Course Syllabus

**Section 1**  
*Getting Started: Let’s Get Mapping*
Consider the value and purpose of cartography as science and art. Get set up with ArcGIS Pro, ArcGIS Online, and exercise data. Use ArcGIS Pro to design a small-format, multiscale topographic map, using generalization tools and scale-dependent symbology. Use layouts for composition. Add contextual detail, insets, legends, and marginalia.

**Section 2**  
*Maths for Map Makers*
Explore how coordinate systems, transformations, and projections affect your map’s message. Deal with the effects of projections and data classification methods on thematic maps. Design and publish a custom basemap in a nonstandard projection to support thematic data. Build attribute-driven symbology. Publish a multiscale web map and app.

**Section 3**  
*The Language of Graphics*
See how generalization, symbology, and color affect your story. Explore generalization techniques that reduce feature complexity for smaller-scale displays. Create a variety of thematic maps, including choropleth, proportional symbol, value-by alpha, and multivariate maps. Change symbology and use transparency in creative ways.

**Section 4**  
*Labels and Composition*
Learn a little about typography, label placement, and map composition. Set up a palette of label styles for different features and explore options for positioning them around other map details. Create a layout that includes a range of marginalia. Use ArcGIS expressions to define labels in innovative ways.

**Section 5**  
*Going 3D*
Consider how to best use the z dimension to represent data for both reference and thematic maps. Use 3D symbology and develop a sense of when 3D adds value to your map. Build 3D scenes and vary the way features are represented using attributes and dynamic symbology.

**Section 6**  
*Mapping Movement and Change*
Use the time-aware and animation controls in ArcGIS Pro to design maps that show temporal change. Direct an animated movie to map change; add captions and dynamic overlay information; and publish in a range of popular, shareable formats. Create a display of small multiples for an infographic poster.