Course Syllabus (Academic Year 2020)

School of Interdisciplinary Studies, Kanchanaburi Campus, Mahidol University

1. **Course No. and Title** : KAID270 Introduction to Statistics

   Credit (study hours) : 2(2-0-5)

2. **Program Name** : Bachelor of Science

3. **Course Module** : Major Required Courses

   Pre/co-requisite : -

4. **Class Semester** : ☑ 1st Semester ☐ 2nd Semester Academic Year 2020

5. **Class Schedule & Venue** : T 09:00 – 12.00 FaceBook ClosedGroup IntroStat63, WebEx

6. **Class Coordinator** : Dr. Nuengruithai Tharawatcharasart

   Email : Nuengruithai.tha@gmail.com

7. **Course Description**

   Introduction, data analysis, sampling, probability, random variables and probability distributions,sampling distributions, estimation, hypothesis testing.

8. **Course Objectives / Course Learning Outcomes (CLOs)**

No.	Objectives / CLOs	Expected Skills / Knowledge			PLOs
		Specific	Generic	Knowledge	
8.1	To provide students with knowledge and understanding of statistics and application of statistics.				
8.2	To instruct students of the statistic and the application of scientific data, concepts, and statistic models.				
8.3	To provide students with problem solving skills by an approach that describes statistics.				

8.4	To provide students with basic skills of statistics that can be applied.				

9. Class Instructor List

9.1 Name : Dr. Nuengruithai Tharawatcharasart (NT)   Email : Nuengruithai.tha@gmail.com

9.2 Facebook Group IntroStat63, WebEx

10. Course Outline

Week	Date	Contents	CLOs	Instructor's Names
1	7 Jul	Introduction : Introduction to statistics	1	NT
2	14 Jul	Data analysis	1	NT
3	21 Jul	Probability	1	NT
4	28 Jul	Random variable and probability distribution	1	NT
5	4 Aug	Random variable and probability distribution	1	NT
6	11 Aug	Sampling distributions	1	NT
7	18 Aug Mid-term Examination			
8	25 Aug	Estimation	1	NT
9	1 Sep	Estimation	1	NT
10	(add) 5 Sep	Application and presentation 1	1	NT
11	8 Sep	Hypothesis testing	1	NT
12	15 Sep	Hypothesis testing	1	NT
13	22 Sep	Application and presentation 2	1	NT
14	29 Sep Final Examination			

11. Course Assessment

No.	Methods / Activities	Regulations	CLOs	Week	Weight Distribution (%)
11.1	Mid-term exam	Writing examination (Open book)	8.1, 8.2	7	30
11.2	Final exam	Writing examination (Open book)	8.1, 8.2, 8.3	14	40
11.3	Application and presentation	Presentation	8.1, 8.2, 8.3	10, 13	10
11.4	Quiz / Assignments / Personal homework	Complete and On time	8.1, 8.2, 8.3	2-16	20
				Total	100

12. Grading System

☑ Criterion-referenced evaluation

Grade	Score	Grade	Score	Grade	Score	Grade	Score
A	$\geq$ 80 %	B	70 – 74.99%	C	60 – 64.99%	D	50 – 54.99%
B+	75 – 79.99%	C+	65 – 69.99%	D+	55 – 59.99%	F	< 50 %

☑ Norm-referenced evaluation

*If use both criterion and norm-referenced evaluation, please tick two boxes.

13. References

13.1 WeissNA. Introductory statistics. 5th ed.Addison-Wesley;1995.

13.2 Johnson RA. Statistics: principles and methods. 3rded. John Wiley & Sons;1992.

13.3 Hogg RV. Probability and statistical inference. 5th ed. Prentice-Hall; 1997.