PLEASE READ THIS SYLLABUS CAREFULLY.

3 credits – Fall 2021
MW 5:55 p.m. – 7:10 p.m. Ebenezer D. Bassett Hall (EDB) 309

Instructor: Dr. Andre Freeman

Office Hours: Mondays, 4:45 p.m. – 5:45 p.m., Tuesdays & Thursdays, 12:30 p.m. – 1:30 p.m., and by appointment. Location (TBD)

E-mail: a.freeman@ccsu.edu


Prerequisites: MATH 101 (C- or higher) or MATH 102 (C- or higher) or MATH 103 (C- or higher) or placement exam.

Course Description: Introductory treatment of research statistics used in behavioral sciences. Quantitative descriptive statistics, including frequency distributions, measures of central tendency and variability, correlation, and regression. A treatment of probability distributions including binomial and normal. Introduction to the idea of confidence intervals and hypothesis testing.

Students for Whom the Course is Intended: The Stat. 215-216 sequence is designed to meet the needs and program requirements of social and behavioral science majors.

Course and Classroom Policy:

(1) Attend and participate in class regularly; read the book and complete homework assignments, take quizzes and tests as scheduled (no email submissions please).

Note: A general rule for any college course is that you are expected to put in at least 2 hours of work outside of class for every hour in class. For a mathematics class, the expectation is at least 6 hours per week outside of class.

(2) It is virtually impossible to pass this course without completing the homework.
It would be like taking a course in swimming without ever getting in the water. Learn by doing; i.e., do the assigned homework diligently and read the textbook faithfully. For best results, complete more than the suggested homework problems.
(3) Develop the ability to independently solve each problem (i.e., without aid from a tutor, an online resource, the textbook’s explanation and/or solution, etc.); answering each problem quickly and correctly on your own will be the key to success.

(4) Smart-phones, cell phones, and laptops are not to be used during class, or exams, unless special accommodations are necessary.

(5) Classroom etiquette: Be prompt; Be prepared; Be polite; Be productive.

Final Exam: Wednesday, December 8, 5:30 pm – 7:30 pm

Evaluation Plan:
- Exams 1, 2, and 3 - 55%
- HW & SPSS Assignments - 20%
  (HW & SPSS assignments will be due on specific dates. Late HW will be accepted but points will be deducted in proportion to how late the assignment is submitted.)
- Final Exam - 25%

Note: To receive the grade of C- or better for the course, you must receive the grade of at least 60% on the final exam.

Minimum averages have been established for each of these grades:

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<thead>
<tr>
<th>Grade</th>
<th>Average</th>
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<tbody>
<tr>
<td>A</td>
<td>93%</td>
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<tr>
<td>A-</td>
<td>90%</td>
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<tr>
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<tr>
<td>C-</td>
<td>70%</td>
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<tr>
<td>D</td>
<td>63%</td>
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<tr>
<td>D-</td>
<td>60%</td>
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University’s Academic Integrity Policy: Any student who engages in any forms of academic misconduct will face disciplinary consequences. Academic sanctions can range from a reduced grade for the quiz or exam to a failing grade for the course. An Academic Misconduct Report may be filed, and a Faculty Hearing Board may impose sanctions such as probation, suspension, or expulsion. It is your responsibility to know the Student Code of Conduct (see http://www.ccsu.edu/page.cfm?p=4155) and the Policy on Academic Misconduct (see http://www.ccsu.edu/page.cfm?p=2468#Misconduct.)

Additional University Policies:

1. You must take the FINAL EXAMINATION at the time specified by CCSU’s final exam schedule: Wednesday, December 8, from 5:30 pm – 7:30 pm.

2. Statement on Discrimination and Harassment (Title IX)
Central Connecticut State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon age; ancestry, color; gender identity and expression; intellectual disability; learning disability; mental disorder; physical disability; marital status, national origin; race; religious creed; sex, (including pregnancy, transgender status, sexual harassment and sexual assault); sexual orientation; or any other status protected by federal or state laws. Any student who has concerns about this should contact the Office of Diversity and Equity (ODE) at 860-
832-1652, Student Affairs at 860-832-1601, or his/her faculty member. The ODE is located in Davidson Hall, Room 102.

