Department of Mathematical Sciences  
CCSU  
Fall, 2021

**Mathematics 104-01: Elementary Statistics**: TTr 9:25-10:40 a.m.

**Instructor**: Weisgram


**Prerequisite**: Mathematics Placement examination or a grade of C- or higher in Mathematics 101

**Prospectus**:  
This course is a general introduction to the concepts of Statistics with applications to a variety of disciplines, including business and the behavioral sciences. **Note**: Business majors should enroll in the two-semester STAT 200-201 sequence. Majors in Sociology, Criminal Justice, Anthropology, and Psychology should take STAT 215.

**Format**:  
Classes will be conducted in the lecture/discussion format. The first few minutes of each period are reserved for questions based on readings, prior lectures, and homework. Other appropriate questions will be entertained as they arise. **Note Standard 7 below.**

**Office Hours/Contact**:  
Office hours are Tuesday and Thursday, 7:00-7:50 a.m. and 10:50-11:50 a.m. in Maria Sanford 211. To contact your instructor, use the following email address: weisgramp@ccsu.edu.

**Evaluation**:  
Students will be evaluated by means of examinations, announced and unannounced quizzes, and written assignments. There will be five in-class examinations including the comprehensive final examination administered, **without exception**, on the date to be published by the University. Failure to attend the final examination will result in a grade of “F” for the course. All examinations bear equal weight. Written assignments and quizzes will, in total, count as a single examination. Standards for written assignments will be distributed in class. There are no extra credit assignments and no examination “retakes”. assignments in this class. **Note Standards 1,3,5, and 6 below. See separate Homework Standards sheet.**

**Attendance**:  
Regular class attendance is expected at this university. Students benefit from lectures and class discussions in direct proportion to the frequency of their attendance and participation. Frequent absences will be reported via the Early Academic Warning facility. **Note Standards 5,6, 7 and 8, below.**

**Standards**:  
1) The purpose of examinations and quizzes is to measure mastery of the concepts and techniques previously studied. That is, to determine whether the student can apply these ideas correctly to new situations. Students will be responsible for accurate and grammatical statement and illustration of all definitions and theorems, and for solving problems which require a thorough understanding of concepts, their relations, and methods.

2) Clear and accurate grammatical expression is **essential**, especially in Mathematics. All written work will be subject to this standard. Consult the Homework Standards.

3) A calculator with Statistical functionality is needed for this course. The most popular such device is a TI graphing calculator of the TI-84 and higher designation.

4) The calculator will be used to perform complex statistical calculations, to illustrate concepts, and to
provide a means for testing conjectures. It will not replace the need to develop critical conceptual and analytical skills. Calculators capable of symbolic manipulation are prohibited for use on examinations or quizzes.

5) Make-up examinations will not be given. If significant, documentable circumstances (as judged by the instructor) obtain, the missed examination will be assigned the student’s grade on the final, comprehensive examination. Any subsequent missed examinations will be assigned a grade of “F”. It is the student’s responsibility to attend all examinations, submit all written assignments in a timely manner, and to prevent the occurrence of circumstances which compromise this responsibility. There will be no examination “retakes”. It is the student’s responsibility to be prepared for the examination at its scheduled time. And, there is no extra credit available in this course.

6) Students are responsible for determination of all assignments and announcements made in their absence and for completion and timely submission of all such assignments. Lectures will not be repeated.

7) The general standard of civility which respects each person’s right to speak and listen without interruption or disturbance will apply throughout this semester. If you have a question or wish to answer a question, raise your hand and you will be acknowledged in turn. Unless you are asking the instructor a question or you are answering a question directed to you or to the class, you should not be talking while class is in session. Do not engage in private conversations or distracting activity during class. Failure to comply with this standard will be reported to the Academic Dean with the recommendation that the violator be removed from the class.

8) Cell phones are to be turned off and removed from sight of both the student and the instructor during class. Each violation will result in a ten-point reduction in the student’s final quiz/homework grade. Use of a cell phone during an examination will result in a failure (a grade of F) for that examination.

9) Assignments, examinations, and quizzes are returned on the first class period after they are submitted. It is the student’s responsibility to collect submissions returned in his or her absence. Papers not collected within two weeks will be discarded.

10) Your instructor will not supply you with calculators, batteries, pencils, or text books.

11) Access to a textbook is required from the first period.

Schedule:
Entries in the “Monday” and “Wednesday” columns refer to sections from the text covered that period. This schedule is subject to change if conditions warrant modification. Assigned Homework consists of at least the first 40 problems representative of each section, along with the problems cited in the following schedule. Only the problems listed below are to be submitted for grading. See Homework Standards document.

