SOC 101: INTRODUCTION TO STATISTICS FOR SOCIOLOGISTS

In Workflow

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Approval Path

1. Mon, 23 Mar 2020 17:57:34 GMT
   Todd Migliaccio (tmigliac): Approved for SOC Committee Chair
2. Mon, 23 Mar 2020 17:57:54 GMT
   Todd Migliaccio (tmigliac): Approved for SOC Chair
3. Fri, 17 Apr 2020 16:06:05 GMT
   Mical Shilts (shiltsm): Rollback to SOC Chair for SSIS College Committee Chair
4. Fri, 17 Apr 2020 21:27:41 GMT
   Todd Migliaccio (tmigliac): Approved for SOC Chair
5. Fri, 17 Apr 2020 22:16:16 GMT
   Mical Shilts (shiltsm): Approved for SSIS College Committee Chair
6. Fri, 17 Apr 2020 22:36:44 GMT
   Marya Endriga (mendriga): Approved for SSIS Dean

Date Submitted:Mon, 23 Mar 2020 17:56:57 GMT

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Changes proposed by: Todd Migliaccio (101045759)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Todd Migliaccio	tmigliac@csus.edu	916-278-6678

Catalog Title:

Introduction to Statistics for Sociologists

Class Schedule Title:

Intro To Stat For Soc

Academic Group: (College)

SSIS - Social Sciences & Interdisciplinary Studies

Academic Organization: (Department)

Sociology; Labor Studies

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

No

Catalog Year Effective:

Fall 2021 (2021/2022 Catalog)

Subject Area: (prefix)

SOC - Sociology

Catalog Number: (course number)
101

Course ID: (For administrative use only.)
162306

Units:
4

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

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:
Course is not changing, but we are submitting it for consideration for GE Area B-5, as the class outcomes and requirements align with the area.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)
Provides students with an overall view of the role and techniques of statistics in the presentation and interpretation of social science data. Lectures emphasize descriptive statistics: measures of central tendency and variability, and association and correlation. Introduction is given to statistical inference: sampling distributions, hypothesis-testing, and estimation. Lab sessions provide demonstrations and training in the practical application of concepts and techniques dealt with in lectures. Students learn to use the computer as an aid in data processing and analysis.

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?
Yes

Prerequisite:
Sociology majors only

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):
Activity
Discussion

Activity Classification
CS#08 - Education Workshops & Social Science Activity (K-factor=1.3 WTU per unit)
Activity Units
1

Discussion Classification
CS#04 - Lecture /Recitation (K-factor=1 WTU per unit)
Discussion 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.'
1. Identify units of analysis from a study description
2. Identify independent and dependent variables from a hypothesis statement
3. Understand and explain the concept of 'variables' and identify levels of measurement for given variables
4. Select and conduct appropriate univariate data analysis techniques based on given data and interpret results (e.g. central tendency, variability)
5. Select and conduct appropriate bivariate data analysis techniques based on given data and interpret results (e.g. crosstabulation, association, correlation)
6. Explain the appropriate use of hypothesis tests and p-values
7. Select and conduct appropriate hypothesis tests, including independent samples t-test and chi-square test, and interpret results
8. Demonstrate proficiency using SPSS for Windows for univariate and bivariate statistical analyses

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

Soc 101 Required Materials.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.

It is a scaffolded class, so homework supports ability to do lab assignments, which will be facilitated by portfolio and thus is evaluated finally by exam. Much of it is both formative and summative in the assessment process.
Homework, both offline and online, to explain data (ELO 1, 2, 3, 6),
lab assignments to engage and run data (ELO 4, 5, 6, 7),
portfolios that include work and preparation (i.e. practice exam questions, class notes, etc) to evaluate student comprehension overall (ELO 1-8),
exams (ELO 1-6, 8).

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:
BA in Sociology

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:

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)?

No

GE Course and GE Goal(s)

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

Yes

In which GE area(s) does this apply?

B5. Further Studies in Physical Science, Life Forms and Quantitative Reasoning (Upper Division Only)

Which GE objective(s) does this course satisfy?

Use mathematical ideas to accomplish a variety of tasks.

Attach Course Syllabus with Detailed Outline of Weekly Topics:

Soc 101 Syllabus_2.pdf

Syllabi must include: GE area outcomes listed verbatim; catalog description of the course; prerequisites, if any; student learning objectives; assignments; texts; reading lists; materials; grading system; exams and other methods of evaluation.

Will more than one section of this course be offered?

Yes

Provide a description of what would be considered common to all sections and what might typically vary between sections:

The learning outcomes are established for all sections of the course. How they provide the instruction and the depth of coverage on some may differ across sections.

The primary concepts covered (univariate, bivariate statistics, hypothesis testing) are common to all sections. The emphasis on hand calculations may vary between sections, but all sections require interpretation and analysis or results.