3. Statement on Sexual Misconduct, Intimate Partner Violence, and Stalking
Central Connecticut State University (CCSU) will not tolerate sexual misconduct against students, staff, faculty, or visitors in any form, including but not limited to: sexual assault, sexual exploitation, sexual harassment or stalking, as defined in CCSU policies. For additional information, please consult the CCSU policies at http://www.ccsu.edu/diversity/policies/index.html.

To file a report, contact: Diversity and Equity (860-832-1652); Student Affairs (860-832-1601); Student Conduct (860-832-1667) or the University Police (860-832-2375).

For support and advocacy, contact: Office of Victim Advocacy at 860-832-3795 or jflanagan@ccsu.edu; Student Wellness Services at 860-832-1945 (confidential), the Women’s Center at 860-832-1655, the local YWCA’s Sexual Assault Crisis Services Hotline at 860-223-1787 (confidential) and Prudence Crandall Center for Domestic Violence (confidential) at 888-774-2900(24-hour hotline).

NOTE: Any student should also feel free to discuss issues of concern with a faculty member he/she trusts. Students should know, however, that all faculty members and staff have a duty to report incidents of sexual harassment including sexual misconduct, intimate partner violence and stalking to Nancy "Rusty" Barceló, Office of Diversity and Equity, Davidson Hall, 102. (860) 832-1653.

4. Special Needs Accommodations: If you are a student with a documented disability, and would like to request academic accommodations, you are encouraged to contact Student Disability Services (SDS) at 860-832-1952, or email disabilityservices@ccsu.edu. Please visit the SDS website at http://www.ccsu.edu/sds/ to download an Intake form and documentation requirements. Temporary impairments may also qualify for accommodations. Central Connecticut State University provides reasonable accommodations in accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act for students with documented disabilities on an individualized basis.

5. Academic Integrity: All students are expected to demonstrate integrity in the completion of their coursework. Academic integrity means doing one's own work and giving proper credit to the work and ideas of others. It is the responsibility of each student to become familiar with what constitutes academic dishonesty and plagiarism and to avoid all forms of cheating and plagiarism. Students who engage in plagiarism and other forms of academic misconduct will face academic and possibly disciplinary consequences. Academic sanctions can range from a reduced grade for the assignment to a failing grade for the course. From a disciplinary standpoint, an Academic Misconduct Report may be filed and a Faculty Hearing Board may impose sanctions such as probation, suspension or expulsion. The Department of Mathematical Sciences rigorously enforces this policy. Don’t cheat; it’s not worth it.

For further information on academic misconduct and its consequences, please consult the Student Code of Conduct (http://www.ccsu.edu/StudentConduct/codeofconduct.asp) and the Academic Misconduct Policy (http://www.ccsu.edu/AcademicIntegrity/).
6. **Student Behavior** - Taken from the BOR/CSCU STUDENT CODE OF CONDUCT

https://web.ccsu.edu/studentconduct/files/Student%20Code%20of%20Conduct%201.15.15.pdf

*All members of CSCU must at all times govern their social and academic interactions with tolerance and mutual respect…Because of the BOR’s and CSCU's commitment to principles of pluralism, mutual respect, and civility, certain activities are not acceptable on CSCU campuses.* Please be aware that any violations of this Code of Conduct will result in a report of misbehavior to the Office of Student Conduct. Severe violations can result in dismissal from CCSU.

7. In the event of a **weather emergency** which requires curtailment or cancellation of classes, listen to WTIC (1080 AM) or call (860) 832-3333 for the “general snow message.” Even quicker – check the CCSU website!