<table>
<thead>
<tr>
<th>Week</th>
<th>Tuesday</th>
<th>Thursday</th>
<th>Assignment due Thursday</th>
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<tbody>
<tr>
<td>8/24 – 8/26</td>
<td>No Class</td>
<td>1.1-1.2</td>
<td>Read 1.2 and 1.3 and start the problems.</td>
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<tr>
<td>8/31-9/2</td>
<td>1.3, 2.1</td>
<td>2.1-2.2</td>
<td>1.2 (12,16), 1.3 (8,16)</td>
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<td>9/7-9/9</td>
<td>2.3, 3.1</td>
<td>3.1-3.2</td>
<td>2.1 (49-52), 2.2 (17-20), 2.3 (7,8)</td>
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<tr>
<td>9/14-9/16</td>
<td>3.1-3.2</td>
<td>Exam Ch. 1 and 2.</td>
<td>Review</td>
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<tr>
<td>9/21-9/23</td>
<td>3.2-3.3</td>
<td>3.4-3.5</td>
<td>3.1 (14,20), 3.2 (12,62), 3.3 (12)</td>
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<td>9/28-9/30</td>
<td>3.5, 4.1</td>
<td>4.1, 5.1</td>
<td>3.4 (8,24,46,48), 3.5 (7-12)</td>
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<td>10/5-10/7</td>
<td>5.1-5.2</td>
<td>Exam Ch 3 and 4</td>
<td>Review</td>
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<td>10/12-10/14</td>
<td>5.2-5.3</td>
<td>5.3, 5.4</td>
<td>5.1 (12, 21-24), 5.2 (13-18)</td>
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<td>10/19-10/21</td>
<td>5.4, 6.1</td>
<td>6.1, 6.2</td>
<td>5.3 (10,12,14,16,44), 5.4 (8,42)</td>
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<td>10/26-10/28</td>
<td>6.2, 6.4</td>
<td>6.4, 7.1</td>
<td>11/2-11/4</td>
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<td>11/9-11/11</td>
<td>8.1, 8.2</td>
<td>8.2, 8.3</td>
<td>11/16-11/18</td>
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<td>12/7</td>
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<td>12/8-12/14</td>
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**Special Needs:**
Contact me privately to discuss your specific needs if you believe you need course accommodations based on the impact of a disability, medical condition, or if you have emergency medical information to share. I will need a copy of the accommodation letter from the Student Disability Services (Willard 201) in order to arrange your class accommodations. Contact Student Disability Services if you are not already registered with them. Student Disability Services maintains the confidential documentation of your disability and assists you in coordinating reasonable accommodations with a faculty member.

**Admonitions:**
1) Statistics is learned not by accident or passive observation, but through active, focused, intellectual inquiry and problem solving. Text problems are critical to one's success in this course. Do not expect to pass this course by only watching the instructor lecture.
   a) In addition to the problems assigned for submission, you should attempt to solve as many text problems as possible. This will expand and reinforce your understanding.
   b) Memorize, recite, and illustrate all definitions and theorems. You will be tested on them.
   c) Compose problems which reflect the concepts being studied. Create your own tests.
   d) Ask yourself constantly how the concepts currently being studied relate to prior topics.

2) **Comprehension is coextensive with expression.** One only knows what one can communicate accurately and objectively. This is why written assignments play a major role in this course.
   a) Take great care in writing your assignments. Be guided by the principles of Standard English usage and by the understanding that writing which is illegible, incoherent, or ungrammatical is incorrect and unacceptable, regardless of the writer's intentions. The inability to couch one's thoughts in precise grammatical form is a deficiency which can obviate the best creativity, analysis, and effort.
   b) Like English, Mathematics has a grammar to which the student’s work must conform. Abuse of mathematical grammar will result in incorrect and unacceptable exposition. Note that all mathematical statements are always literal and never metaphorical. Notational errors on homework assignments will result in reductions to the overall assignment grade.

3) While the student may have formally satisfied the prerequisites for this course, it is possible that he or she is actually deficient in knowledge of some prerequisite material. It is the student’s responsibility to identify any such deficiencies and to master the relevant topics through self-study.

4) Questions in class are both expected and encouraged. If you have a question about a topic or problem, be certain to ask it. Do not accept answers which you do not understand.

5) The understanding of definitions and the concepts they represent is critical to success in this course. Having previously seen all the words in a definition does not constitute understanding of what it defines. Do not assume that you understand a concept unless you can recite it verbatim, illustrate it with a non-trivial example, and use it in solving problems.
6) The only true measure of one’s knowledge of any mathematical subject is the ability to solve a wide variety of related problems without reference to the text or notes.

7) Understanding course material requires one to master new mathematical concepts, not merely to revisit concepts already learned. Students must be prepared to recognize the difficulties which are inherent in learning to think abstractly, to acknowledge the possibility that new study skills may be required, and to approach the course with an open, receptive, yet critical mind. Be advised that success in prior Mathematics courses does not guarantee success in this course.

8) Falling behind in any Mathematics course can be academically fatal and, ultimately, catching up requires more effort and study time than is required to stay on schedule. Getting ahead and staying ahead is a valuable practice.

9) Not having a textbook does not excuse a student from any course requirement. Nor does joining the course late.
1. Name

2. Major

3. Year (Freshman, Sophomore, Junior, Senior)

4. Telephone Number

5. The prerequisite for this course is the Mathematics Placement Examination or a C- or better in Mathematics 101. How and when did you satisfy this requirement?

6. List all the Mathematics courses you have taken at the college or university level.

7. Do you have a calculator capable of performing statistical calculations? You will need one.

8. What concerns do you have about this course and its subject matter?

9. Are there other issues which you wish to communicate?

Read the following statement and sign and date it.
I have read the syllabus for Mathematics 104-01, Fall, 2021. I understand its content. I agree to comply with the standards cited therein and I understand the consequences of failing to do so.

___________________                          _________________________________          _______________
Name (Printed)                                        Signature                          Date