

# **BA 240 Statistical Analysis Syllabus**

(Fall 2019 Item: 5459 A)

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Office location: A208

Office Hours: Daily 12:30

### **Course Information**

Meeting Times: Daily 9:30 a.m. in C208

Examines techniques used in decision-making and research. Topics include descriptive and inferential statistics, probability, central tendency, variability, normal and t-distributions, hypothesis testing, and regression. Materials have applications in business, health care, etc.

#### **Course Outcomes**

After completing this class, students should be able to:

- Identify the relationships between data analytics and the business decision-making process
- Analyze and evaluate research methodologies
- Identify the most common data analytics methods and discuss how each method applies best to specific analytics questions
- Evaluate business problems and determine suitable analytical methods
- Identify the most common technological tools used in data analytics
- Use technological tools such as Excel or R to manage data sets in various sizes and formats

• Interpret research study results and clearly state the conclusions in reports and presentations with attention to details

## **How Outcomes Will be Met and Grading**

Participation (5%): is required and will be worth 5% of your grade. You must be present, on time, and actively participating. If you fail to meet these standards you will be warned. If problems persist, then I will inform you of deductions to your grade via email and they will be reflected in Canvas.

Exercises (10%): We will have exercises/homework that will be worth 10% of your grade. You will bring them to class on Fridays, review solutions posted in Canvas, and submit marked up corrections with explanations of errors on Mondays. You must be in class to hand these in or have a school excused absence to turn them in late. I will allow you to miss one exercise without penalty.

Weekly Quizzes (15%): We will have weekly quizzes on Fridays. Quizzes are open note, but closed book. I will drop one quiz for you.

Midterms (35%): There are two midterms given in class at approximately the 4<sup>th</sup>, and 8<sup>th</sup> week. The first exam will cover Ch. 1 through Ch. 4. The second will cover Ch. 5 through Ch. 8. Two pages of notes and appropriate reference tables are allowed.

Final Exam (15%): Will be given in class according to the final exam schedule. The final is cumulative (but predominantly covers the materials after Exam 2). Four pages of notes and appropriate reference tables are allowed.

Project (20%): The Project includes THREE parts:

- 1) **Team Contract (5%):** Gather in groups (each group should have 3 to 4 team members, maximum 4 people). Select a data set that satisfies the requirements. Split up work evenly and complete the Team Contract. The Team Contract is intended to define each team member's responsibility and provide accountability. For more information, see *Modules* Team Contract
- 2) Individual Report (45%): Each team member chooses ONE variable (no two team members may use the same variable). Complete a basic descriptive statistics analysis on your chosen variable using EXCEL and complete an individual report. For more information, see Modules > Project Part 2
- 3) Team Report and Member Evaluations (50%): Work in teams, complete a multiple regression analysis using EXCEL, and complete a group report. For more information, see Modules→Project Part 3

Note: No late project assignments will be accepted. Instructor reserves the right to lower individual grades based on poor evaluations from team members.

The College Grading Policy is explained in the current Course Catalog and can also be found at this link: Grading Policy

## **Books and Materials Required**

Text: Statistics, 12<sup>th</sup> ed., by McClave and Sincich, Prentice Hall 2013

Software: Excel 2007 or later

Other: Scientific Calculator

## **Help with Canvas**

Students can find help with Canvas by following the link here: Student Canvas Help

### **Instructor's Expectations**

I expect students to show up to class prepared, participate in exercises, and not distract other students. If you and your personal electronics become a distraction to other students, then you will be dismissed for the day and warned. If it is a recurrent problem, then you will be referred to the Student Conduct Manager for removal from the class and any disciplinary action that officer deems appropriate.

### **Affirmation of Inclusion**

Bellevue College is committed to maintaining an environment in which every member of the campus community feels welcome to participate in the life of the college, free from harassment and discrimination.

We value our different backgrounds at Bellevue College, and students, faculty, staff members, and administrators are to treat one another with dignity and respect.

Affirmation of Inclusion (https://www.bellevuecollege.edu/inclusion/)

#### Reasons of Faith and Conscience

Reasonable Accommodations for Reasons of Faith and Conscience: Students who will be absent from course activities due to reasons of faith or conscience may seek reasonable accommodations so that grades are not impacted. Such requests must be made within the first two weeks of the course to the office of the Associate Vice President of Student Affairs (see Bellevue College Policy 2950 (https://www.bellevuecollege.edu/policies/id2950/)). In the event you feel you are being discriminated against based on faith or conscious, you may refer to the procedures outlined in the college's Discrimination, Harassment and Retaliation Policy 1440P (https://www.bellevuecollege.edu/policies/id-1440p/).

#### **Annual Notice Non-Discrimination**

Bellevue College does not discriminate on the basis of race or ethnicity; creed; color; national origin; sex; marital status; sexual orientation; age; religion; genetic information; the presence of any sensory, mental, or physical disability; or veteran status in educational programs and activities which it operates. Bellevue College is prohibited from discriminating in such a manner by college policy and by state and federal law. All college personnel and persons, vendors, and organizations with whom the college does business are required to comply with applicable federal and state statutes and regulations designed to promote affirmative action and equal opportunity.

