

Cons 340 - Key concepts for exam 1:

5 components of GIS

What can a GIS do? (ppt slide)

Levels of measurement

Accuracy vs precision

Scale - 1 D not 2, large vs small

Spatial reference – GCS – PCS, developable surfaces, authalic sphere, spheroid, geoid, basic geodesy concepts

DMS to DD conversion

Data models - TIN, raster, vector – object/field

Vector data formats

Projection

Relational DB – terms, - tuples, relations, etc.; Cardinality. Keys

Data type, domain

Join vs relate

Relational algebra (top 6 operators), how are they used in SQL

And vs OR – SQL – selection concepts

Remote sensing – EM energy, bands, classification (sup unsup), spatial & spectral resolution, spectral signatures, platforms, sensors, etc.

Raster analysis - Boolean AND vs OR, Functions (focal, zonal, global, local), Surface analysis

Modelbuilder stuff - file locking, states, layers, where it saves *.tbx, environment settings, relative path

Topology –definition