

Table of Contents

Introduction.....	4	PostGIS and SRID's.....	43
About This Course.....	5	PostGIS Metadata Tables.....	44
GIS Fundamentals.....	6	Expressing Spatial Objects.....	47
What is GIS?.....	7	Creating PostGIS Tables & Loading Data.....	51
The Raster Model.....	8	Creating PostGIS Tables.....	52
Raster Data Structures.....	9	Removing Geometry Columns.....	55
Vector Data.....	11	Exercises.....	56
Spatial Coordinate Systems.....	14	Loading GIS Data.....	57
Spatial Relativity.....	16	Creating Indexes.....	58
Projections.....	19	Exercises.....	60
Spatial References.....	21	Simple PostGIS Queries	
Understanding Polygon Access.....	22	(Simple Features for SQL).....	61
Geometries.....	23	PostGIS Queries.....	62
Installing PostGIS.....	24	Basic Intersection Queries.....	64
PostGIS Pre-Install Steps.....	25	Exercises.....	65
Installed Files.....	28	Areas From Polygons.....	66
Creating a PostGIS Database.....	30	Exercises.....	69
PostGIS Upgrades.....	31	Computing Centroids.....	70
Exercises.....	33	Coordinate Transformations.....	71
PostGIS Data Loads.....	34	Exercises.....	72
Importing Shape Files.....	35	Aggregate Functions.....	73
Exercises.....	39	Exercises.....	75
PostGIS Features.....	41	Geometry Relationship Functions.....	76
PostGIS and OpenGIS.....	42	Exercises.....	79



Introduction to GIS with PostgreSQL & PostGIS

Other Geometry Functions.....	80	General MAP File Format.....	112
Exercises.....	82	Exercises.....	113
Visualizing PostGIS Results.....	83	Defining Map Layers.....	114
Using uDig.....	84	Sample MAP File with Layer.....	118
Installing uDig.....	85	Adding Scale Information.....	120
Attaching to a Data Source.....	86	Exercises.....	122
Connecting to a WMS Server.....	87	Specifying Class Information.....	123
Adding PostGIS Sources.....	89	Performing Joins.....	127
Managing Layers.....	91	Styles.....	129
Adding Custom Layers.....	92	Labels.....	130
Displaying Meta-Data.....	93	Exercises.....	132
Navigating the Maps.....	94	Interactive Maps.....	133
Exercises.....	95	MapServer Browse Mode.....	134
Using ArcExplorer.....	96	Creating the Web Template.....	135
Deploying UMN MapServer.....	97	Exercises.....	137
About MapServer.....	98	Setting Fonts.....	138
Installing MapServer.....	100	Exercises.....	139
Creating Map files.....	104	MapServer Documentation.....	140
Map File Format.....	105	Questions?.....	141
Setting Web Display Parameters.....	108	Where to Find Answers.....	142
Determining Map Information.....	110		