Please write a statement indicating the means and methods for evaluating the extent to which the objectives of the GE Area(s) and any writing requirements are met for all course sections:

We already require all faculty to submit syllabi to make sure they include learning outcomes in their syllabus and that writing requirements are covered. We are looking into creating common measures that can be used to evaluate achievement of learning outcomes as a measure of student success in the course and in the program.

What steps does the department plan to take to ensure that instructors comply with the respective category criteria and who is responsible?

There is a central meeting that occurs among faculty who teach this course prior to the start of a year. When new faculty teach the course, they are contacted by the lead faculty member to clarify what is required for any section of the course and what is open for them to address as faculty.

General Education Details - Area B5: Further Studies in Physical Science, Life Forms and Quantitative Reasoning

Section 1.

Indicate in written statements how the course meets the following criteria for Category B5. Relate the statements to the course syllabus and outline. Be as succinct as possible.

Course type:
Quantitative Reasoning

For courses in quantitative reasoning:

Develops basic mathematical or logical concepts, quantitative reasoning skills, and has general applicability in solving problems.

While most of the course engages quantitative reasoning as it is focused on developing and applying statistical skills to Social Issues. Specifically, these two learning outcomes highlight this:
Students will be able to:
Use of hypothesis testing and p-values to evaluate social phenomenon and solve applied problems.

Select and conduct appropriate univariate and bivariate data analysis based on given data and interpret results.

Develops computational skills or competence in the analysis of arguments.

The following course learning outcome highlights this:
Students will be able to:
Demonstrate proficiency using SPSS for Windows for univariate and bivariate statistical analyses.

Also, to emphasize this focus in the course, the following requirement in all sections of the course:
Multiple lab assignments using SPSS throughout the course to help students apply statistical measures to quantitative data. Students analyze the best measure of a given concept, the appropriate analysis technique and how the results answer a given research question.

Please Note: Courses listed in this category:
1) Need not be introductory courses and need not be as broad in scope as courses included in B1, B2, B3 or B4 i.e.; they may deal with a specialized topic.
2) These courses may have prerequisites or build on or apply concepts and knowledge covered in Areas B1, B2 and B4. For math courses, there must be an intermediate algebra prerequisite.

Addresses the specific GE student learning outcomes for area B5. A student should be able to do one or more of the following:

Cite critical observations, underlying assumptions and limitations to explain and apply important ideas and models in one or more of the following: physical science, life science, mathematics, or computer science.

Most, if not all of the learning outcomes in each section of the course address this, as the entire process is learning how to understand statistical computations, identify which would be useful, how to interpret each, and ultimately how to utilize in the process of hypothesis testing (see syllabus).

See below:
Identify units of analysis from a study description
• Identify independent and dependent variables from a hypothesis statement
• Understand and explain the concept of 'variables' and identify levels of measurement for given variables
• Select and conduct appropriate univariate data analysis techniques based on given data and interpret results (e.g. central tendency, variability)
• Select and conduct appropriate bivariate data analysis techniques based on given data and interpret results (e.g. crosstabulation, association, correlation)
• Explain the appropriate use of hypothesis tests and p-values
• Select and conduct appropriate hypothesis tests, including independent samples t-test and chi-square test, and interpret results
• Demonstrate proficiency using SPSS for Windows for univariate and bivariate statistical analyses

Recognize evidence-based conclusions and form reasoned opinions about science-related matters of personal, public and ethical concern.

As the course is focused on hypothesis testing of social phenomenon using statistical measures to do so, this is key larger outcome of the course.

Many of the homework assignments, which are written explanations that are based on the requirement that students need to both run and then interpret results to explain a social phenomenon or social problems and determine if their hypothesis was supported.

Discuss historical or philosophical perspectives pertaining to the practice of science or mathematics.
NA

Includes a writing component described on course syllabus

l) If course is lower division, formal and/or informal writing assignments encouraging students to think through course concepts using at least one of the following: periodic lab reports, exams which include essay questions, periodic formal writing assignments, periodic journals, reading logs, other. Writing in lower division courses need not be graded, but must, at a minimum, be evaluated for clarity and proper handling of terms, phrases, and concepts related to the course.
2) If course is upper division, a minimum of 1500 words of formal, graded writing. [Preferably there should be more than one formal writing assignment and each writing assignment (e.g. periodic lab reports, exams which include essay questions, a research/term paper etc.) should be due in stages throughout the semester to allow the writer to revise after receiving feedback from the instructor. Include an indication of how writing is to be evaluated and entered into course grade determination.]

Lab assignments and exams require written interpretations. The total words over the course of the semester total over 1500.

Section 2.

If you would like, you may provide further information that might help the G.E. Course Review Committee understand how this course meets these criteria and/or the G.E. Program Objectives found in the CSUS Policy Manual, General Education Program, Section I.B.

I am happy to attend, even virtually the meeting to answer any questions pertaining to this submission.

Reviewer Comments:
Mical Shilts (shiltsm) (Fri, 17 Apr 2020 16:06:05 GMT): Rollback: Please see email for requested changes.

Key: 4201