

Stat 106 <b>Biostatistics</b>			
Text	Elementary Biostatistics with Applications from Saudi Arabia, Second Edition. Nancy A. E. Hasabelnaby		
	<b>Lecture Notes:</b> STAT– 106 BIOSTATISTICS, by Dr. Abdullah Al-Shiha, <a href="file:///C:/Users/User/Downloads/A1a.pdf">file:///C:/Users/User/Downloads/A1a.pdf</a>		
	There will be one-hour lecture, and two-hour practice per week.		
	There will be two mid-term exams carrying 25 marks each, and one final exam carrying 40 marks. Participation, Quizzes & Home works: 10 marks		
	More than 25% absenteeism from lectures and/or practice might cause denial from final exam.		
week	date	topics	pages
		Chapter 1: Organizing and Displaying Data	
1	8/5/1438 5/2/2017	1.1 Introduction	1-3
		1.2 Organizing the data	3-14
		Exercises 1.1,1.4	14-16
2	10/5/1438 12/2/2017	1.3 True class intervals	18-20
		Exercises 1.9,1.13	20
		1.4 Displaying grouped frequency distributions	20-24
		Exercises 1.14; R.E. 1.R.3, 1.R.4	24-27
		Chapter 2: Basic Summary Statistics	
3	22/5/1438 19/2/2017	2.1 Introduction	29
		2.2 Measures of central tendency	29-34
		Exercises 2.3, 2.4, 2.5	34-35
		2.3 Measures of dispersion	35-41
		Exercises 2.9, 2.10	42
4	29/5/1438 26/2/2017	2.4 Calculating measures from an ungrouped frequency table	42-44
		Exercises 2.14, 2.18	45-47
		2.5 Approximating measures from grouped data	47-49
		Exercises 2.20, 2.21, 2.25, 2.27; R.E. 2.R.2, 2.R.10, 2.R.11	49-54
5	6/6/1438 5/3/2017	Review	

		Chapter 3: Basic Probability Concepts	
6	13/6/1438 12/3/2017	3.1 General view of probability	55-60
		Exercises 3.1,3.4, 3.5, 3.6	61-62
		3.2 Probability applied to health data	63-66
		Exercises 3.8, 3.9, 3.16	67-71
		3.3 Percentages/100 as probabilities and the use of Venn diagrams	72-73
		Exercises 3.18, 3.22	73-74
7	20/6/1438 19/3/2017	3.4 Conditional probability	75-78
		Exercises 3.24, 3.30, 3.32	78-80
		3.5 Counting techniques	80-86
		Exercises 3.36, 3.37, 3.40, 3.41, 3.48, 3.50; R.E. 3.R.2, 3.R.20, 3.R.24	87-99
		Chapter 4: Probability Distributions	
8	27/6/1438 26/3/2017	4.1 Introduction	101
		4.2 Probability distributions of discrete random variables	101-113
		Exercises 4.2, 4.6, 4.10	114-117
9	12/7/1438 9/4/2017	4.3 Probability distributions of continuous random variables	117-120
		Exercises 4.14, 4.16	120
		4.4 The normal distribution	121-129
		Exercises 4.18, 4.24; R.E. 4.R.2, 4.R.4, 4.R.8	129-132
		Chapter 5: Hypothesis Testing and Estimation	
10	12/7/1438 9/4/2017	5.1 Properties of statistics as parameter estimates	135-138
		5.2 Hypothesis testing for a population mean	138-147
		Exercises 5.2, 5.5	148
11	26/7/1438- 23/4/2017	Review	
12	4/8/1438- 30/4/2017	5.3 Estimation of a population mean	149-153
		Exercises 5.12, 5.14	153-154
		5.4 Hypothesis testing and estimation for a population proportion	155-159
		Exercises 5.18, 5.20, 5.27, 5.30	159-161
13	11/8/1438- 7/5/2017	5.5 Hypothesis testing and estimation for the difference in two population means	161-166
		Exercises 5.34, 5.36	166-167
		5.6 Hypothesis testing and estimation for the	168-172

		difference in two population proportions	
		Exercises 5.44, 5.48	173-174
14	8/8/1438-14/5/2017	5.7 Student's t-distributions and inference for means	174-182
		Exercises 5.51, 5.52; R.E. 5.R.4, 5.R.12, 5.R.16, 5.R.20, 5.R.30, 5.R.34, 5.R.41	183-197
15	25/8/1438-21/5/2017	Final review	

### Exams schedule

Exams	Subjects
<u>Midterm 1:</u> Saturday, 10:30-12 AM 26/6/1438 = 25 March 2017	Descriptive Statistics [Ch. 1 - Ch. 2]
<u>Midterm 2:</u> Saturday, 10:30-12 AM 10/8/1438 = 6 May 2017	Probability and probability distributions (Binomial distribution not included) [Ch. 3 - Ch. 4]
<u>Alternative Exam:</u> For those who missed ONE of the midterm exams and <b>have a justification</b>	<b>Take care:</b> Alternative Exam covers the material of Mid 1 + Mid 2
<u>Final Exam:</u> Tuesday, 9-12 AM 18/09/1438= 13 June 2017	Binomial distribution to the end of [Ch. 4] and Estimation [Ch. 5]