Syllabus for Applied Statistics Using Computers

MTH 214 Ninth Edition

Text: *Introduction to the Practice of Statistics, Ninth Edition*, by Moore, McCabe, and Craig (W.H. Freeman) Student Edition Hardcover ISBN-13: 978-1-319-01338-7. Student Edition Looseleaf Edition: 13; 978-1-319-01362-2.

Chapter 1 Distributions

| First Examination | |
|--|-------------------------|
| 4.4 Mean and Variance | 14,75,78,83,85 |
| 4.3 RVs | 49,51,52,55,57,59,60 |
| 4.2 Models | 21,23,25,27,33 |
| 4.1 Randomness | 5,7 |
| Chapter 4 Probability | |
| 3.4 Ethics | 80,81,83,84 |
| 5.1 Toward Inference | 7,8,9,13 |
| 3.3 Sampling Design | 55,57,58,64,68 |
| 3.2 Design of Experiments | 25, 27,31,34,35 |
| 1.4 Normal Distributions Chapter 3 Data | 110,113,118,120,123,134 |
| 1.3 Center and Spread | 71,75,77,88 |
| 1.2 Graphs | 36,37 |

Chapter 5 Sampling Distributions

5.2 Sampling Distribution of Sample Mean 25,26,27,29,38,39

5.3 Sampling Distributions for

Counts and Proportions 57,59,61,63,70,72,73

| <u>-</u> | Chapter 6 Inference | |
|--------------------------|--------------------------------------|-----------------------------------|
| 6.1 Confidence Intervals | | 12, 13, 14, 15, 17,19,23,25 |
| 6.2 Significance | | 52, 53, 54, 55, 56, 58, 59, 64,65 |
| 6.3 Abuse of Tests | | 92, 93, 95, 99, 100, 101 |
| 6.4 Power, Error Types | | 110, 111, 116, 137 |
| | Chapter 7 Inference for Distribution | <u>s</u> |
| 7.1 One Mean | | 15,16,18,20,22,23,39 |
| 7.2 Two Means | | 55,56,68,71,72,74 |
| | Chapter 8 Inference for Proportions | <u>3</u> |
| 8.1 One Proportion | | 22,23,27,35,38 |
| 8.2 Two Proportions | | 62,63,64 |
| | Second Examination | |
| | Chapter 9 Two-Way Tables | |
| 9.1 Two-way Tables | | 121,146 |
| 9.2 Goodness of Fit | | 43,44,45,48 |
| _ | Chapter 2 Relationships | |
| 2.2 Scatterplots | | 24,28,32 |
| 2.3 Correlation | | 47,48,58 |
| 2.4 Least Squares | | 70,71,72,87 |
| 2.5 Cautions | | 101,102,103,109 |
| | Chapter 10 Linear Regression | |
| Chapter 10.1 | | 7,8,12,14,18 |
| | Third Examination | |
| | Chapter 12 ANOVA | |
| Chapter 12.1 | | 11,14,15,17,18,25 |
| | Final Examination | |