MIS770 – Foundation Skills in Data Analysis (Trimester 1, 2024)

	Modules		Topics		Optional module - Textbook Croucher, John. Introductory Mathematics and Statistics: 6th Edition (6e), 2016 (ISBN: 9781743072929) Ch	Title	Read Sections	Exercises (from Textbook)	Note
	Optional	Basic Numeracy Skills	T0	Foundation Mathematics	1 2 4	• Basic Mathematics • Percentages • Ratios and Proportions	1.1 to 1.4, 1.7 2.1 to 2.11 4.1 to 4.5	1.15, 1.17, 1.55, 1.75 2.15, 2.20, 2.55, 2.79 4.1, 4.7, 4.29, 4.34	This Module is **optional** and is intended for those students who wish to refresh their numeracy skills prior to commencing the Unit. This Module has no direct associated assessment.

Week Commencing	Modules		Topics		Prescribed Textbook Berenson et. al. Basic Business Statistics: Concepts and Applications. 5th Edition, 2019 (ISBN: 9781488617249) Ch	Title	Read Sections	Classroom Exercises (from Textbook)	Assessments
Week 01 **4 Mar 2024**	One	Presenting and Describing Information	T1	Data Collection	1	• Defining and Collecting Data	1 to 1.6	1.5, 1.23, 1.29, 1.49	**First Assessment (20%) - Individual :** 2,000 words or equivalent Due 8pm AEST Wednesday10th April 2024 (Week 5) For this assignment, we will use the ideas and concepts introduced in Module 1 to develop a data collection instrument that relates to a contemporary research topic. A report of 2,000 words including the survey instrument (i.e. questionnaire); justification of the questions contained in the survey, and design. The questionnaire needs to be appropriate/aligned to the research objectives.
Week 02* **18 Mar 2024**			T2	Visualising Data	2	• Organising and Visualising Data	2 to 2.5, 2.7	2.15, 2.17, 2.19, 2.23	
Week 03 **25 Mar 2024**			T3	Numerical Descriptive Measures	3	• Numerical Descriptive Measures	3 to 3.6	3.13, 3.27, 3.33, 3.39	
Week 04 **8 Apr 2024**	Two	Measuring Uncertainty and Drawing Conclusions about Populations Based on Sample Data	T4	Probability and Discrete Probability Distributions	4 5	• Basic probability • Discrete Probability Distributions	4 to 4.5 5 to 5.1, 5.3 to 5.4	4.19 5.3, 5.23, 5.31	**Second Assessment - Individual (30%):** 1,000 words or equivalent Due 8pm AEST Wednesday 8th May 2024 (Week 9) For this assessment, we will use the ideas and concepts introduced in Modules 1 and 2 to undertake Data Analysis and Visualisation. The purpose of this assignment is to manipulate raw data in a meaningful manner to enable us to accurately interpret the underlying data from the outputs we have created.
Week 05 **15 Apr 2024**			T5	Continuous Distributions & Sampling Distributions	6 7	• Normal & Other Cont. Distributions • Sampling Distributions	6 to 6.5 7 to 7.3	6.11, 6.29 7.9, 7.19	
Week 06 **22 Apr 2024**			T6	Confidence Intervals	8	• Confidence Interval Estimation	8 to 8.4, 8.6	8.7, 8.17, 8.27, 8.67	
Week 07 **29 Apr 2024**			T7	Hypothesis Tests	9	• Fundamentals of Hypothesis Testing: One-Sample Tests	9 to 9.5, 9.7	9.15, 9.29, 9.45, 9.69	
Week 08 **6 May 2024**	Three	Determining Cause and Making Reliable Forecasts	T8	Simple Linear Regression	12	• Simple Linear Regression	12 to 12.5, 12.7, 12.9	12.9, 12.27, 12.45	**EoU Assessment:** Online Exam. Fixed start time with a enforced time limit. The exam will be drawn from any of the materials covered in Modules 1, 2 and 3.
Week 09 **13 May 2024**			T9	Introduction to Multiple Regression	13	• Introduction to Multiple Regression	13 to 13.4, 13.6 to 13.7	13.3, 13.37, 13.39, 13.63	
Week 10 **20 May 2024**			T10	Time Series Forecasting and Index Numbers	14	• Time Series Forecasting and Index Numbers	14 to 14.10	14.7, 14.11, 14.45, 14.53	
Week 11 **27 May 2024**	Revision Workshop/Preparation for Exam								
EoU Assessment & Exam Period	The Examination Period runs from Monday 3 Jun 2024 to Friday 14 Jun 2024 (inclusive)								

***Victorian Labour Day Public Holiday: Monday 11 March 2024 (University closed)**

Note: Intra-trimester break: Friday 29 March 2024 - Sunday 7 April 2024 (inclusive)