

UEP Policy and Planning Competency Grid

Course Name/Number: UEP 294-16

Instructor: Mary Davis

Semester: Fall 2011

Environmental Health for Policy and Planning

a) Knowledge Competencies	Specific sub-competencies or examples as developed in this course
1. History, structure, function of urban and metropolitan settlements	Moderate focus on the historical context of modern urban environmental health problems.
2. Economic influences on policy and planning (e.g. 'market' and 'polis' relationships)	Major focus on economic cost-benefit analysis and health impact assessment for evaluating environmental health policy alternatives. Major focus on the importance of economic status on the distribution of environmental harm and human health across a community.
3. Environmental, social and cultural influences on policy and planning	Major focus on the environmental, social, and cultural factors that influence human health, such as race, poverty, urban/rural, age, etc. Also covered in detail are how these factors further interact with the built environment to impact human health. Specific relevant topics include environmental justice, health disparities, sensitive sub-populations, etc.
4. Understanding different roles in policy and planning	
i) Levels of government	
ii) Governance structures	
iii) Citizens and residents	
iv) NGOs	
5. History, theory and processes of policymaking	
6. History, theory and process of planning	
7. Implementation of policy and planning	

8. Evaluation of policy and planning	
9. Administrative and legal aspects of policy	
10. Administrative and legal aspects of planning	
11. Politics of policy and planning	

b) Skills Competencies	Specific sub-competencies or examples as developed in this course
1. Critical thinking	
i) Defining problem	Major focus on developing a thesis question on a relevant (and answerable) environmental health problem.
ii) Documenting the extent of a problem	Major focus on conducting a literature review to summarize the existing state of knowledge on a given environmental health research topic.
iii) Documenting the political and social context	
iv) Documenting the environmental and spatial context	
v) Identifying possible analysis strategies and their implications	Major focus on constructing a methods section that organizes a plan for addressing a given environmental health research question.
vi) Identifying criteria for proposing solutions	
vii) Identifying criteria for selecting solutions	
viii) Evaluating the development and results of policies and plans	
2. Research skills	
i) Understanding research design	Major focus on constructing a thesis proposal, including writing an introduction, literature review, and methods section to address a relevant environmental health question. The methods section will produce a

	detailed research plan outlining an appropriate approach and tools to answer the research question.
ii) Collecting relevant literature	Major focus on conducting a literature review to summarize the existing state of knowledge on a given environmental health research topic.
iii) Analyzing relevant literature	Major focus on conducting a literature review to summarize the existing state of knowledge on a given environmental health research topic.
iv) Identifying and assessing data sources and limitations	Major focus on constructing a methods section that organizes a plan for addressing a given environmental health research question. This includes the identification and collection of relevant data on the topic.
v) Developing data collection instruments and tools	Major focus on constructing a methods section that organizes a plan for addressing a given environmental health research question. This includes the identification and collection of relevant data on the topic.
3. Data Analysis skills	
i) Interpreting and synthesizing data	Major focus on evaluating the environmental health literature, including academic papers that are quantitative in nature.
ii) Drawing inferences from specific observations to make	Major focus on evaluating the environmental health literature, including academic papers that are quantitative in nature. Students will learn to critically evaluate the strength of an argument addressed in the academic literature, and the extent to which those results are generalizable across the population.
iii) More generalizable findings	
iv) Comparative analysis	Major focus on evaluating the environmental health literature, including academic papers that are quantitative in nature. These papers will include meta-analyses and other comparative work relevant to an environmental health topic.
v) Longitudinal analysis	Major focus on evaluating the environmental health literature, including academic papers that are quantitative in nature. These papers will include longitudinal analyses relevant to an environmental health topic.
vi) Recognizing and accounting for limitations to findings	Major focus on evaluating the environmental health literature, including academic papers that are quantitative in nature. Students will learn to critically evaluate the strength of an argument addressed in the academic literature, and fully explore the limitations of the findings.
4. Qualitative Analysis skills	
i) Direct observation	
ii) Analysis of primary qualitative data	
iii) Analysis of secondary qualitative data	

5. Quantitative Analysis skills i) Descriptive statistics	
ii) Inferential statistics	
iii) Basic forecasting	
iv) Use of spreadsheets and statistical software	
6. Spatial Analysis skills i) Understand how to identify spatial problems and frame spatial questions for analysis and research	Major focus on understanding the spatial dimensions of environmental health problems.
ii) Use Geographic Information System for basic spatial analysis and mapping	Major focus on the use of online mapping tools to identify spatial dimensions of environmental health problems.
7. Communication skills i) Writing skills	Major focus on constructing a thesis proposal, including writing an introduction, literature review, and methods section to address a relevant environmental health question.
ii) Speaking skills	Major focus on public discussion of the existing academic literature on an environmental health topic, as well as the results of individual student research.
iii) Graphic presentation skills	
iv) Presentation strategies and methods	

c) Policy and Planning in Practice Competencies	Specific sub-competencies or examples as developed in this course
1. Collaboration skills i) Negotiation	
ii) Group project management	
iii) Group problem solving	
iv) Perspective-taking	
v) Adaptability, flexibility	
vi) Networking	
2. Organizational management skills i) Decision making	
ii) Strategic problem solving and adapting to change	
iii) Human resource development	
iv) Financial management and resource development	
3. Political and economic power mapping skills i) Understanding political and economic power structures and dynamics	
ii) Modes of influencing their use	
4. Ethical and professional behavior skills i) Understanding and upholding the role of ethics and accountability in professional policy and planning processes, practices, and behavior	

