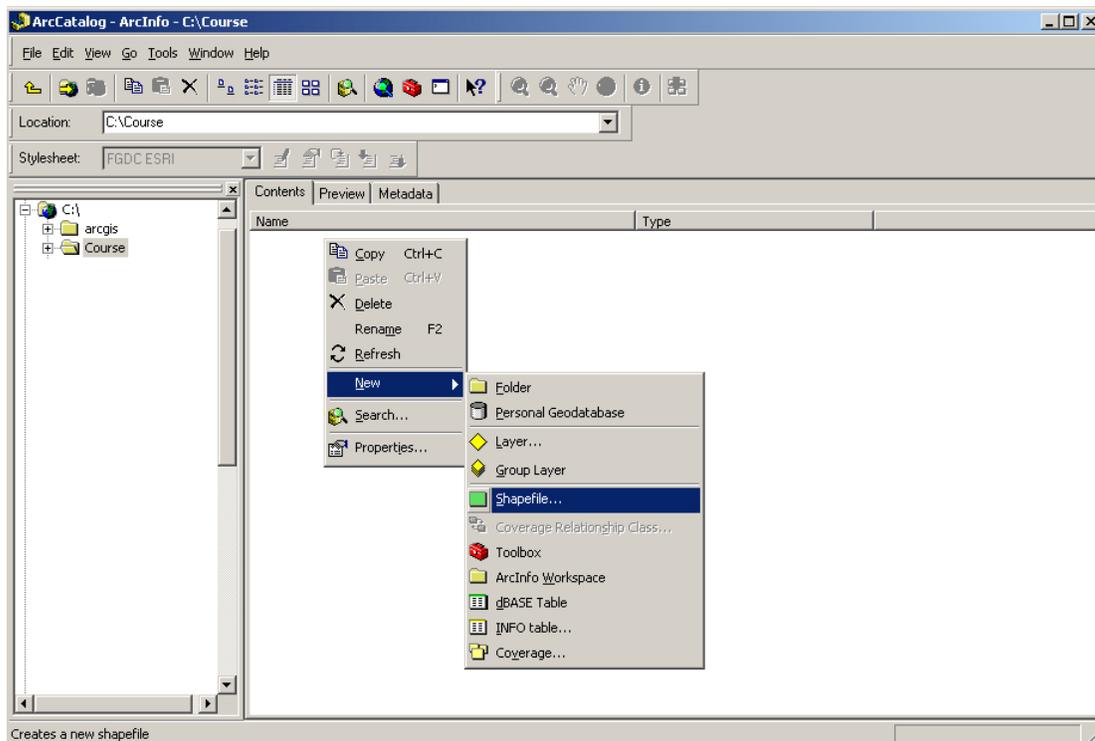


## Creating a new shapefile and digitizing basics in ArcMap

1. To create a new shapefile, open ArcCatalog by clicking the *ArcCatalog*  button in an open ArcMap project.

2. Navigate the directory structure to the left of the window and single-click the directory that you would like to create the new shapefile in. Right-click in the directory space and choose **New > Shapefile...**

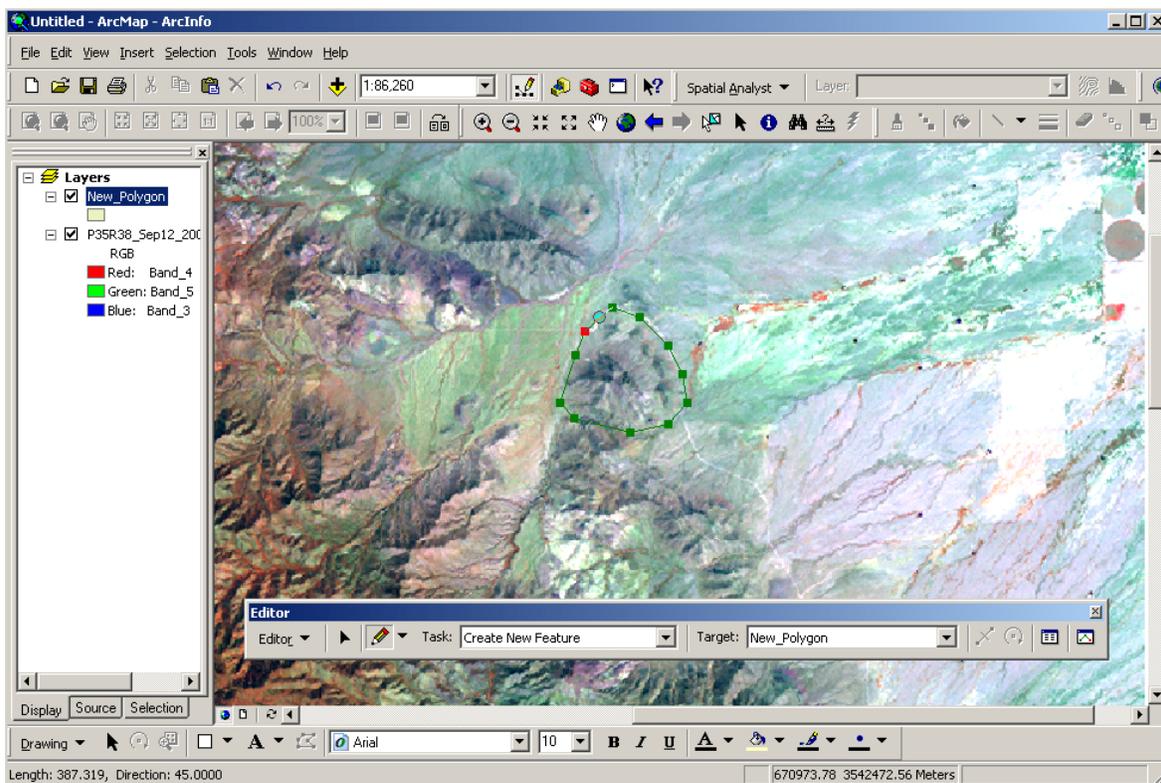


3. In the *Create New Shapefile* Dialog, choose a file name, the type of file (point, line or polygon), and choose a projection by clicking the edit... button. Choose the *Select...* button in the *Spatial Reference Properties* dialog to choose the desired projection from a list. Although ArcMap can “project on the fly” it is important to use the same projection for all map layers in a project in order to preserve accuracy. Click **OK** twice.

4. The new shapefile may now be opened in an ArcMap project and be used for on-screen digitizing.

5. There are numerous options available in ArcMap in terms of on-screen digitizing. This guide will only introduce the very basics in order to facilitate use. In an open project, load a base layer (satellite image, topo map, dem...) and the newly created shapefile.

6. Bring up the *Editor* toolbar by right-clicking anywhere on the top button bar of ArcMap and choosing *Editor*. Make sure the new shapefile is listed as the *Target*, and *Create New Feature* is listed as the *Task*. Click the *Editor* button, and choose *Start Editing*. This activates the bar, and the Pencil tool may be used to edit new features. For a polygon, single-click each node and double-click to close the polygon. For a line, single-click each node and double-click to finish. For a point, click once for each feature. Choose stop digitizing in the *Editor* button when complete.



7. As stated earlier, there are many options with regard to digitizing in ArcMap. For more information, consult the help files or software manuals, particularly to understand table editing, snapping and streaming.