Systematic Review and Meta-Analysis, 2013
EPID 731
1 credit

Instructor:
Charles Poole
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Course description:
Provides training in systematic review and meta-analysis. Topics include problem definition, defining and searching the literature, extracting results and study characteristics, data set preparation, publication bias and funnel plot analysis, analysis of overall heterogeneity, stratified and meta-regression analysis of study and population characteristics, and preparation of reports for publication.

Prerequisites: None

Course requirements:
Attendance and class participation are required for a P. For an H, students may begin a meta-analytic collaboration intended for publication with the instructor as a co-author or conduct an analysis and write a brief report with a meta-analytic data set and instructions that will be provided.

Recommended resources:
Borenstein M, Hedges LV, Higgins JPT, Rothstein HR. Introduction to meta-analysis. Chichester: John Wiley & Sons, 2009.

Cochrane Collaboration Handbook: www.**cochrane**.org/resources/**handbook**/

Egger M, Davey Smith G, Altman DG. Systematic reviews in health care: meta-analysis in context. London: BMJ Books, 2001.

Greenland S. Meta-analysis. Chapter 32 in: Rothman KJ, Greenland S, Lash TL. Modern epidemiology. Third edition. Philadelphia: Lippincott Williams & Wilkins, 2008;652-682.

PRISMA Statement web site: http://www.prisma-statement.org/

Sterne JAC (ed). Meta-analysis in Stata: An updated collection from the Stata Journal. Stata Press, 2009.

Schedule:

2301 McGavran-Greenberg Hall
12:30 PM – 1:45 PM

Date	Topics
Tue, Oct 1	Course introduction
Thu, Oct 3	History and overview
Tue, Oct 8	Defining, searching, retrieving the literature
Thu, Oct 10	Extracting results and study characteristics
Tue, Oct 15	Data base preparation
Thu, Oct 17	No class
Tue, Oct 22	Publication bias
Thu, Oct 24	No class
Tue, Oct. 29	Funnel plots
Thu, Oct 31	Overall heterogeneity, testing and describing
Thu, Nov 5	Random effects model
Tue, Nov 7	Random effects model (cont.)
Thu, Nov 12	Stratified and meta-regression analysis of study characteristics
Tue, Nov 18	Stratified and meta-regression analysis of study characteristics (cont.)