Lecture 8: Geoprocessing with ArcGIS Toolbox

Geography 4/581

Fall 2018

Check-in

Exam Review

Final Project Orientation

Exam Review

#9: Applying or tagging data object with a spatial location is known as: Georeferencing, with two examples being postal addresses and latitude/longitude.

#12. For each field in the table, identify both the attribute type (a) and the measurement scale (b) of the values.

	Attribute type	Measurement scale
ObjectID	**a:numeric/integer**	**b:nominal**
rainfall	**a: numeric/floating point**	**b: ratio**
Type	**a: text**	**b: nominal**
temp	**a: numeric/floating point**	**b: interval**

Final Project Orientation

Week 7

- **Lecture**:
  - Mon November 5 — Lecture 12: Final project—Introduction & worksheet peer review.
  - Wed November 7 — Lecture 13: Data collection—Where do I get data?
- **Lab**:
  - Lab 7: Vegetation Land Cover Report (due in two weeks).

Week 8

- **Lecture**:
  - Mon November 12 — Lecture 14: Guest lecturer: Adam Lake.
  - Wed November 14 — Lecture 15: Project Management.
  - Final project proposal due 12pm Wednesday November 14.

Final Project Orientation

Final Project

- Topic Ideas
- Worksheet (PDF)—(DOCX)—(RTF)
- Worksheet—Peer Feedback
- Proposal (PDF)—(DOCX)—(RTF)

Due: Wednesday December 5th at 10:15 am

The project will be not unlike the labs you will have completed, except the data, analysis, and products of it will be designed by you rather than the instructor. As you progress through the class, be thinking about possible topics for your final project.

Graduate students will have two additional components to their final project. The first is a description of the analysis you did (4-10 pages), or a related literature review to the subject matter. Be sure to provide citations and reasoning for your methodology. The second is to present your project briefly in the last week of class.

Geoprocessing with ArcGIS Toolbox

Geoprocessing Environments

- Overwriting tool output
- Geoprocessing log file
- Background and foreground processing
- Script tool editing and debugging
- ModelBuilder
- Results management
- Display and temporary data

Toolbox/tool Documentation Structure

Geoprocessing with ArcGIS Toolbox

Analysis toolbox
Conversion toolbox
Data Management toolbox
Spatial Analyst Toolbox

Geoprocessing Analyses

- Usually a combination of tools and procedures
- Step-wise Manual Exploration evolves to Documented Repeatable Procedures
- Experimentation, hypothesis testing, empirical learning