

Competencies

Clinical Trials Competencies – PhD and ScD Department of Epidemiology

			Evaluation Opportunities							
Specific Competencies	Learning Opportunities		Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
1. Appreciate the historical development of public health knowledge and research ethics Acquire basic public health knowledge through study of the history of public health, epidemiology, and specifically clinical trials	340.606 Systematic Reviews and Meta-Analysis 340.642-3 History of Epidemiology I-II 340.645 Introduction to Clinical Trials 340.863 Doctoral Seminars in Epidemiology 390.612 Design and Analysis of Clinical Trials Clinical Trials Journal Club		X	X						
Develop basic knowledge of the historical development of research ethics	306.655 Ethical Issues in Public Health 306.665 Research Ethics and Integrity 306.680 Ethics of Human Subject Research 340.642-3 History of Epidemiology I-II 340.863 Doctoral Seminars in Epidemiology 550.860 Research Ethics		X	X	X	X				

Competencies

Clinical Trials Competencies – PhD and ScD Department of Epidemiology

			Evaluation Opportunities							
Specific Competencies	Learning Opportunities		Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
2. Characterize public health problems and identify areas needing research	Identify new areas needing research and study particularly for clinical trials	340.606 Systematic Reviews and Meta-Analysis 340.645 Introduction to Clinical Trials 340.863 Doctoral Seminars in Epidemiology 390.612 Design and Analysis of Clinical Trials Clinical Trials Journal Club	X				X			
	Recognize and characterize public health problems and issues	340.606 Systematic Reviews and Meta-Analysis 340.645 Introduction to Clinical Trials 340.863 Doctoral Seminars in Epidemiology 390.612 Design and Analysis of Clinical Trials Clinical Trials Journal Club	X	X			X			X

Competencies

**Clinical Trials Competencies – PhD and ScD
Department of Epidemiology**

3. Access and critique literature

		Evaluation Opportunities							
Specific Competencies	Learning Opportunities	Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
Use library and electronic resources such as MEDLINE and other databases to identify articles and other information	340.820 Thesis Research Epidemiology					X			X
Read and critique literature and consider and interpret results	340.820 Thesis Research Epidemiology 340.863 Doctoral Seminars in Epidemiology Clinical Trials Journal Club	X	X	X		X			

Competencies

Clinical Trials Competencies – PhD and ScD Department of Epidemiology

			Evaluation Opportunities							
			Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
4. Design and conduct clinical trials										
Specific Competencies	Learning Opportunities									
Describe different study designs (e.g. survey, case-control, cohort, clinical trials, field trials, community intervention trials) and discuss when each is appropriate and the strengths and weaknesses of each design	340.752 340.753 340.754 340.645 340.820 390.612	Epidemiologic Methods 2 Epidemiologic Methods 3 Methodologic Challenges in Epidemiologic Research Introduction to Clinical Trials Thesis Research Epidemiology Design and Analysis of Clinical Trials	X				X			
Apply knowledge of design issues and strategies (stratification, confounding, choice of comparison groups, bias control via masking, randomization, etc.) to clinical trial design	340.752 340.753 340.754 340.645 340.820 390.612	Epidemiologic Methods 2 Epidemiologic Methods 3 Methodologic Challenges in Epidemiologic Research Introduction to Clinical Trials Thesis Research Epidemiology Design and Analysis of Clinical Trials	X				X			
Utilize knowledge of issues specific to clinical trials (e.g. equipoise and consent issues) when designing clinical trials	340.752 340.753 340.754 340.645 340.820 390.612	Epidemiologic Methods 2 Epidemiologic Methods 3 Methodologic Challenges in Epidemiologic Research Introduction to Clinical Trials Thesis Research Epidemiology Design and Analysis of Clinical Trials	X				X			

Competencies

Clinical Trials Competencies – PhD and ScD Department of Epidemiology

			Evaluation Opportunities							
Specific Competencies	Learning Opportunities		Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
4. Design and conduct clinical trials, continued Develop: <ul style="list-style-type: none"> • Patient information materials including consent letter or forms • And oversee consent process • And implement quality control procedures 	340.715 Problems in the Design of Epidemiologic Studies 390.611 Analytic Methods in Clinical Investigation 390.612 Design and Analysis of Clinical Trials 390.631 Principles of Drug Development 390.673 Ethical and Regulatory Issues in Clinical Research 390.675 Outcomes and Effectiveness Research Participate in a Multi-center Clinical Trial Conducted by the Data Coordinating Center		X	X			X			X
Use knowledge of research ethics to develop plan for dealing with problems that arise during conduct of trial	221.616 Ethics of Public Health Practice in Developing Countries 306.665 Research Ethics and Integrity 340.645 Introduction to Clinical Trials 340.715 Problems in the Design of Epidemiologic Studies 340.717 Health Survey Research Methods 340.820 Thesis Research Epidemiology 390.612 Design and Analysis of Clinical Trials		X				X			X
Understand and evaluate the ethics of human subjects participation in trials	221.616 Ethics of Public Health Practice in Developing Countries 306.665 Research Ethics and Integrity 340.645 Introduction to Clinical Trials 340.715 Problems in the Design of Epidemiologic Studies 340.717 Health Survey Research Methods 340.820 Thesis Research Epidemiology 390.612 Design and Analysis of Clinical Trials		X				X			X

Competencies

Clinical Trials Competencies – PhD and ScD Department of Epidemiology

			Evaluation Opportunities							
Specific Competencies	Learning Opportunities		Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
4. Design and conduct clinical trials, continued										
Collaborate effectively with colleagues	221.616 Ethics of Public Health Practice in Developing Countries 306.665 Research Ethics and Integrity 340.715 Problems in the Design of Epidemiologic Studies 340.717 Health Survey Research Methods 340.820 Thesis Research Epidemiology 390.612 Design and Analysis of Clinical Trials		X				X			X
Participate in:	340.645 Introduction to Clinical Trials 340.715 Problems in the Design of Epidemiologic Studies 340.820 Thesis Research Epidemiology 390.611 Analytic Methods in Clinical Investigation 390.612 Design and Analysis of Clinical Trials 390.631 Principles of Drug Development 390.673 Ethical and Regulatory Issues in Clinical Research 390.675 Outcomes and Effectiveness Research Participate in a Multi-center Clinical Trial Conducted by the Data Coordinating Center		X	X			X			X
Manage an epidemiologic study, specifically a clinical trial	340.645 Introduction to Clinical Trials 340.715 Problems in the Design of Epidemiologic Studies 340.820 Thesis Research Epidemiology 390.611 Analytic Methods in Clinical Investigation 390.612 Design and Analysis of Clinical Trials 390.631 Principles of Drug Development 390.673 Ethical and Regulatory Issues in Clinical Research 390.675 Outcomes and Effectiveness Research Participate in a Multi-center Clinical Trial Conducted by the Data Coordinating Center		X	X			X			X

Competencies

Clinical Trials Competencies – PhD and ScD Department of Epidemiology

			Evaluation Opportunities							
Specific Competencies	Learning Opportunities		Course Work/Exam	Written Comps	Department Preliminary Orals	School Preliminary Orals	Thesis	Final Defense	Public Thesis Presentation	Non-Thesis Research
5. Analyze data and prepare reports and manuscripts	Participate in analysis planning and aid in interpretation of trial results	340.645 390.612	Introduction to Clinical Trials Design and Analysis of Clinical Trials	X	X			X		X
	Develop performance and treatment monitoring reports	340.645 390.612	Introduction to Clinical Trials Design and Analysis of Clinical Trials	X				X		X
	Prepare manuscripts	340.820	Thesis Research Epidemiology					X		X