

WEEK	TOPIC	READINGS	ASSIGNMENTS
<b>WEEK 1</b>  <b>Tuesday: Jan 16</b>	<b>Lesson 1</b> <i>Introduction to GIS &amp; Cartography</i> <ul style="list-style-type: none"> <li>Course introduction,</li> <li>Class procedure and objectives</li> <li>Review of syllabus content</li> </ul>	Chapter 1: <b>An Introduction to GIS</b> From: GIS Fundamentals., 3/E or 4/E Authors: Paul Bolstad	
<b>WEEK 2</b>  <b>Tuesday: Jan 23</b>	<b>Lesson 2</b> <i>Principles of Cartographic Design</i> <ul style="list-style-type: none"> <li>Essential Map Elements</li> <li>Basic Symbolology</li> <li>Visual Hierarchy &amp; Balance</li> <li>Scale</li> <li>Generalization</li> </ul>	<i>Available on Blackboard</i> Chapter 11: <b>Elements of Cartographic Design</b> From: Thematic Cartography & Geographic Visualization, 2/E Authors: Slocum, McMaster, Kessler, Howard  Chapter 6: <b>Scale &amp; Generalization</b> From: Thematic Cartography & Geographic Visualization, 2/E	<b>Assigned: Homework 01</b>  <b>Assigned: Map Critique</b>
<b>WEEK 3</b>  <b>Tuesday: Jan 30</b>	<b>Lesson 3: PRACTICUM 1 (Cartography)</b> <i>Principles of Cartographic Design</i> <ul style="list-style-type: none"> <li>Essential Map Elements</li> <li>Basic Symbolology</li> <li>Visual Hierarchy &amp; Balance</li> <li><b>ATTENDANCE REQUIRED</b></li> </ul>	Same as for Week 2	<b>Due: Practicum Lab, Friday Feb 2</b> <b>(additional days from Practicum for “spit and polish”)</b>  <b>Due: Map Critique First Posting</b>
<b>WEEK 4</b>  <b>Tuesday: Feb 6</b>	<b>Lesson 4</b> <i>Thematic Mapping &amp; Data Classification</i> <ul style="list-style-type: none"> <li>Spatial Distribution of Data</li> <li>Choropleth Mapping</li> <li>Proportional Mapping</li> <li>Density Mapping</li> <li>Data Classification Schemes for thematic mapping</li> </ul>	<i>Available on Blackboard</i> Chapter 4: <b>Principles of Symbolization &amp;</b> Chapter 5: <b>Data Classification</b> From: Thematic Cartography & Geographic Visualization, 2/E  “When Maps Lie,” The Atlantic CityLab. <a href="http://www.citylab.com/design/2015/06/when-maps-lie/396761/">http://www.citylab.com/design/2015/06/when-maps-lie/396761/</a> Author: Wiseman	<b>Due: Map Critique Response Posting</b>
<b>WEEK 5</b>  <b>Tuesday: Feb 13</b>	<b>Lesson 5</b> <i>Coordinate Systems</i> <ul style="list-style-type: none"> <li>Categorizing Projections: Class, Case &amp; Aspect</li> <li>Distortion</li> <li>Projection Properties</li> <li>Choosing an Appropriate Map Projection</li> <li>Projections demo in ArcMap</li> </ul>	Chapter 3: <b>Map Projections &amp; Coordinate Systems</b> From: GIS Fundamentals., 3/E or 4/E Authors: Paul Bolstad	<b>Due: Homework 01</b> <b>(Hand-in start of class)</b>

