DS 110: DATA MINING FOR BUSINESS ANALYTICS

In Workflow

- 1. CBA College Committee Chair (anne.fuller@csus.edu)
- 2. CBA Dean (mcwilson@csus.edu)
- 3. Academic Services (torsetj@csus.edu;%20212408496@csus.edu;%20cnewsome@skymail.csus.edu)
- 4. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
- 5. Dean of Undergraduate (james.german@csus.edu;%20celena.showers@csus.edu)
- 6. Dean of Graduate (cnewsome@skymail.csus.edu)
- 7. Catalog Editor (212408496@csus.edu;%20torsetj@csus.edu;%20cnewsome@skymail.csus.edu)
- Registrar's Office (wwd22@csus.edu;%20wlindsey@csus.edu;%20sac19595@csus.edu;%20danielle.ambrose@csus.edu;%20h.skocilich@csus.edu;%20j.espera@csus.edu)
- 9. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

- 1. Wed, 04 Sep 2019 17:40:30 GMT Marty Wilson (mcwilson): Approved for CBA College Committee Chair
- 2. Wed, 04 Sep 2019 17:41:25 GMT Marty Wilson (mcwilson): Approved for CBA Dean

Date Submitted: Thu, 14 Mar 2019 04:02:00 GMT

Viewing:DS 110 : Data Mining for Business Analytics

Formerly known as: DS 133

Last edit:Thu, 14 Mar 2019 04:01:59 GMT

Changes proposed by: Min Li (101017159)

Contact(s):

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Catalog Title:

Data Mining for Business Analytics

Class Schedule Title: Data Mining for Business Analy

Academic Group: (College)

CBA - Business Administration

Academic Organization: (Department)

Business Administration

Will this course be offered through the College of Continuing Education (CCE)?

No

Catalog Year Effective: Spring 2020 (2019/2020 Catalog)

Subject Area: (prefix) DS - Decision Sciences

Catalog Number: (course number) 110

Course ID: (For administrative use only.) 149841

Units:

3

In what term(s) will this course typically be offered?

Fall, Spring

Does this course require a room for its final exam?

Yes, final exam requires a room

Does this course replace an existing experimental course? No

This course complies with the credit hour policy:

Yes

Justification for course proposal:

DS 133 Multivariate Business Statistics, an elective course created over 10 years ago for a Knowledge Management minor in MIS, has never been offered to our students. Given the rapid development of data analytics in recent years and its critical role in all businesses, the course content of DS 133 is updated to reflect current developments in data analytics and its applications in business. The updated content will be of interest to students in many business disciplines including accounting, finance, insurance, MIS, marketing, management, and real estate. This revision will prepare our students for more advanced analytics courses. It will also help our students seeking employment in the analytics arena as well as those students who want to broaden their understanding of the field. To reflect the updated content in this course and to emphasize its critical role in the new business analytics concentration, the prefix and title are better changed to "DS 110 Data Mining for Business Analytics".

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)

Data mining methods including data visualization, classification (logistic regression, discriminant analysis), tree-based methods, cluster analysis, principle components analysis, factor analysis, neural networks, classification and regression trees, and facilitated through software. Focus on applications in the business environment.

Are one or more field trips required with this course?

No

Fee Course?

No

Does this course have prerequisites?

Yes

Prerequisite:

DS 101 or STAT 103 or ENGR 115 or equivalent. Business, Computer Science, and Mathematics are approved majors to enroll in the course.

Prerequisites Enforced at Registration?

Yes

Does this course have corequisites? No

Graded:

Letter

Approval required for enrollment?

No Approval Required

Course Component(s) and Classification(s): Lecture

Lecture Classification CS#02 - Lecture/Discussion (K-factor=1WTU per unit) Lecture Units 3

Is this a paired course? No

Is this course crosslisted?

No

Can this course be repeated for credit?

No

Can the course be taken for credit more than once during the same term? No

Description of the Expected Learning Outcomes: Describe outcomes using the following format: "Students will be able to: 1), 2), etc."

Students will be able to:

1. identify opportunities for creating value using data mining in business;

2. identify appropriate data mining methods for a given business problem;

- 3. evaluate and compare model performance;
- 4. recognize strengths and limitations of modern data mining methods in business.

Attach a list of the required/recommended course readings and activities:

SYLLABUS_DS110.docx

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and posttests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above.

- 1. Weekly homework assignments
- 2. Case studies to solve real business problems
- 3. In-class examinations
- 4. Group project

Is this course required in a degree program (major, minor, graduate degree, certificate?)

Yes

Identify the program(s) in which this course is required:

Programs:

BS in Business Administration (Business Analytics)

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals

Undergraduate Learning Goals:

Competence in the disciplines Integrative learning Intellectual and practical skills

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?

No

Key: 1190