

Sample Syllabus of STAT 2231, Section A, Introduction to Statistics I

Credit Hrs	3
Term	Any Term, 20XX
Class Meetings and Location	8–8:50AM, MWF, MPCS3031
Prerequisites	Minimum grade of C in MATH 1101, 1111 or equivalent
Instructor	Yma Mean
Office Location	MPCS 2314E
Contact Information	Phone: 681-5555 E-mail address: statsrus@georgiasouthern.edu
Office Hours	MWF 10:00pm - 11:59pm
Textbooks and Materials	Moore and McCabe, Introduction to the Practice of Statistics, 5 th edition, W. H. Freeman, publisher. We will cover Chapters 1-8 with some material omitted. TI-83 graphing/statistical calculator
Course Objectives	Students successfully completing this course will be able to: <ol style="list-style-type: none">1. Create and interpret basic statistical graphs and charts for distributions and relationships.2. Calculate descriptive measures for distributions and relationships.3. Understand and use probability concepts appropriately.4. Perform basic inference procedures for means and proportions and interpret results.5. Use appropriate modern technology to solve problems and communicate results. For information on related General Education Outcomes, see http://academics.georgiasouthern.edu/provost/instruction/gened_outcomes.html
Assessment of Course Objectives:	Student achievement of the course objectives will be measured through the use of daily homework assignments, participation in class discussions, graded weekly homework assignments, four hourly in-class exams and a comprehensive final exam.
Grading Policy: (varies by instructor)	Grades will be assigned on a percentage of total points. (The percentage will be rounded to the nearest whole number.) A student earning 90%-100% of the total points will receive a course grade of an A, 80%-89% a B, 70%-79% a C, 60-69% a D and below 60% an F. The course average will be determined using the scores from the weekly homework assignments, the 4 hourly exams and the final exam. The scores from the weekly homework assignments will comprise 10% of the course average, the four hourly exams 65% and the final exam 25%.
Make-up Policy: (varies by instructor)	No make-up exams will be given. When a student misses an exam the score from the final exam will be substituted for the missing exam score. No late homework will be accepted.

- Attendance Policy: Students are expected to attend each class meeting and pay attention but attendance will not be taken. A student who chooses to miss class is responsible to find out what was discussed and learn the material that was covered on the missed day. The instructor is **not** responsible for re-teaching material missed by a student who did not attend class.
- (varies by instructor)
- Academic Dishonesty Policy: Any student who exhibits academic dishonesty in any form will receive a failing grade (F) for the entire course and will be reported to the University Judicial Officer. For a full discussion of academic dishonesty, see the Student Guide at <http://students.gasou.edu/sta/guide/>. Storing unauthorized programs or information in your calculator is considered cheating.
- Civility Statement: See the Student Conduct Code at the URL above.
- Disability Policy: See www2.georgiasouthern.edu/Disability_Services/.
- Additional Help: The Academic Success Center offers free peer tutoring during the week. Contact the tutorial centers for exact hours at 681-0321 or <http://academics.georgiasouthern.edu/success/>

Course Schedule (STAT 2231)

Day	Subject	Reading HW	Problems
1	Intro, definitions, Variable Types	pp. 4-13	Ch 1: 1-4, 7, 8, 10
2	Pie/Bar charts, stemplots, Shapes	pp. 14-18	12, 14, 18-20, 23, 24, 26 (On 26 - stemplot only)
3	Histograms	pp. 18-21	26 (hist), 27 (hist), 28, 29ab
4	Time Plots, Bad Graphs	pp. 38-43, 48-51	29c, 37, 38
5	Measures of Center/Spread	pp. 43-48	49ab, 50, 53, 54 (stemplot), 59, 61, 65
6	Boxplots	Lab 1 Handout	41, 42, 44, 45, 49cd, 57
7	Lab1 - Heart Rate Variability Written report due XX/XX	pp. 63-77	
8	Density curves, Normals, z-scores	pp. 78-83	78-83, 86-89, 92-95, 98, 99ab, 102, 104
9	Normal Plots, Quantiles	pp. 104-115	90, 91, 99c, 105, 106, 108, 109, 112, 115
10	Scatterplots, Relationships	pp. 135-143	Ch. 2: 1-4, 7, 9, 10, 16
11	Linear Regression	pp. 126-130, 143-146	35, 37, 38, 41, 54
12	Correlation, r^2	pp. 154-168	20-25. 31, 34, 40, 46, 53
13	Interpretation, Cautions	pp. 179-184	59, 61, 65, 66, 68, 69, 73, 77
14	Causation		78, 79, 82, 83, 85, 87, 88
15	Review/Catch-up		
16	Test 1 - Chapters 1 and 2	Lab 2 Handout	
17	Lab 2 - Real and Perceived Distances, Written report due XX/XX	pp. 222-226, 229-241	
18	Experiments	pp. 248-255	Ch. 3: 1-3, 5, 8, 10-12, 13, 17, 18, 29, 32, 33
19	Sampling	pp. 260-269	36-39, 49, 51, 53, 54, 55
20	Toward Inference	pp. 282-285, 287-294	58-66, 69
21	Probability	pp. 294-298	Ch. 4: 5, 7, 8, 10-13, 15-18, 19ab, 20, 24
	For Problem 7, use the command <code>randint(0,1,100)->L1</code> . Count the number of 1's as Hits. For Problem 8, use the command <code>randbin(n, .73)</code> where n is the number in the sample. The observed proportions are the returned values (x) divided by n.		
22	Independence	pp. 305-314	14, 19c, 21, 29-35
23	Random Variables	pp. 318-333	40, 42, 43, 45, 46, 50-52, 55, 56
24	Means and Variances	pp. 366-371	57, 58, 60. 63-66, 67ab, 68-70, 77, 78
26	Binomial RV's	pp. 371-378	Ch. 5: 1-6, 17, 18ab, 19abd, 20
27	Mean, Normal approx.	Lab 3 Handout	7-9, 11, 12, 14, 15, 18cd, 22, 23
28	Lab 3 - A Question of Taste Written Report due XX/XX	pp. 391-396	
29	Distn of \bar{x}	pp. 397-400	28, 29, 31-35, 37, 38
30	Central Limit Theorem		30, 39-42, 44, 49, 50
31	Review/Catch-up		
32	Test 2 - Chapters 3, 4, 5		

33	CI Intro, z's	p. 416-427	Sect 6.1 - 1-7, 9, 10, 27, 28
34	CIs, sample size	p. 435-452	Sect 6.1 - 16-19, 21, 23, 29
35	Hypothesis Tests (z)	p. 461-466	Sect 6.2 - 31-35, 37, 40-43
36	Hypothesis Tests (z), Use and Abuse	p. 492-501	Section 6.2 - 44-48, 52, 53, 55-57, 63, 65 Section 6.3 - 68-74, 77
37	T distribution, CIs	Lab Handout	Sect 7.1 - 1-4, 8, 9, 15-17, 20, 24, 25
38	Lab 4 - Variation in Manufactured Goods	Written Assignment due XX/XX	
39	T tests	p. 525-542	Sect 7.1 - 6, 21, 27, 33-37, 29, 40, 42
40	Two Sample Tests	p. 572-581	Sect 7.2 - 56bc, 57-59, 64, 69-75
41	One proportion CIs, sample size	p. 587-595	Sect 8.1 - 1, 2, 4-8, 10, 19, 21 16, 23-26
42	Two Proportions		Sect 8.2 - 31-35, 37-40, 49, 50
43	Review/Catch up		
44	Test 3 - Chapters 6, 7, 8		
45	Final Exam Review		