

Department of Mathematical Sciences

Welcome to Elementary Statistics, Stat 104, section 6.

Be sure to read this syllabus carefully. It will be assumed that you are aware of the contents.

Prerequisite: Math 101 (C- or higher) or placement exam.

Course Description: STAT 104 Elementary Statistics, 3 credits. Intuitive treatment of some fundamental concepts involved in collecting, presenting, and analyzing data. Topics include frequency distributions, graphical presentations, measures of relative position, measures of variability, probability distributions (binomial and normal), sampling theory, regression, and correlation. No credit is given to students with credit for STAT 108, 200, 215, 314 or 315. This course may be counted toward General Education Skill Area II. It is a part of the following major programs: criminology, economics, general science, physical education, electronics, engineering, technology, and technology and engineering education.

Basic goals: Citizens of the information age need to become savvy consumers of statistical knowledge. Toward this end, the major objectives of Stat 104 are to introduce students to the methods and interpretations of (a) descriptive statistics and (b) inferential statistics.

Instructor: Dr. Frank Gould

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Office: Marcus White 202

Office Hours: MWF: 12:00 – 12:30
MTTh: 4:00 – 5:00, Th: 5:00 – 5:30

Textbook: Discovering Statistics, by Daniel Larose, Brief Version, published by W.H. Freeman and Company, New York.

Technology: (1) The TI83, TI84, TI83Plus or TI84Plus graphing calculator is required. *Discovering Statistics* provides explicit instruction for all necessary computations using this calculator, in the **Step-by-Step Technology Guide** located at the end of most sections.

(2) Access to a desktop or laptop computer with Microsoft Excel will be needed for some homework assignments. These resources are available in the Marcus White computer lab.

Class Schedule: MWF, 9:00 – 9:50 a.m., Maria Sanford 204 (Attendance will be taken).

Final Exam: Monday, December 13th, 08:00 a.m. - 10:00 a.m.

Course Requirements: Attendance, participation, homework reading assignments and homework problem assignments are the crucial components of successfully mastering the subject. There will be 4 exams and the final.

Grading:

Homework problems	10%
Attendance, participation	10%
4 in-class exams	15%, each
Final exam	20%
Total	100%

Academic Integrity:

You are responsible for understanding and abiding by the University’s policy on academic integrity. Information on the policy may be found at <http://www.ccsu.edu/AcdemicIntegrity/>.

University policies:

1. Please 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 Student Disability Services in order to arrange your class accommodations. Contact Student Disability Services, room 241, Copernicus Hall 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 your faculty.
2. 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.”
3. The last day to withdraw from a course and receive the grade of “W” is **Monday, October 25**. Approvals for withdrawal prior to this date are not required; however, it is strongly recommended that students consult with their academic advisors prior to deciding to withdraw. Cessation of attendance, notice to the instructor, or telephone calls to the Enrollment Center are not considered official notice of a student’s intention to drop the course. After **October 25**, withdrawals are allowed only under extenuating circumstances and require approval of the course instructor, department chair and dean of the School of Arts and Sciences.

Resources Available:

- (1) Make use of my scheduled office hours, or make an appointment.
- (2) The Learning Center is located in Room 241, Copernicus. Free tutoring is available in Room 241, Copernicus, and at other locations on campus. A schedule for hours the Center is open will be posted soon after the beginning of the semester.
- (3) Form a study group with other students in your section. Explaining 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 107 Marcus White, 832-2835.

Tentative Schedule.

Week	Dates	Monday	Wednesday	Friday
1	8/30-9/3	Ch 1	Ch 1	Ch 2
2	9/7-9/10	Labor Day	Ch 2	Ch 2/3
3	9/13-9/17	Ch 3	Ch 3	Ch 3/4
4	9/20-9/24	Ch 4	Ch 4	Review Ch 1-4
5	9/27-10/1	Exam1 on Ch 1-4	Ch 5	Ch 5
6	10/4-10/8	Ch 5	Ch 5	Ch 6
7	10/11-10/15	Ch 6	Ch 6	Ch 6
8	10/18-10/22	Review	Exam2, Ch 5 – 6.2	Ch 6
9	10/25-10/29	Ch 6	Ch 6	Ch 6
10	11/1-11/5	Ch 7	Ch 7	Ch 7
11	11/8-11/12	Review	Exam3 on Ch 6.3 -7	Ch 8
12	11/15-11/19	Ch 8	Ch 8	Ch 8
13	11/22-11/26	Review	Thanksgiving	Thanksgiving
14	11/29-12/3	Exam4 on Ch 8	Ch 9	Ch 9
15	12/6-12/10	Ch 9	<i>Review</i>	<i>Reading Day</i>
16	12/13-12/17	<i>Final Exam, 08:00 a.m. -10:00 a.m.</i>		

Individual Datasets:

Each student in the class will identify a set of related specific types of information which he or she finds interesting. During the first week of class, each student will collect some actual data of the chosen types, which he/she will then use for statistical analysis throughout the course. Detailed specifications for these personal datasets will be handed out on the first day of class.

