Last Updated: Haddad, Deborah Moore 01/27/2014

Term Information

Effective Term Autumn 2014

General Information

Course Bulletin Listing/Subject Area Political Science

Fiscal Unit/Academic Org

College/Academic Group

Arts and Sciences

Level/Career

Undergraduate

Course Number/Catalog 3780

Course Title Data Literacy and Data Visualization

Transcript Abbreviation Data Lit & Vis

Course Description Most social science debates can be addressed with data, and sources of data are growing exponentially.

This course introduces students to tools of data analysis and principles behind their use in the context of

social-science applications.

Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week, 7 Week, 4 Week (May Session), 12 Week (May + Summer)

Flexibly Scheduled Course Never

Does any section of this course have a distance No

education component?

Grading Basis Letter Grade

Repeatable No

Course Components Lecture, Recitation

Grade Roster Component Recitation
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites

Exclusions

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 45.1001

Subsidy Level Baccalaureate Course

Intended Rank Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

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Required for this unit's degrees, majors, and/or minors

General Education course:

Data Analysis

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- Students will develop skills in drawing conclusions and critically evaluating results based on data.
- Students will understand basic concepts of statistics and probability.
- Students will comprehend methods needed to analyze and critically evaluate statistical arguments.
- Students will recognize the importance of statistical ideas.

Content Topic List

- Locating and obtaining data
- Design of data visualizations
- R programming
- Creating visualizations (distributional, spatial, and temporal, etc.)
- The fundamentals of probability and uncertainty
- Monte Carlo simulations for understanding probability
- The bootstrap: generalizing from a sample to a larger population
- Research design: theories, hypotheses, and hypothesizing

Attachments

• 3780 rationale and objectives.pdf: rationale and objectives

(Other Supporting Documentation. Owner: Smith, Charles William)

Pols3780-syllabus.pdf: syllabus

(Syllabus. Owner: Smith, Charles William)

Assessment-plan (2).pdf: assessment plan

(GEC Course Assessment Plan. Owner: Smith, Charles William)

Comments

- There are no math/stats preregs for this course (by Smith, Charles William on 01/27/2014 09:18 AM)
- Wasn't there to be math and/or stats prereqs?

Re: assessment. How are the problem sets being used for assessment? How will the independent project assess the course's learning outcome -- longitudinally? (by Haddad, Deborah Moore on 01/21/2014 05:47 PM)

COURSE REQUEST 3780 - Status: PENDING Last Updated: Haddad, Deborah Moore 01/27/2014

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Smith, Charles William	01/21/2014 03:32 PM	Submitted for Approval
Approved	Herrmann, Richard Karl	01/21/2014 04:54 PM	Unit Approval
Revision Requested	Haddad, Deborah Moore	01/21/2014 05:47 PM	College Approval
Submitted	Smith, Charles William	01/27/2014 09:20 AM	Submitted for Approval
Approved	Herrmann, Richard Karl	01/27/2014 09:39 AM	Unit Approval
Approved	Haddad, Deborah Moore	01/27/2014 10:11 AM	College Approval
Pending Approval	Hanlin,Deborah Kay Hogle,Danielle Nicole Jenkins,Mary Ellen Bigler Nolen,Dawn Vankeerbergen,Bernadet te Chantal	01/27/2014 10:11 AM	ASCCAO Approval