**SCBE 302 Biostatistics 3(3-0-6)**

**Instructor:** Dr. Ekgachai Jeratthitikul (Course co-ordinator)

**Contact:** Ekgachai.jer@mahidol.edu

**Semester/Academic Year:** 2/2020

**Google classroom:** 365nlcw

**Upload teaching material:** Friday before 4:00 PM

**Live Q/A session:** Tuesday 11:30 – 12:30 AM via Cisco Webex Meeting (571-007-991)

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| Week | Date | Topic | Hour | Lecturer |
| 1 | 19 Jan | Introduction to Biostatistics | 3 | Ekgachai |
| 2 | 26 Jan | Descriptive Statistics | 3 | Ekgachai |
| 3 | 2 Feb | Probability and Distributions | 3 | Ekgachai |
| 4 | 9 Feb | Sampling Distribution and Estimation | 3 | Ekgachai |
| 5 | 16 Feb | Hypothesis Testing: One Sample Inference | 3 | Ekgachai |
| 6 | 2 Mar | Hypothesis Testing: Two Sample Inference (I) | 3 | Ekgachai |
| 7 | 9 Mar | Hypothesis Testing: Two Sample Inference (II) | 3 | Ekgachai |
| 8 | 16 Mar | Midterm examination (Topic 1-7) | 3 | Ekgachai |
| 9 | 23 Mar | One-Way ANOVA with completely randomized design (CRD) | 3 | Ekgachai |
| 10 | 30 Mar | Randomized complete block design (RCBD) | 3 | Ekgachai |
| 11 | 20 Apr | Latin Square design (LSD) and Two-Way ANOVA | 3 | Ekgachai |
| 12 | 27 Apr | Linear correlation and regression analysis | 3 | Ekgachai |
| 13 | 11 May | Chi-square Analysis | 3 | Ekgachai |
| 15 | 18 May | Final Examination (Topic 9-13) | 3 | Ekgachai |

**Course Schedule**

**Evaluation**

 Homework 20%
 Midterm Examination 40%
 Final Examination 40%

**Grade evaluation:** Letter system

**Books**

1. Rosner, B. 2011. Fundamentals of Bioststistics. 7th ed. Cengage Learning. 891 pp.
2. Daniel, W.W., and Cross, C.L. 2013. Biostatistics: A Foundation for Analysis in the Health Sciences. 10th Ed. Willey. 960 pp.