**Course Competency**

**Competency 1:** The student will demonstrate knowledge of the scientific basis of social sciences research by:

1. Identifying the steps of the scientific method.
2. Describing the historical foundations of the development of the social sciences.
3. Identifying differences between scientific and non-scientific reasoning.
4. Assessing different forms of logical reasoning.
5. Recognizing common errors of logical reasoning.
6. Describing the difference between correlation and causality.
7. Exploring ethical considerations for social research such as IRB requirements.

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<tr>
<th>Learning Outcomes</th>
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<tbody>
<tr>
<td>• Critical thinking</td>
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<tr>
<td>• Information Literacy</td>
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<td>• Ethical Issues</td>
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**Competency 2:** The student will demonstrate knowledge of the relationship between research and theory by:

1. Evaluating various purposes for which social sciences research is used.
2. Identifying major research paradigms of the social sciences.
3. Assessing key characteristics of the major social science’s theoretical paradigms.
4. Describing different types of variables.
5. Describing procedures involved in the operationalization of variables in social research.
6. Assessing the characteristics of different research sample designs.

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*Updated Spring 2021*
| Competency 3: The student will demonstrate knowledge of how social research is structured by: | Numbers / Data  
Critical thinking  
Information Literacy |
|---|---|
| 1. Assessing distinctive issues involved in the scientific measurement of social phenomena.  
2. Recognizing the significance of population sampling techniques.  
3. Distinguishing between different types of research sample designs.  
4. Conceptualizing a research design.  
5. Constructing an instrument for data collection.  
7. Collecting, processing, and displaying data. | |

| Competency 4: The student will distinguish between and assess different research methodologies by: | Numbers / Data  
Critical thinking  
Information Literacy  
Ethical Issues |
|---|---|
| 1. Identifying the difference between qualitative and quantitative methods.  
2. Describing the distinguishing characteristics of experiments, surveys, field studies, content analysis, secondary data analysis, and evaluation research.  
3. Assessing the appropriateness of different research methods for specific purposes.  
4. Describing the significance of reliability and validity in social sciences research. | |

| Competency 5: The student will demonstrate the ability to analyze quantitative and qualitative data by: | Numbers / Data  
Critical thinking  
Information Literacy  
Ethical Issues  
Computer / Technology Usage |
|---|---|
| 1. Recognizing the role of computers and statistical software in social research.  
2. Assessing issues in the scientific analysis of qualitative data.  
3. Identifying issues in data management and coding procedures for qualitative data. | |

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<th>Competency 6: The student will demonstrate the ability to conduct a literature review by:</th>
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<td>1. Discussing the purpose of literature review in research.</td>
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<td>2. Searching for existing literature that pertains to a particular body of work or area of research.</td>
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<td>3. Reviewing the selected literature.</td>
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<td>4. Developing theoretical frameworks from the literature review that pertain to a particular research problem.</td>
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<tr>
<td>5. Developing conceptual frameworks as the basis for a research problem.</td>
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<td>7. Writing a literature review summary with properly formatted in-text citations and references according to accepted styles such as APA and MLA formatting.</td>
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**Course Competency 7:** The student will demonstrate an understanding of performing architectural analysis and refinement of the logical architecture of the system by:
1. Identifying and analyzing the non-functional requirements/architectural factors that have an impact on the architecture.
2. Developing quality scenarios that define measurable/observable responses that can be verified (i.e., developing quality scenarios of the form.
3. Analyze alternatives and create solutions that resolve the impact.
4. Designing for a separation of concerns to maximize low coupling and high cohesion at the architectural level.
5. Applying the use of Façade, Observer, and Controller patterns in the context of architectural layers.
6. Organizing packages to reduce the impact of changes to the system.