

## COURSE OVERVIEW

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**Course Outline:** Survey Design & Analysis – Application

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**Course Number:** SIO 278

**Number of Units:** 2

**Total Hours of Instruction:** 2

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### Survey Design and Analysis Syllabus

Course Number: SIO 278

Section ID:

Course Start Date: 09/09/2018

Course End Date: 03/13/2019

### Instructor Information

Name: Ernest Brazier

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Communication Policy: I am available via email or text Monday thru Friday. Give me an indication how fast of a reply you require, and I will do my best to accommodate. Otherwise I will let you know when to expect my reply.

### Course Purpose and Prerequisites

This course will provide you with the opportunity to incorporate the knowledge and skills you gained from the Survey Design & Analysis – Principles course into a practical environment. The course is especially designed for students who have decided to have a primary data collection survey as part of their capstone project, this course will provide them the opportunity to plan out and develop the key components to their survey effort.

### Course Description

For students who have decided to have a primary data collection survey as part of their capstone project, this course will provide them the opportunity to plan out and develop the key components to their survey effort. While moving from the world of theoretical principles to one of applied, can be a daunting task the first time it is undertaken; this course will focus on techniques which will allow the student to structure a survey in such a way as to which will generate the information needed for a successful capstone project. The course will walk you through each step in the process of collecting the desired information. We will talk about how to formulate a measurable statement of work and hypothesis, recognize potential pitfalls and how to best avoid them. Each component to the survey process – design methods, sampling alternatives, collection methods, processing challenges, analysis options, and reporting/presentation methods will be tailored to your capstone project. At the end of the course, you should have a complete outline/proposal of how to best conduct your survey for your capstone project.

## Course Goals/Learning Objectives

- Ability to clearly define the project's objective
- Map objectives to your survey design, questions, and analysis
- Weigh the pros and cons of survey alternatives structures
- Weigh the pros and cons of analysis options – descriptive, inferential, modeling
- Understand the statistically designed elements of your survey-based project
- Define how a representative sample can be structured
- Identify and evaluate potential errors and bias and how to adjust for them
- Build a questionnaire which yields responses that are accurate and meaningful
- Select analytical tools which will yield meaningful and clear results

## Course Materials/Textbook

There is no course material/textbook for this course. However, course material from the Survey Design & Analysis – Principles course would be used as a resource for this course.

## Course Overview

There are ten (10) 80 minute class meetings which will take place over the winter period. Each student will create a detailed description of each element of a survey-based project. The following topics will be presented:

1. Outlining the Background -- Statement of the Problem – Project Objectives (Session 1)
2. Stretching out the Survey Design (Session 2)
3. Developing a Questionnaire Map (Session 3)
4. Designing the Questionnaire Format and Questions (Session 4)
5. Determining the Optimal Data Collection Method (Session 5)
6. Designing the Sampling Scheme (Session 6)
7. Calculating the Desired Sample Size (Session 7)
8. Selecting the Statistics of be Used (Session 8)
9. Reviewing How Best to Processes Survey Results (Part of Session 9)
10. Outlining How to Analyze, Report, and Presentation Survey Results (Session 9 and 10)

## Reading Overview by Session -- None

## Requirements

At the end of the course you will submit a portfolio which summarizes each of the areas outlined above. Fifty percent of your grade will be based on this portfolio. The other 50 percent will be based on your participation in class. Your participation efforts will primarily consist of critiquing other student's design efforts.

## Assignments

There will be no formal assignments for the course other than the portfolio. Students are encouraged to prepare each section of the portfolio as the class progresses. These section drafts are to be submitted for review by the instructor throughout the course.

## Grades

Grades are based on overall points and the letter grades are given as follows:

A+ 97-100

A 94-96

A- 90-93

B+ 87-89

B 84-86

B- 80-83

C+ 77-79

C 74-76

C- 70-73

D+ 67-69

D 65-66