

SCBE 302 Biostatistics 3(3-0-6)

Instructor: Dr. Ekgachai Jeratthitikul (Course coordinator)

Contact: Ekgachai.jer@mahidol.ac.th

Semester/Academic Year: 2/2025

Location: SC1-155

Google classroom:

Time 9:30-12:30 (THU)

Course Schedule

Week	Date	Topic	Hour	Lecturer	
1	8 Jan	Introduction to Biostatistics	3	Ekgachai	
2	15 Jan	Descriptive Statistics	3	Ekgachai	TA 3 hr
3	22 Jan	Probability and Distributions	3	Ekgachai	TA 3 hr
4	29 Jan	Sampling Distribution and Estimation	3	Ekgachai	TA 3 hr
5	5 Feb	Hypothesis Testing: One Sample Inference	3	Ekgachai	TA 3 hr
6	12 Feb	Hypothesis Testing: Two Sample Inference I	3	Ekgachai	TA 3 hr
7	26 Feb	Hypothesis Testing: Two Sample Inference II	3	Ekgachai	TA 3 hr
6 Mar		Midterm examination (Topic 1-7)	3	Ekgachai	
8	12 Mar	One-Way ANOVA with Completely Randomized Design (CRD)	3	Ekgachai	TA 3 hr
9	19 Mar	Randomized Complete Block Design (RCBD)	3	Ekgachai	TA 3 hr
10	26 Mar	Nested ANOVA	3	Ekgachai	TA 3 hr
11	2 Apr	Two-Way ANOVA	3	Ekgachai	TA 3 hr
12	9* Apr	Linear Correlation and Regression Analysis	3	Ekgachai	TA 3 hr
13	16 Apr	Analysis of Covariance (ANCOVA)	3	Ekgachai	TA 3 hr
14	23 Apr	Chi-Square Analysis (χ^2 - test)	3	Ekgachai	TA 3 hr
1 May		Final Examination (Topic 8-14)	3	Ekgachai	

*Class is mock up at SC2-161

TA: Peerapol Bootti

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.