Epidemiology (EPIJ) - Joint Courses

Epidemiology - Joint (EPIJ) Courses

EPIJ 5240 [0.5 credit] (EPI 5240)
Epidemiology

EPIJ 5241 [0.5 credit] (EPI 5241)
Epidemiology II

EPIJ 5330 [0.5 credit] (EPI 5330)
Vital and Health Statistics

EPIJ 5340 [0.25 credit] (5340)
Epidemiological Methods
Major principles of study design and analysis: validity in epidemiologic studies; precision and statistics in epidemiology studies; confounding; additive and multiplicative interaction; stratified analysis; regression models; regression modeling; bias analysis; analytical strategy.
Includes: Experiential Learning Activity
Prerequisite(s): EPI 5240, (EPI 5242 or MAT 5375).

EPIJ 5344 [0.25 credit] (EPI 5344)
Survival Analysis in the Health Sciences
Types of survival data. Hazard function and its links to incidence rate/density. Nonparametric analysis including actuarial life tables, Kaplan-Meier method and log-rank test. Proportional hazards (Cox regression) modeling. Methods for time varying covariates and non-proportional hazards. SAS software for hands-on modeling.
Includes: Experiential Learning Activity
Prerequisite(s): EPI 5340.

EPIJ 5345 [0.25 credit] (EPI 5340)
Applied Logistic Regression
Foundation of model estimation: maximum likelihood; modeling dichotomous outcome (dependent) variables: logistic regression; logistic models with several independent variables; interpretation of model parameters; model-building strategies; assessing the fit of the model; regression diagnostics. Classes will include hands-on modeling examples using SAS statistical software.
Includes: Experiential Learning Activity
Prerequisite(s): EPI 5340.

EPIJ 5346 [0.25 credit] (EPI 5346)
Applied Longitudinal and Clustered Data Analysis
Introduction to longitudinal (repeated measures) and clustered data and overview of regression models for correlated data; linear mixed effects models: modelling the mean; modelling the covariance structure; generalized estimating equations and generalized linear mixed effects models; regression diagnostics; missing data and drop-out; case studies.
Includes: Experiential Learning Activity
Prerequisite(s): EPI 5340.

EPIJ 6178 [0.5 credit] (EPI 6178)
Clinical Trials

EPIJ 6278 [0.5 credit] (EPI 6278)
Advanced Clinical Trials