FORM B: COURSE PLAN (To be uploaded in Google Classroom for students)

Faculty/Centre:	FOCS	**Course Coordinator:**	Lee Shu Gyan			
Campus:	KL	**Other Tutors and Lecturers:**	Refer to timetable			
Course Code & Course Title:	BAMS1613 PROBABILITY AND STATISTICS	**Moderator(s):**				
Programme(s):	REI, RIS, RIT,RST, RSW	**Examiner(s):**	Lee Shu Gyan			
Credit Hours:	3	**Contact hrs/sem:**	**L** 28	**T** 21	**P** 0	**O/B** 0
Session:	202305	**Course Weighting:**	**CW** 50%	**PR** 0%	**EX** 50%	
Academic Year:	2023/24	**Passing Threshold**	**CW**	**PR**	**EX**	

Week		Topics	Reference Materials (Books/Titles, Journals, Web articles, etc)	Remarks
1	Lecture	Introduction to Statistics - Definition and purpose of statistics. - Population and sample. -Types of data. Descriptive Statistics - Frequency distribution. - Histogram. - Frequency polygon.	1. Mann, P. S. (2021). Introductory statistics (10th, Wiley loose-leaf print ed.). Wiley. 2. Anderson, D. R., Sweeney, D. J., Williams, T. A., Camm, J. D., Cochran, J. J., Fry, M. J., & Ohlmann, J. W. (2020). Statistics for business & economics (14th ed.). Cengage. https://tarcez.tarc.edu.my/login?url=https://resolver.vitalsource.com/9780357118184 3. Lind, D. A., Marchal, W. G., & Wathen, S. A. (2021). Statistical techniques in business & economics (18th ed.). McGraw-Hill Education.	
	Tutorial	Introduction to Statistics - Definition and purpose of statistics. - Population and sample. - Types of data.		
	Practical			

Week		Topics	Reference Materials (Books/Titles, Journals, Web articles, etc)	Remarks
2	Lecture	- Ogive. - Measures of central tendency: mean, median, mode.	Book 1, Book 2 and Book 3.	
	Tutorial	Descriptive Statistics - Frequency distribution. - Histogram. - Frequency polygon.		
	Practical		Book 1, Book 2 and Book 3.	
3	Lecture	- Measures of dispersion: range, interquartile range, quartile deviation.	Book 1, Book 2 and Book 3.	
	Tutorial	- Ogive. - Measures of central tendency: mean, median, mode.		
	Practical			
4	Lecture	Variance, standard deviation. Probability - Events. - Laws of probability and applications.	Book 1, Book 2 and Book 3.	
	Tutorial	- Measures of dispersion: range, interquartile range, quartile deviation.		
	Practical			

Week		Topics	Reference Materials (Books/Titles, Journals, Web articles, etc)	Remarks
5	Lecture	- Permutation & combination. - Independent events. - Mutually exclusive events.	Book 1, Book 2 and Book 3.	
	Tutorial	Variance, standard deviation. Probability - Events. - Laws of probability and applications.		
	Practical			
6	Lecture	- Conditional probability. - Probability tree. - Bayes' theorem. Probability Distribution - Normal distribution	Book 1, Book 2 and Book 3.	
	Tutorial	- Permutation & combination. - Independent events. - Mutually exclusive events.		
	Practical			
7	Lecture	-Binomial and Poisson distributions.	Book 1, Book 2 and Book 3.	
	Tutorial	- Conditional probability. - Probability tree. - Bayes' theorem. Probability Distribution - Normal		
	Practical			

Week		Topics	Reference Materials (Books/Titles, Journals, Web articles, etc)	Remarks
8	Lecture	- Normal approximation to binomial and Poisson distributions. Estimation and Confidence Interval - Distribution of sample mean and proportion. - Central limit theorem.	Book 1, Book 2 and Book 3.	
	Tutorial	- Binomial and Poisson distributions.		
	Practical			
9	Lecture	- Point estimate: population mean, proportion and variance. - Interval estimate: population mean (large sample) and proportion.	Book 1, Book 2 and Book 3.	
	Tutorial	- Normal approximation to binomial and Poisson distributions. Estimation and Confidence Interval - Distribution of sample mean and proportion. - Central limit theorem.		
	Practical			

Week		Topics	Reference Materials (Books/Titles, Journals, Web articles, etc)	Remarks
10	Lecture	- Methods of determining the sample sizes Hypothesis Testing - Fundamentals of hypothesis testing. - Type I and type II errors.	Book 1, Book 2 and Book 3.	
	Tutorial	- Point estimate: population mean, proportion and variance. - Interval estimate: population mean (large sample).		
	Practical			
11	Lecture	- Testing for mean (large sample) and proportion.	Book 1, Book 2 and Book 3.	
	Tutorial	- Interval estimate: population proportion. Fundamentals of hypothesis testing. - Type I and type II errors.		
	Practical			
12	Lecture	- Testing for mean (large sample) and proportion. Regression and Correlation - Linear regression. - Method of least squares.	Book 1, Book 2 and Book 3.	
	Tutorial	- Testing for mean (large sample) and proportion. Regression and Correlation Linear regression. - Method of least squares.		
	Practical			

Week		Topics	Reference Materials (Books/Titles, Journals, Web articles, etc)	Remarks
13	Lecture	- Product moment correlation coefficient.	Book 1, Book 2 and Book 3.	
	Tutorial	- Testing for mean (large sample) and proportion. Regression and Correlation Linear regression. - Method of least squares.		
	Practical			
14	Lecture	- Spearman's coefficient of rank correlation.	Book 1, Book 2 and Book 3.	
	Tutorial	- Product moment correlation coefficient. - Spearman's coefficient of rank correlation.		
	Practical			

** Any changes made in the course plan must be recorded. For replacement of classes, please refer to the Replacement record kept in Central filling.*

Continuous Assessment Type	Weighting	Week of Submission
Assignment	50	11
Test	50	9

Prepared by Course Coordinator:

Name : Lee Shu Gyan

Date : 22/06/2023

Approved by Course Leader/Programme Leader/Associate Dean /
Head of Division:

Name : Chong Voon Niang

Date : 22/06/2023

Notes:

1. *Upon the approval by the Course Leader/ Programme Leader/ Associate Dean,/Head of Division Form B must be uploaded onto respective online classroom and distributed to the lecturers at Branch level.*
2. *Lecturers are advised to take into account the public holidays when planning the course plan.*
3. *Lecturers are advised to take into account the previous recommendation stated in Form J*