GEOG 960 Techniques Seminar

READINGS and ASSIGNMENT LIST

For week 2 (September 20th) FINAL

Read:

- Gober, P. "In Search of Synthesis", Presidential Address, (to appear in March 2000 issue of the Annals of the Association of American Geographers), 31 pp.
- James, P. E., & G. J. Martin. 1981. All Possible Worlds: A History of Geographical Ideas, 2nd Ed. John Wiley & Sons, New York. [Chapters 16 (pp. 369-388) and 18 (pp. 404-426).]

Write:

• Two paragraphs, with the first addressing your personal definition of geography, and the second addressing your notions on the future of the discipline.

Research and bring:

• Photocopy of one article that addresses a technical development in the fields of Geographic Information Science (GIS) or Cartography. Ideally, the paper will include some discussion of the implications of this innovation to the future of geographic teaching or research. Please be sure to write the full reference on the first page.

For week 3 (September 27th) FINAL

Read:

- DiBiase, D. 1996. Rethinking Laboratory Education for an Introductory Course on Geographic Information. *Cartographica* 33: 61-72.
- Keller, C. P. 1996. Towards an Introductory Cartographic Curriculum for the 21st Century. *Cartographica* 33: 45-53.

Student-provided papers (all will read and indicated student must be prepared to lead discussion):

- Berry, J. K., Buckley, D. J., & C. Ulbricht. 1998. Visualize realistic lanscapes: 3-D modeling helps GIS users envision natural resources. *GIS World* 11(8): 42-47. (**Olson**)
- Brewer, C. A., & R. B. McMaster. 1999. The State of Academic Cartography. *Cartography and Geographic Information Science* 26: 215-234. (**Reiter**)
- Stewart, M. A. 1999. FAME Gives Power to Utility Company. *GeoInfo Systems* 9(4): 20-24. (Escott)
- Tilton, D. W., & S. K. Andrews. 1993. Space, Place, and Interface. *Cartographica* 30(4): 61-72. (**Rawling**)

• Walford, N. 1999. Making more of maps. *Geography* 84: 129-138. (Chenoweth)

Research and bring:

 Photocopy of one article that addresses a technical development in the field of Remote Sensing. Ideally, the paper will include some discussion of the implications of this innovation to the future of geographic teaching or research. Please be sure to write the full reference on the first page.

For week 4 (October 4th) FINAL

Read:

- Jensen, J., et al. 1998. UCGIS "Spatial Data Acquisition and Integration" White Paper, http://www.geog.umn.edu/umucgis/research_priorities/
- Rediscovering Geography Committee. 1997. Rediscovering Geography: New Relevance for Science and Society. National Academy Press, Washington. [Chapter 3 (pp. 28-46) and 4 (pp. 47-69).]

Student-provided papers (all will read and indicated student must be prepared to lead discussion):

- Carande, R. E. 1999. Next Generation Radar Opens New Doors. Space Imaging, July/August issue, pp. 24-26. (Lyden)
- Donoghue, D. N. M. 1999. Remote Sensing. *Progress in Physical Geography* 23: 271-281. (**Huang**)
- Spencer, R. D. 1997. Remote sensing and GIS applications in the US Forest Service. *Cartography* 26: 31-40. **(Chen)**
- Tilley, K. A. 1998. ASPRS Launches Remote Sensing Core Curriculum. *Photogrammetric Engineering & Remote Sensing* (April issue): 255. (**Johnson**)

Research and bring:

• Photocopy of one article that addresses a technical development in the fields of PC computers and the Internet. Ideally, the paper will include some discussion of the implications of this innovation to the future of geographic teaching or research. Please be sure to write the full reference on the first page.

For week 5 (October 11th) Final

Read:

 Anonymous. 1998. UCGIS "Distributed Computing" White Paper, http://www.geog.umn.edu/umucgis/research_priorities/

Student-provided papers (all will read and indicated student must be prepared to lead discussion):

- Butler, J. C. 1999. Another Node on the Internet. *Computers & Geosciences* 25: 205-206, 621-622, 709-710, 873-875. (**Rawling**)
- Jiang, B. & F. J. Ormeling. 1997. Cybermap: the Map for Cyberspace. *The Cartographic Journal* 34: 111-116. (Chenoweth)
- McClurg, P.A. & H. E. Lerner. 1998. Earth System Science Internet Project Widens Wyoming Student's World. *Geo Info Systems*, March 1998, pp. 34-37. (Lyden)
- Ramsden, S. 1999. Geography 'On the Line'. *Teaching Geography* 24: 34-35. (Olson)
- Singh, R. 1999. Providing GIS Services over the Internet. *Proceedings, Urban Regional Information Systems Association Conference*, Chicago, Aug. 21-25, pp. 440-445. (**Huang**)

Research and bring:

Photocopy of one article that addresses a technical development with implications for the
future of geographic research, for use next week. Please be sure to write the full
reference on the first page. Also bring the URL showing a web-based resource for
teaching or research that is particularly useful or innovative for this week's discussion, if
not already included with your paper.

For week 6 (October 18th) Final

Read:

• Rediscovering Geography Committee. 1997. Rediscovering Geography: New Relevance for Science and Society. National Academy Press, Washington. [Chapter 5 (pp. 70-108) and 6 (pp. 109-137).]

Student-provided papers (all will read and indicated student must be prepared to lead discussion):

- Annonymous. 1999. Harmonize Geospatial Initiatives through Standards (http://www.opengis.org/info/gisworld/GeoWorld499.htm) AND OGC delivers GI Interoperability and Industry Coordination (http://www.opengis.org/techno/articles/9611gim.htm (Reiter)
- Callander, B. A. 1997. Global climatic change the latest scientific understanding. *Geojournal* 42.1: 55-63. (**Johnson**)
- Dobson, J. E. 1993. The Geographic Revolution: A Retrospective on the Age of Automated Cartography. *Professional Geographer* 45(4): 431-439. (Chen)
- Foote, K. E. 1999. Bringing Faculty Online: inspiring and sustaining innovation in information and computer technologies (ICT). *Journal of Geography in Higher Education* 23(1): 5-8. (Escott)

Research:

• Consider five USA Geography departments for review in the next two weeks

For week 7 (October 25th) Final

• Each student should examine the undergraduate programs of their five assigned Geography departments. Summarize the characteristics of these programs (similarities and differences), and your reaction to the various components of their curricula. Please have a one page outline of your findings to me by 10:00am on the morning before class, so I can make copies for distribution. We will be attempting to discover the common programmatic themes, and design an "ideal" undergraduate curricula.