activities, students are expected to uphold the highest standards of academic integrity. Any form of scholastic dishonesty is an affront to the pursuit of knowledge and jeopardizes the quality of the degree awarded to all graduates of UTEP.

Any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. Proven violations of the detailed regulations, as printed in the Handbook of Operating Procedures (HOP) and available in the office of the Dean of Students, may result in sanctions ranging from disciplinary probation, to failing grades on the work in question, to failing grades in the course, to suspension or dismissal, among others.

Tentative Schedule

The instructor will attempt to adhere to the course schedule below but does reserve the right to alter course content, class assignments and activities, and/or dates as deemed necessary.

Note: The reading is to be completed prior to the start of class. Class lectures will not be used to cover everything in the readings. Students are expected to know the material given in reading assignments whether or not it is covered in class.

***** Please note that this is a draft schedule and is subject to change *****

Tentative Schedule of Classes

DATES	TOPICS	READINGS
Week #1:	Course introduction/Information - Global E-business and Collaboration - Modern Analytics	Chaps 1- 2, Supplemental Reading
Week #2:	IS, Organization and Strategy	Chap 3
Week #3:	- IT Infrastructure and Emerging Technologies - Analytic Architectures	Chap 5, Supplemental Reading
Week #4:	**Technology @ Work:** - Solving Customer Retention through Analytics	Hands-On Lab #1: Power BI Supplemental Reading
Week #5:	**- EXAM 1** - Foundations of BI and Databases including Big Data, SQL, etc.	**EXAM 1** (Chaps 2, 3, 5) Chap 6
Week #6:	- Foundations of BI and Databases including Big Data, SQL, etc. - The Age of Analytics and the Importance of Data Quality	Chap 6, Supplemental Reading
Week #7:	**Technology @ Work:** - Analyzing Data Quality in the Age of Big Data	Hands-On Lab #2: Power BI Supplemental Reading
Week #8:	Telecommunications, Internet Wireless Tech; Security Issues in IS	Chap 7, 8
Week #9:	Enterprise Applications; Electronic Commerce Systems and Digital Goods	Chap 9, 10
Week #10:	**Technology @ Work**: -Managing Customer Service through Analytics	Hands-On Lab #3: Power BI
Week #11:	**- EXAM 2** - Knowledge Management, Artificial Intelligence, Machine Learning, and Data Science	**EXAM 2** (Chaps 6, 7, 8, 9, 10) Chap 11
Week #12:	**Technology @ Work:** -Natural Language Analytics and Visualization	Hands-On Lab #4: Python Supplemental Reading
Week #13:	Enhancing Decision Making with Business Intelligence	Chap 12
Week #14:	**Technology @ Work:** - Identifying Market Opportunities through Consumer Demographics	Hands-On Lab #5: ArcGIS Supplemental Reading
Week #15:	System Development – SLCD, Agile Framework, and other Methods	Chapter 13
Final Exam	**- EXAM 3**	**EXAM 3** (Chaps 11-13)