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


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 dropout; case studies.

Includes: Experiential Learning Activity

Prerequisite(s): EPI 5340.

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

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