



GEO 447 PRINCIPLES OF GIS

- Future of GIS
- Final “Written” exam

Created by JDG 2000

Class slides are based on readings, the current NCGIA Core Curriculum for GIS(ystems) and GIS(cience), Kemp & Goodchild (1991), the NCGIA Core Curriculum Project at UBC, and Foote & Heubner's *The Geographer's Craft*

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History

- GIS originated in the mid 1960s
- Takes Off in 1980s
 - major growth phase began in early 1980s due to combined effects of developments in software, cost- effectiveness of hardware
 - development of digital data infrastructure
- 1990s expanded data infrastructure & cheaper software & hardware
 - increased commercialization of product and development

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Is GIS like remote sensing?

- Remote Sensing?
 - major efforts began in late 1960s
 - grew in 1970s & 1980s
 - heavily funded by military/defense agencies
 - developed in federal labs--not universities or private sector
 - ‘victim’ of post-Cold War era?
 - GIS considered a by-product & add-on of RS
 - remote sensing has become a technical project based program
 - lacks theory
 - expectations were high, but benefits not necessarily realized

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GIS is different...really

- Development more closely associated with education & commercial sector
 - perhaps, it has more post-Cold War applications than RS
- GIS is only now being integrated into government
 - although, perhaps expectations are too high
- GIS data is being released at an amazing rate and is easier & cheaper than RS data
- GIS & Society is beginning to address questions of epistemology & theory
 - avoids project orientation

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GIS Problems

- Contract Workforce
 - Professional GIS-ers are often hired guns lacking institutional context
 - GIS-ers are less frequently social scientists and tend to CS
- Divergence
 - human & physical division within geography
 - discipline divisions
 - public/private dichotomy
 - uses are different

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Visions of a GIS Future

- Automated Geography (Dobson 1983)
 - like the expectations of logical-positivism or later behaviouralism
- A spatial information science
 - recent NCGIA efforts, including I-19 & new Core Curriculum