8. The **last day to withdraw** from a course and receive the grade of “W” is **Wednesday, November 17th**. Approvals for withdrawal prior to this date are not required; but we strongly recommend that students consult with their instructors and their academic advisors before to deciding to withdraw. Not coming to class, telling the instructor, and calls to the Registrar’s Office are not considered official notice of your intention to drop a course - you have to fill out the official form and bring it to the Registrar’s office by **November 17th**. After **November 17th** withdrawals are allowed **only under extenuating circumstances** and require approval of the course instructor AND the department chair. **Poor academic performance is not considered an extenuating circumstance.**

**Resources Available:**

1. If you need help, take advantage of instructor’s office hours. Do NOT wait until just before the test to do so.
2. The Learning Center (TLC) is in Carroll Hall, Room 016 (860-832-1900). For more information, visit their website at [www.ccsu.edu/learnctr/](http://www.ccsu.edu/learnctr/). Free tutoring is available as well as free on-line eTutoring. The tutorial schedule, which includes both day and evening hours, is posted in The Learning Center and online by the end of the add/drop period. Student Disability Services is in Carroll Hall, 150: Stephanie Scapeccia, (860) 832-1952.
3. Form a study group with other students in your section. Explaining solutions to homework problems to each other is a good way to learn.
4. A list of private tutors for hire is available in the math department office, Room 128 Marcus White, 832-2835.
# Course Schedule & Textbook Sections

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<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topics</th>
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<tbody>
<tr>
<td><strong>Week 1</strong> – 8/26</td>
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<td>No Class</td>
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</table>
| **Week 2** – 8/30 & 9/1 | | Course Introduction  
1.1 Descriptive and Inferential Statistics  
1.2 Variables and Types of Data  
1.3 Data Collection and Sampling Techniques  
1.4 Experimental Design |
| **Week 3** – 9/8 | | 2.1 Organizing Data  
2.2 Histograms, Frequency Polygons, and Ogives |
| **Week 4** – 9/13 & 9/15 | | 2.3 Other Types of Graphs  
3.1 Measures of Central Tendency  
3.2 Measures of Variation  
3.3 Measures of Position |
| **Week 5** – 9/20 & 9/22 | | 3.4 Exploratory Data Analysis  
Exam 1 (Chapters 1 – 3) |
| **Week 6** – 9/27 & 9/29 | | 4.1 Sample Spaces and Probability  
4.2 The Addition Rules for Probability |
| **Week 7** – 10/4 & 10/6 | | 4.3 The Multiplication Rules and Conditional Probability  
4.4 Counting Rules  
4.5 Probability and Counting Rules |
| **Week 8** – 10/11 & 10/13 | | 5.1 Probability Distributions  
5.2 Mean, Variance, Standard Deviation, and Expectation |
| **Week 9** – 10/18 & 10/20 | | 5.3 The Binomial Distribution  
6.1 Normal Distributions  
6.2 Applications of the Normal Distribution |
| **Week 10** – 10/25 & 10/27 | | 6.3 The Central Limit Theorem  
6.4 The Normal Approximation to the Binomial Distribution  
Exam 2 (Chapters 4 - 6)  
7.1 Confidence Intervals for the Mean When sigma is Known |
| **Week 11** – 11/1 & 11/3 | | 7.2 Confidence Intervals for the Mean When sigma is Unknown  
7.3 Confidence Intervals and Sample Size for Proportions |
| **Week 12** – 11/8 & 11/10 | | 8.1 Steps in Hypothesis Testing – Traditional Method  
8.2 z Test for a Mean  
8.3 t Test for a Mean |
| **Week 13** – 11/15 & 11/17 | | 8.4 z Test for a Proportion |
| **Week 14** – 11/22 | | Exam 3 (Chapters 7 - 8)  
10.1 Scatter Plots and Correlation  
10.2 Regression |
| **Week 15** – 11/29 & 12/1 | | Final Exam Review  
Final Exam (Cumulative – Chapters 1 – 8)  
Exam 4 (Chapters 9 - 10) |
| **Week 16** – 12/6 & 12/8 | | |

**Note:** Departures from this outline responsive to the needs of the students may be made at the discretion of the instructor.