

# **Syllabus**

# SCHOOL OF ARTS AND SCIENCES

MATH 146: Foundational Statistics

5 Credits

Effective: Spring 2019

# **FACULTY**

See Faculty Information in Blackboard.

#### COURSE DESCRIPTION

This course introduces students to the study of basic probability, descriptive and inferential statistics, and decision-making. Through various learning activities, students will explore concepts such as measures of central tendency and dispersion, correlation, regression, discrete and continuous probability distributions, and hypothesis testing. Upon completion of this course, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data.

# **COURSE RESOURCES**

Required and recommended resources to complete coursework and assignments are available from the Course Document Lookup.

# CITYU LEARNING GOALS

This course supports the following City University learning goals:

• Professional competency and professional identity

#### **COURSE OUTCOMES**

In this course, learners:

- Calculate and interpret measures of central tendency and measure of dispersion
- Present interpretation of data and summarize statistical findings
- Evaluate statistical data
- Use Regression Analysis to test correlation of data
- Test hypothesis using appropriate statistical test

# CORE CONCEPTS, KNOWLEDGE, AND SKILLS

- Correlation analysis
- Hypothesis testing
- Measures of central tendency
- Measures of dispersion
- Normal distribution
- Probability
- Regression analysis
- Sample and population
- Sampling

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# **OVERVIEW OF COURSE GRADING**

The grades earned for the course will be derived using City University of Seattle's decimal grading system, based on the following:

Overview of Required Assignments	% of Final Grade
Course activities	30%
Homework Assignments	40%
Quizzes	30%
TOTAL	100%

# SPECIFICS OF COURSE ASSIGNMENTS

The instructor will provide grading rubrics that will provide more detail as to how this assignment will be graded.

#### Course activities

Class participation through discussion activities is an integral part of this course. To provide structure for balanced participation and allow maximum benefit of enhanced discussion activities and learning, the following are required: 1) Post initial responses to discussion questions; 2) Post at least two thoughtful and topic-relevant comments or questions in response to classmates' posts on at least two different days during the school week; and 3) Respond to any questions the instructor or classmates have regarding the original post by the end of the school week.

Components	% of Grade
Engagement	100%
TOTAL	100%

# **Homework Assignments**

Students complete homework to learn course concepts. Homework topics will include measures of central tendency, measure of dispersion, hypothesis testing, interpretation and analysis of statistical data, correlation and regression, etc. Homework needs to be sent electronically to instructors. Students are required to use equation editor, such as Microsoft Equation 3.0, and Microsoft Excel, Google Sheets, or their equivalent to type their answers.

Components	% of Grade
Solve Mathematical Problems	0%
TOTAL	100%

#### Quizzes

Students complete quizzes to reinforce course concepts. The quizzes test students on mathematical terminology and the identification and application of mathematical tools. All quizzes are open book, and students may use a calculator.

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Components
Solve Mathematical Problems
TOTAL

% of Grade 100% **100%** 

# **COURSE POLICIES**

#### **Late Assignments**

See Late Policy under Course Information in Blackboard.

#### **Participation**

See Participation Policy under Course Information in Blackboard.

#### **Professional Writing**

Assignments require error-free writing that uses standard English conventions and logical flow of organization to address topics clearly, completely, and concisely. CityU requires the use of APA style.

#### UNIVERSITY POLICIES

You are responsible for understanding and adhering to all of City University of Seattle's academic policies. The most current versions of these policies can be found in the <u>University Catalog</u> that is linked from the CityU Web site.

#### **Title IX Statement**

City University of Seattle and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination, and harassment. If you have encountered any form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the University. If you speak with a faculty member about an incident of misconduct, that faculty member must notify CityU's Title IX coordinator and share the basic fact of your experience. The Title IX coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

To view CityU'S sexual misconduct policy and for resources, please visit the <u>Campus Safety and Title IX</u> <u>Page</u> in the my.cityu.edu portal.

#### **Scholastic Honesty**

Scholastic honesty in students requires the pursuit of scholarly activity that is free from fraud, deception and unauthorized collaboration with other individuals. You are responsible for understanding CityU's policy on scholastic honesty and adhering to its standards in meeting all course requirements. A complete copy of this policy can be found in the <a href="University Catalog">University Catalog</a> in the section titled Scholastic Honesty under Student Rights & Responsibilities.

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#### Attendance

Students taking courses in any format at the University are expected to be diligent in their studies and to attend class regularly.

Regular class attendance is important in achieving learning outcomes in the course and may be a valid consideration in determining the final grade. For classes where a physical presence is required, a student has attended if s/he is present at any time during the class session. For online classes, a student has attended if s/he has posted or submitted an assignment. A complete copy of this policy can be found in the <a href="University Catalog">University Catalog</a> in the section titled <a href="Attendance Policy for Mixed Mode">Attendance Policy for Mixed Mode</a>, <a href="Online and Correspondence Courses">Online and Correspondence Courses</a>.

# SUPPORT SERVICES

# **Disability Services Accommodations Statement**

Students with a documented disability who wish to request academic accommodations are encouraged to contact Disability Support Services to discuss accommodation requests and eligibility requirements. Please contact Disability Support Services at <a href="mailto:disability@cityu.edu">disability@cityu.edu</a> or 206.239.4752 or visit the <a href="mailto:Disability\_Disabilit

# **Library Services**

CityU librarians are available to help you find the resources and information you need to succeed in this course. Contact a CityU librarian through the <u>Ask a Librarian</u> service, or access <u>library resources and services online</u>, 24 hours a day, seven days a week.

#### **Smarthinking**

As a CityU student, you have access to 10 free hours of online tutoring offered through Smarthinking, including writing support, from certified tutors 24 hours a day, seven days a week. Contact CityU's Student Support Center at help@cityu.edu to request your user name and password.

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