**Instructor:** Hsin-Yi Weng (weng9@purdue.edu)

**Course Title**: CPB 62600: Design and Analysis of Epidemiologic Studies

**Class meeting times**: Lect: MR 8:30 am – 9:20 am; Lab: R 9:30 am – 11:20 am

**Course Description**: This course will provide students with hands-on training on the analysis of the data derived from epidemiologic studies using contingency table analysis, logistic regression, Poisson/negative binomial regression, and survival analysis. Emphasis will be placed on the importance of integrating causal thinking in study design, data analysis, and result interpretation. Upon the completion of the course, students will be able to define the key feature for different epidemiologic study designs, analyze data using the introduced statistical methods, and interpret results by critically appraising effect size, precision, bias, confounding, and effect modification.

**Any pre-req details, if appropriate**: Pre-requisite: at least 1 graduate-level statistics course; IBM SPSS for Windows will be the main software program; Minimum number of students: 5 and maximum of 15; Offering in Fall 2022