

SCBE 302 Biostatistics 3(3-0-6)

Instructor: Dr. Ekgachai Jeratthitikul (Course coordinator)

Contact: Ekgachai.jer@mahidol.edu

Semester/Academic Year: 2/2022

Location SC1-159

Google classroom: 2wwilxc

Time 9:30-12:30 (TUE)

Course Schedule

Week	Date	Topic	Hour	Lecturer
1	10 Jan	Introduction to Biostatistics	3	Ekgachai
2	17 Jan	Descriptive Statistics	3	Ekgachai
3	24 Jan	Probability and Distributions	3	Ekgachai
4	31 Jan	Sampling Distribution and Estimation	3	Ekgachai
5	7 Feb	Hypothesis Testing: One Sample Inference	3	Ekgachai
6	14 Feb	Hypothesis Testing: Two Sample Inference I	3	Ekgachai
7	21 Feb	Hypothesis Testing: Two Sample Inference II	3	Ekgachai
7 Mar		Midterm examination (Topic 1-7)	3	Ekgachai
8	14 Mar	One-Way ANOVA with completely randomized design (CRD)	3	Ekgachai
9	21 Mar	Randomized complete block design (RCBD)	3	Ekgachai
10	28 Mar	Latin Square design (LSD)	3	Ekgachai
11	4 Apr	Nested ANOVA	3	Ekgachai
12	11 Apr	Two-Way ANOVA	3	Ekgachai
13	18 Apr	Linear correlation and regression analysis	3	Ekgachai
14	25 Apr	Chi-square Analysis (χ^2 - test)	3	Ekgachai
2 May		Final Examination (Topic 8-14)	3	Ekgachai

Evaluation

Homework	20%
Midterm Examination	40%
Final Examination	40%

Grade evaluation: Letter system

Books

1. Rosner, B. 2015. Fundamentals of Biostatistics. 8th ed. Cengage Learning. 927 pp.
2. Daniel, W.W., and Cross, C.L. 2013. Biostatistics: A Foundation for Analysis in the Health Sciences. 10th Ed. Willey. 960 pp.