<b>WEEK 6</b> <b>Tuesday: Feb 20</b>	<b>Lesson 6</b> <i>Databases &amp; Geospatial Modeling</i> <ul style="list-style-type: none"> <li>▪ DBMS &amp; Relational Databases</li> <li>▪ Querying &amp; Linking Spatial Data</li> <li>▪ Data Management in ArcGIS</li> <li>▪ Metadata</li> <li>▪ The Modeling Process</li> </ul>	Chapter 2: <b>Data Models</b> From: GIS Fundamentals., 3/E Authors: Paul Bolstad  Chapter 8: <b>Attribute Data and Tables</b> From: GIS Fundamentals., 3/E Authors: Paul Bolstad	Assigned: Homework 02
<b>WEEK 7</b> <b>Tuesday: Feb 27</b>	<b>Quiz 1</b>		
<b>WEEK 8</b> <b>Tuesday: Mar 6</b>	<b>Lesson 7</b> <i>Capturing Spatial Data</i> <ul style="list-style-type: none"> <li>▪ Organizing the Data Collection process</li> <li>▪ Data Capture</li> <li>▪ Data Transfer</li> <li>▪ Topology</li> <li>▪ Data Quality: Accuracy &amp; Precision</li> <li>▪ Error: Sources, Recognition &amp; Solutions</li> </ul>	Chapter 4: <b>Maps, Data Entry, Editing &amp; Output</b> From: GIS Fundamentals., 3/E Authors: Paul Bolstad  Chapter 14: <b>Data Standards &amp; Data Quality</b> From: GIS Fundamentals., 3/E Authors: Paul Bolstad	Due: Homework 02
<b>March 12-16</b>	<b>SPRING BREAK!</b>		
<b>WEEK 9 (OSM)</b> <b>Tuesday: Mar 20</b>	<b>Lesson 8: Open Source GIS</b> <ul style="list-style-type: none"> <li>▪ Open Source GIS Concepts</li> <li>▪ Open Source GIS Software's</li> <li>▪ Open Street Map</li> <li>▪ Introduction to USAID project</li> </ul>	Instructor will provide readings on this topic (Will be posted on Blackboard)	
<b>WEEK 10 (OSM)</b> <b>Tuesday: Mar 27</b>	<b>Lesson 9: Open Source GIS Practical Training</b> <ul style="list-style-type: none"> <li>▪ USAID Briefing</li> <li>▪ Learn to work with iD editor</li> <li>▪ <b>ATTENDANCE REQUIRED</b></li> </ul>	Same as for Week 9  *Mapping Party Friday, March 31st	Assigned: OSM Project  Assigned: GIS Proposal

<b>WEEK 11</b>  <b>Tuesday: Apr 3</b>	<b>Lesson 10: PRACTICUM (Data Management in ArcGIS)</b> <ul style="list-style-type: none"> <li>Data Management in ArcGIS</li> <li>Data Capture</li> <li>Data Transfer</li> <li>Projection information</li> <li><b>ATTENDANCE REQUIRED</b></li> </ul>	Chapter 4: <b>Maps, Data Entry, Editing &amp; Output</b> From: GIS Fundamentals., 3/E Authors: Paul Bolstad  Chapter 14: <b>Data Standards &amp; Data Quality</b> From: GIS Fundamentals., 3/E Authors: Paul Bolstad	<b>Due: OSM Project</b>  <b>Due: Practicum 02 (Friday, Apr 6)</b>
<b>WEEK 12</b>  <b>Tuesday: Apr 10</b>	<b>Lesson 11</b> <i>Vector Analysis &amp; Geoprocessing</i> <ul style="list-style-type: none"> <li>Queries</li> <li>Proximity Functions</li> <li>Geoprocessing</li> </ul>	Chapter 9: <b>Basic Spatial Analysis</b> From: GIS Fundamentals., 3/E Authors: Paul Bolstad  Chapter 10: <b>Topics in Raster Analysis</b> From: GIS Fundamentals., 3/E Authors: Paul Bolstad	<b>Assigned: Homework 03</b>  <b>Due: Two GIS Proposal Ideas (we will discuss in class)</b>
<b>WEEK 13</b>  <b>Tuesday: Apr 17</b>	<b>Lesson 12: PRACTICUM 3 (Cartography Workshop)</b> <i>Cartography Workshop</i> <ul style="list-style-type: none"> <li>Essential Map Elements</li> <li>Basic Symbology</li> <li>Visual Hierarchy &amp; Balance</li> <li>Choropleth Mapping</li> <li><b>ATTENDANCE REQUIRED</b></li> </ul>	<i>Available on Blackboard</i> Chapter 11: <b>Elements of Cartographic Design</b> From: Thematic Cartography & Geographic Visualization, 2/E Authors: Slocum, McMaster, Kessler, Howard  Chapter 6: <b>Scale &amp; Generalization</b> From: Thematic Cartography & Geographic Visualization, 2/E Authors: Slocum, McMaster, Kessler, Howard	<b>Due: Homework 03 (Hand-in start of class)</b>  <b>Due: Practicum 03 (Friday, Apr 20)</b>  <b>Assigned: Homework 04 (Challenge Assignment)</b>
<b>WEEK 14</b>  <b>Tuesday: Apr 24</b>	<b>Lesson 13</b> <i>Web Mapping</i> <ul style="list-style-type: none"> <li>Introduction to web mapping</li> <li>Web mapping demo with Carto</li> </ul>	Instructor will provide readings on Web Mapping (Will be posted on Blackboard)	<b>Due: Homework 04 (at the beginning of class)</b>  <b>Due: GIS Proposal</b>
<b>EXAM WEEK</b> <div>Quiz 2 (Exam Week)</div>			

The Final Quiz (Quiz 2) for GEOG6304 will be scheduled by the Office of the Registrar, by the third or fourth week of class. The date will be announced in class. It is your responsibility to make sure that you do not have a time conflict with another subject.

**\*\*Class material/schedule subject to change.**