QMM 1001

STATISTICS FOR DATA ANALYTICS

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Course Information			
Code/Name	QMM1001 Statistics for Data Analytics		
Delivery Method	Virtual		
CRN	91705	Term (YYYY/MM)	2021/09
School	School of Business/Information Technology		

Professor Contact Information		
Name	Jenna Guse	
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Office Hours	Available upon request via Zoom	

Week	Class	Content	Course	Pages	Assessments
			Objectives		
1	Sept 8	1.1 Introduction to the course and	1.1, 1.2, 1.3	Ch 1 p. 1 – 7	
		Statistics		Ch 2 p. 8 – 21	
	Sept 10	1.2 Introduction to R		Class notes	
2	Sept 15	1.3 Surveys and Sampling	2.1, 2.2, 2.3, 2.4	Ch 3 p. 27 – 47	
	Sept 17	2.1 Visual Displays of Categorical Data	3.1, 3.2, 12.1	Ch 4 p. 56 – 62	Module 1 AA [6%]
					September 17 @ 11:59PM
3	Sept 22	2.2 Contingency Tables	3.3	Ch 4 p. 62 – 73	
	Sept 24	3.1 Measures of Centre	4.1, 4.2, 4.3, 4.4,	Ch 5 p. 88 – 98	Module 2 AA [6%]
			12.2		September 24 @ 11:59PM
4	Sept 29	3.2 Measures of Spread	4.4, 4.5	Ch 5 p. 98 - 102	
	Oct 1	3.3 Boxplots and Outliers	4.1, 4.2, 4.6, 12.2	Ch 5 p. 105-108, 109 –	
				115	
5	Oct 6	3.4 Time Series and Transforming	4.1, 4.7, 12.2	Ch 5 p. 115 – 125	
		Skewed Data			
	Oct 8	4.1 Correlation	5.1, 5.2, 5.3 5.4,	Ch 6 p. 143 – 160	Module 3 AA [6%]
			12.3		October 8 @ 11:59PM
6	Oct 13	4.2 Regression	5.3, 12.3	Ch 7 p. 172 – 181	
	Oct 15	4.3 Regression Continued			Module 4 AA [6%]
					October 15 @ 11:59PM

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7	Oct 20	Case Study 1 [20%]			
	Oct 22	Case Study 1 [20%]			Case Study 1 Due [20%] October 22 @ 11:59 PM
8		Study Week – NO CLASSES			
_			October 25 – Octo		
9	Nov 3	5.1 Basic Probability Rules	6.1, 6.2, 6.3, 12.5	Ch 8 p. 205 – 216	
	Nov 5	5.2 Probability Rules and Contingency Tables	6.3, 6.4, 6.5	Ch 8 p. 216 – 221	
10	Nov 10	6.1 Random Variables, Expectation, and Variance	7.1, 7.2 7.3	Ch 9 p. 245 – 258	Module 5 AA [6%] November 10 @ 11:59PM
	Nov 12	6.2 The Binomial Distribution	7.4	Ch 9 p. 261 – 266	
11	Nov 17	7.1 Introduction to the Normal Distribution	8.1, 8.2, 8.3	Ch 9 p. 272 – 284	Module 6 AA [6%] November 17 @ 11:59PM
	Nov 19	7.2 Normal Distribution Calculations	8.4, 12.4	Ch 9 p. 272 – 284	
12	Nov 24	8.1 Sampling Distributions for the Sample Proportion	9.1, 9.2	Ch 10 p. 309 – 325	Module 7 AA [6%] November 24 @ 11:59PM
	Nov 26	8.2 Solving Problems for the Sampling Distribution of a Sample Proportion	9.3, 9.4, 9.5, 12.5	Ch 10 p. 309 – 325	
13	Dec 1	9.1 Confidence Intervals	10.1, 10.2, 10.4	Ch 11 p. 336 – 345	Module 8 AA [6%] December 1 @ 11:59PM
	Dec 3	9.2 Confidence Intervals Continued	10.3, 12.6	Ch 11 p. 346 – 353	
14	Dec 8	10.1 Introduction to Hypothesis Testing	11.1, 11.2, 11.3, 11.4, 12.7	Ch 12 p. 363 – 373, 388 – 396	Module 9 AA [6%] December 8 @ 11:59PM
	Dec 10	10.2 Hypothesis Testing Continued	11.5, 11.6, 12.7	Ch 12 p. 374 – 381	
15	Dec 15	Case Study 2 [20%]			Module 10 AA [6%] December 15 @ 11:59PM
	Dec 17	Case Study 2 [20%]			Case Study 2 Due [20%] December 17 @ 11:59 PM





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Assessment Information (all assessments are due at 11:59 PM on the dates listed in the table above)		
Applied	Applied activities (AA) will require the use of the R programming language. There will be an equally weighted (6%)	
Activities	applied activity for each module (10). Students are expected to complete applied activities independently unless	
(AA) [60%]	otherwise indicated and are permitted to use their course notes.	
Assignments	There will be two case studies in the course. Case studies require the analysis of a real world data set	
[40%]	accompanied by a written report. Each case study is equally weighted (20%). All students are expected to	
	complete each assignment independently without the assistance of another person but are permitted to use their	
	course notes.	
Late Policy	Late assessments will not be accepted. In the case of illness or other extenuating circumstances, prior notice must	
	be provided and alternate assessment due dates must be approved by your professor.	