Reports of gender and sex-based based discrimination, sexual misconduct, or retaliation by a student should be raised with the Title IX office (see 1440P2 for contact information). In cases where the impacted party is a student and the responding party is a college employee, the Title IX coordinator will direct the matter to the Office of Human Resources (HR). All other reports, including all reports where the impacted party is an employee, should be raised with the HR. If a report is against personnel in the Title IX office or HR, it should be submitted to the president's office for referral to an alternate designee.

Equal Opportunity (http://www.bellevuecollege.edu/equal/)

[Spanish and Chinese versions of the anti-discrimination notice are available at <u>Equal</u> <u>Opportunity</u> should you wish to link to them or include them in your syllabus.]

### **Confidentiality and Mandatory Reporting**

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. It is my goal that you feel able to share information related to your life experiences in

classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private to the greatest extent possible. However, I am required to share with the Title IX Coordinator any and all information regarding sexual assault and other forms of sexual misconduct (e.g. relationship violence, stalking) that may have occurred on campus or that impacts someone on campus. Students may speak to someone confidentially by contacting the BC Counseling Center at (425) 564-2212. The Title IX Office can be contacted at 425-564-2641 and more information can be found at Title IX (http://www.bellevuecollege.edu/titleix/).

If you have any concerns, you may report to: Report Concerns (https://www.bellevuecollege.edu/reportconcerns/).

## **Student Conduct Code and Academic Integrity**

Any act of academic dishonesty, including cheating, plagiarism (using the ideas or words of another as one's own without crediting the source), and fabrication, and inappropriate/disruptive classroom behavior are violations of the Student Conduct Code of Bellevue College. Examples of disruptive behavior include, but are not limited to, repeatedly talking out of turn, arriving late or leaving early without a valid reason, allowing cell phones to ring, and inappropriate behavior toward the instructor or classmates. The instructor can refer any violation of the Student Conduct Code to the Manager of Student Conduct for investigation. Specific student rights, responsibilities, and appeal procedures are listed in the Student Conduct Code at: <a href="Student Code">Student Code</a>

This link provides a good, short summary of how to avoid plagiarism: Avoiding Plagiarism

# **Important Links**

See "Important Links" page online for more information about the E-mail and MyBC, Public Safety, the Academic Calendar, the Academic Success Center, and more.

## **Disability Resource Center (DRC)**

The Disability Resource Center serves students with disabilities. Common disabilities include physical, neurological (e.g. Autism, ADD/ADHD), and mental health (e.g. depression, anxiety). If you are a student who has a disability or if you think you may need accommodations in order to

have equal access in your classes, programs, activities, and any other services, please contact the DRC.

If you require assistance in an emergency, please meet with your individual instructors to develop a safety plan for while in class and contact the DRC to develop a safety plan for while you are elsewhere on campus.

The DRC office is located in building B Room 132. You can contact the DRC by stopping by the office at B132, calling our front desk phone number (425) 564-2498, emailing <a href="mailto:drc@bellevuecollege.edu">drc@bellevuecollege.edu</a>. Deaf students can reach us by calling TTY: (425) 564-6189, or by Skype (account name **DRCatBC**). For more information about the services we offer, including our Initial Access Application, visit our website at <a href="mailto:Disability Resource Center">Disability Resource Center</a> (http://www.bellevuecollege.edu/drc).

Service Animals are allowed in this classroom. Emotional Support Animals need to be approved through the DRC. All other animals will be asked to leave. If you believe you need your animal with you, please connect with the DRC and refrain from bringing your animal until a decision has been made.

### **Course Calendar**

Column1	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1					
16-Sep	Syllabus	Read 1.1 - 1.6	Read 2.1-2.8	Continue Ch. 2	Quiz 1
Week 2					
23-Sep	Read 3.1-3.8	Continue 3	Read 4.1-4.4	Continue Ch.4	Quiz 2
Week 3					
30-Sep	Read 5.1-5.4	Cotinue 5	NO Class	Read 6.1-6.3	Quiz 3
					Team Contract
Week 4					Due
7-Oct	Continue 6	Catch-up	Review	Midterm 1, Part 1	Midterm 1, Part 2
Week 5					
10-Oct	Read 7.1 -7.5	Continue 7	Continue 7	Read 8.1-8.5	Quiz 4
Week 6					
21-Oct	Continue 8	NO Class	Continue 8	Read 9.1-9.4	Quiz 5
Week 7					Individual Project Due
28-Oct	Continue 9	Continue 9	Continue 9	Continue 9	Quiz 6
Week 8					
4-Nov	Read 10.2	Continue 10	Review	Midterm 2, Part 1	Midterm 2, Part 2

Week 9					
11-Nov	NO Class	Read 11.1-11.7	Continue 11	Continue 11	Quiz 7
Week 10					
		Read 12.1-12.3,			
18-Nov	Continue 11	12.11	Continue 12	Continue 12	Quiz 8
Week 11					
	In Class	In Class Group			
25-Nov	Group Time	Time	Review	Thxgiving	Thxgiving
	Final Project				
Final Exam	Due				
	Practice	Student Success			
2-Dec	Problems	Day	Final at 9:30 a.m.		