# STAT 192: STATISTICS CAPSTONE PROJECT

## In Workflow

- 1. MATH Committee Chair (vincent.pigno@csus.edu)
- 2. MATH Chair (kelce@skymail.csus.edu)
- 3. NSM College Committee Chair (mikkel.jensen@csus.edu)
- 4. NSM Dean (datwyler@csus.edu)
- 5. Academic Services (catalog@csus.edu)
- 6. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
- 7. Dean of Undergraduate (gardner@csus.edu)
- 8. Dean of Graduate (cnewsome@skymail.csus.edu)
- 9. Catalog Editor (catalog@csus.edu)
- 10. Registrar's Office (k.mcfarland@csus.edu)
- 11. PeopleSoft (PeopleSoft@csus.edu)

## **Approval Path**

1. Fri, 29 Sep 2023 03:50:40 GMT

Vincent Pigno (vincent.pigno): Approved for MATH Committee Chair

2. Fri, 29 Sep 2023 16:39:11 GMT

Kimberly Elce (kelce): Approved for MATH Chair

3. Wed, 04 Oct 2023 23:00:07 GMT

Mikkel Jensen (mikkel.jensen): Approved for NSM College Committee Chair

4. Wed, 04 Oct 2023 23:04:07 GMT

Shannon Datwyler (datwyler): Approved for NSM Dean

5. Mon, 30 Oct 2023 20:24:02 GMT

Katie Hawke (katiedickson): Approved for Academic Services

## **New Course Proposal**

Date Submitted: Fri, 29 Sep 2023 00:11:16 GMT

**Viewing: STAT 192: Statistics Capstone Project** 

Last edit: Wed, 04 Oct 2023 22:59:21 GMT

Changes proposed by: Clark Fitzgerald (223005263)

Contact(s):

| Name (First Last) | Email               | Phone 999-999-9999 |
|-------------------|---------------------|--------------------|
| Clark Fitzgerald  | fitzgerald@csus.edu | 916-278-4748       |

#### **Catalog Title:**

Statistics Capstone Project

#### Class Schedule Title:

Statistics Capstone Project

#### **Academic Group: (College)**

NSM - Natural Sciences & Mathematics

#### **Academic Organization: (Department)**

Mathematics & Statistics

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

No

#### **Catalog Year Effective:**

Fall 2024 (2024/2025 Catalog)

## Subject Area: (prefix)

STAT - Statistics

#### Catalog Number: (course number)

192

#### Course ID: (For administrative use only.)

**TBD** 

Units:

3

Is the only purpose of this change to update the term typically offered or the enforcement of existing requisites at registration?

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

Spring term only

Does this course require a room for its final exam?

Yes, final exam requires a room

Does this course replace an existing experimental course?

Nο

This course complies with the credit hour policy:

Yes

#### Justification for course proposal:

This course will be required for the new BS degree in statistics. It is designed to be taken the final semester before graduation. It brings together concepts from many classes and teaches students how to interact with clients and teams, which prepares them for professional work.

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

Capstone course for statistics majors. Students work in small groups on a project that brings together skills developed across multiple upper division statistics courses. In a typical project, students will define a complex problem, create a data analysis plan, learn and apply new methodologies, communicate with clients, write statistical reports, and present results to an audience.

#### Are one or more field trips required with this course?

No

Fee Course?

No

Is this course designated as Service Learning?

Yes

#### **Attach Service Learning Designation Approval**

Service Learning Course Designation Approval Letter\_Fitzgerald\_STAT 192.pdf

Is this course designated as Curricular Community Engaged Learning?

No

Does this course require safety training?

Nο

Does this course require personal protective equipment (PPE)?

No

Course Note: (Note must be a single sentence; do not include field trip or fee course notations.)

Stat 115B is a recommended prerequisite.

Does this course have prerequisites?

Yes

Prerequisite:

Stat 128, Stat 115A, Stat 140A, Stat 191

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?

Nο

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 and Assessment Strategies:**

List the Expected Learning Outcomes and their accompanying Assessment Strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers). Click the plus sign to add a new row.

|   | Expected Learning Outcome   | Assessment Strategies   |
|---|---|---|
| 1 | Translate client requests into well-defined statistical problems. | Homework Project check-ins and peer feedback Written project report Oral project report Client feedback |
| 2 | Select and apply appropriate methodologies for a given problem.   | Homework Project check-ins and peer feedback Written project report Oral project report Client feedback |
| 3 | Communicate clearly with clients.                                 | Written project report<br>Oral project report<br>Client feedback  |
| 4 | Write technical reports using professional technology.            | Written project report Oral project report  |
| 5 | Orally present results at an audience-appropriate level.          | Oral project report<br>Client feedback  |
| 6 | Work collaboratively in a team.                                   | Project check-ins and peer feedback<br>Written project report<br>Oral project report<br>Client feedback |

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

Stat 192 Recommended Reading and Course Activities.pdf

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?

Yes

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

#### Programs:

BS in Statistics

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 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?

Nο

Please attach any additional files not requested above:

stat192syllabus.pdf

Key: 14961