



Clinical Epidemiology

This area is designed primarily for clinicians and other health care professionals in the 42.5-credit master's program who wish to develop the quantitative skills needed for clinical research. Students take core courses in epidemiology and biostatistics to develop basic skills in study design and analysis that will allow them to examine clinical questions related to the diagnosis and treatment of disease. Additional courses in epidemiology and courses offered by other departments address related topics of potential interest such as health status and quality-of-life measurement, decision analysis, cost-effectiveness analysis, health services research, and quality improvement of health care.

While the appropriate content for this area may be covered by taking courses offered during the regular academic year (fall and spring semesters), requirements for the 42.5-credit SM degree in epidemiology may also be partially fulfilled by taking the summer courses offered through the [Summer Program in Clinical Effectiveness](#) and the [Summer Session in Public Health Studies](#). In this schedule students begin their program by taking a core set of courses during an initial summer period. They complete the SM program by taking advanced courses during the regular academic year and, if desired, during two or more summer periods. Alternatively, students can satisfy the requirements for the 42.5-credit SM degree by taking courses during summer periods and completing a supervised research project. The content of this project typically entails the design and implementation of a clinical study, the analysis of the resulting data, and the creation of a manuscript of quality suitable for publication. An outline for this project must be submitted at the time of application.

Recommended Coursework

BIO213 Applied Regression for Clinical Research

BIO214 Principles of Clinical Trials

EPI242 Seminar in Applied Research in Clinical Epidemiology

EPI271 Propensity Score Analysis: Theoretical and Practical Considerations

EPI288 Data Mining and Prediction

* Courses with an asterisk are offered every other year

Clinical Epidemiology Track Suggested Schedule		
Fall Semester Courses		
BIO 213	Applied Regression for Clinical Research	Orav Fall
EPI 242	Seminar in Applied Research in Clinical Epidemiology	Cook Fall/Spring
Wintersession Courses		
EPI 288	Data Mining and Prediction	Cook WS
Spring Semester Courses		
EPI 271	Propensity Score Analysis	Kurth, Seeger WS
BIO 214	Principles of Clinical Trials	Lagakos Spring I

- * Courses with an asterisk are offered every other year