Binomial Experiment:

There will be a project which is due on or before October 18th and which counts as part of the second Exam grade. This will be a so-called “binomial experiment” of your own design, which you will actually carry out and then write up. Hand in plans and drafts early on in order to receive guidance and corrections. The detailed description will be handed out soon after Exam1.

Exercises:

Chapter	Homework Problems	Submit for grading
1	Sect 1.1: all; Sect 1.2: 2 – 6, 10 – 13, 25, 31 – 33, 42, 47, 51, 53; Sect 1.3: 4 – 14, 16, 24 – 30 (even).	Sect 1.1: 9, 10, 11 Sect 1.2: 3, 11, 12, 25 Sect 1.3: 5, 6, 14, 16
2	Sect 2.1: 3 – 6, 9, 10, 13, 25, 26, 40, 41; Sect 2.2: 3, 8, 9, 11, 12, 17, 21, 22; Sect 2.3: 1 – 6, 11, 14, 15, 16, 18 Sect 2.4: 10, 14, 15	Sect 2.1: 3, 4, 10 Sect 2.2: 3, 9, 11, 12, 21 Sect 2.3: 11, 14 Sect 2.4: 10
3	Sect 3.1: 1, 2, 3, 7, 11, 19, 24 – 27 Sect 3.2: 1, 2, 12, 13, 27, 28, 29 Sect 3.3: 1 – 3, 12, 14, 15, 19; Sect 3.4: 1 – 5, 7, 9, 11, 19, 20, 22, 23 Sect 3.5: 1, 2, 3, 4, 5, 6, 14 Sect 3.6: 1, 2, 5 – 9	Sect 3.1: 7, 19 Sect 3.2: 12, 13 Sect 3.3: 15 Sect 3.4: 19, 20, 22 Sect 3.5: 1, 4, 14 Sect 3.6: 5 – 9
4	Sect 4.1: 1, 2, 5 – 6, 10, 23, 24; Sect 4.2: 1–4, 5–9, 10, 12, 18, 19, 20 Sect 4.3: 1–6, 13–15	Sect 4.1: 5, 10 Sect 4.2: 18, 19, 20 Sect 4.3: 13, 15
5	Sect 5.1: 2, 3, 6, 7, 9, 18–21, 28, 30, 42, 43; Sect 5.2: 1 – 5, 28–33, 39, 43, 47 Sect 5.3: 1, 4, 5, 7–10, 40, 45; Sect 5.4: 3, 6, 7, 9, 11, 13, 21, 36, 45, 47, 57(a)	Sect 5.1: 30, 42 Sect 5.2: 39, 47 Sect 5.3: 7 – 10, 40, 45 Sect 5.4: 13, 21, 45, 47
6	Sect 6.1: 1–7, 12, 11, 15–18, 20, 30, 32; Sect 6.2: 2, 6, 11, 13, 26, 37, 38; Sect 6.3: 1–4, 6, 11, 14, 17, 23; Sect 6.4: 1–4, 16, 17, 49, 50, 51, 52, 53, 58 Sect 6.5: 1–6, 12, 18, 19, 27, 29, 34, 48, 69	Sect 6.1: 12, 20 Sect 6.2: (Binomial experiment) Sect 6.3: 6, 7, 11, 14 Sect 6.4: 49, 50, 58 Sect 6.5: 4, 48
7	Sect 7.1: 1 – 4, 11, 12, 25; Sect 7.2: 4, 11, 12, 14; Sect 7.3: 1, 25, 27, 28	Sect 7.1: 12, 25 Sect 7.2: 4, 12, 14 Sect 7.3: 1, 25, 27, 28
8	Sect 8.1: 1, 4, 5, 7, 9, 14, 18, 24, 25, 30; Sect 8.2: 1–4, 9, 27(b, c, d); Sect 8.3: 1–2, 8, 9, 16, 23, 39, 46, 54, 55;	Sect 8.1: 4, 5, 7, 9, 25, 30 Sect 8.2: 1, 9, 27 (b, c, d) Sect 8.3: 2, 23, 39, 46, 54, 55
9	Sect 9.1: 1–5, 7, 8, 10, 13, 14; Sect 9.2: 2, 3, 7–10, 26	None