MSBA 201: PROGRAMMING FOR BUSINESS ANALYTICS

In Workflow

1. CBA College Committee Chair (jlee@csus.edu)
2. CBA Dean (mikhaili@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)
8. Registrar's Office (wlindsey@csus.edu)
9. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

1. Wed, 08 Apr 2020 21:02:19 GMT
   Jai Joon Lee (jlee): Approved for CBA College Committee Chair
2. Wed, 08 Apr 2020 23:53:10 GMT
   Jaydeep Balakrishnan (jaydeep.balakrishnan): Approved for CBA Dean

New Course Proposal

Date Submitted:Wed, 25 Mar 2020 22:34:15 GMT

Viewing:MSBA 201 : Programming for Business Analytics
Last edit:Wed, 25 Mar 2020 22:34:14 GMT

Changes proposed by: Min Li (101017159)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Ramakrishna Dantu	dantu@csus.edu	(916) 278-6849

Catalog Title:
Programming for Business Analytics

Class Schedule Title:
Prog for Business Analytics

Academic Group: (College)
CBA - Business Administration

Academic Organization: (Department)
Business Administration

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

Please specify:
CCE Only

Catalog Year Effective:
Fall 2020 (2020/2021 Catalog)

Subject Area: (prefix)
MSBA - Business Analytics

Catalog Number: (course number)
201

Course ID: (For administrative use only.)
TBD

Units:
3

In what term(s) will this course typically be offered?
Fall, Spring, Summer

Does this course require a room for its final exam?
No, final exam does not require a room

Does this course replace an existing experimental course?
No

This course complies with the credit hour policy:
Yes

Justification for course proposal:
This is a core course of Masters in Business Analytics (MSBA) program. It's a required course. Some programming skills in Python or R are required for most business analytics programs. Such skills are required for most analytics jobs.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)
The purpose of this course is to introduce and familiarize students with key aspects of Python and R programming languages that are necessary for computation in business analytics. Upon successful completion of this course, students will be familiar with Python and R programming constructs, data structures, retrieving data from Excel, databases and other online sources, pre-processing data, and various types of data analysis techniques.

Are one or more field trips required with this course?
No

Fee Course?
No

Is this course designated as Service Learning?
No

Does this course require safety training?
No

Does this course require personal protective equipment (PPE)?
No

Does this course have prerequisites?
No

Does this course have corequisites?
No

Graded:
Letter

Approval required for enrollment?
No Approval Required

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

Activity Classification
CS#15 - Technical Activity/Laboratory (K-factor=1.5 WTU per unit)
Activity Units
1.5

Discussion Classification

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

Discussion Units

0.5

Lecture Classification

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

Lecture Units

1

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.'

Upon successful completion of this course, the student will be able to
1. Describe and distinguish various data structures such as lists, tuples, dictionaries, data frames, Matrices where applicable in Python and R language.
2. Write programming constructs such as selection (e.g., if else), and repetition (e.g., while and for loops) structures.
3. Use essential libraries required for reading data from various sources (e.g., text, CSV, JSON, Web, and databases)
4. Demonstrate skills in retrieving data from Excel, databases and other online sources, pre-processing data, and various types of data analysis techniques.
5. Apply tools and techniques for pre-processing data required for exploratory data analysis and visualization
6. Identify programming techniques required for Text Analytics such as topic modeling and sentiment analysis.

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

MSBA_201_Computation_for_Business_Analytics_Syllabus.pdf

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, 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.

Students will be assessed on the curriculum in the class using a variety of methods, including:
Projects
Exams
Quizzes
Homework Assignments

For whom is this course being developed?

Majors in the Dept

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

Yes

Has a corresponding Program Change been submitted to Workflow?

No

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

Programs:
Master of Science in 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

Graduate (Masters) Learning Goals:
Critical thinking/analysis
Disciplinary knowledge

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)?
No

Is this a Graduate Writing Intensive (GWI) course?
No

Key: 13883