

**Geographic Information Systems and Remote Sensing for Natural Resource
Management
FW3540**

**Study Guide for Third Hour Exam
Spring Semester 2009**

Chapters in textbook: Chapter 12, Chapter 13, Chapter 15 (watersheds only), Chapter 19

Terms

- Neighborhood operation
- Raster zonal operations
- Raster focal operations
- Raster local operations
- Reclassification
- Map algebra
- Depressionless or filled DEM
- Flow direction
- Flow accumulation
- Watershed
- Pour point
- Deterministic model
- Stochastic model

Discuss why watershed delineation and analysis is done using raster data instead of vector data?

Why is a DEM critical to delineating and mapping riparian areas?

Review all the GIS analysis functions covered lectures, both raster and vector. Look closely at Chapters 12 and 13 and the corresponding lecture notes. You may be asked to construct a flowchart to solve a resource management problem.

Be able to determine flow direction and accumulation from a DEM