Preparing Students for the Workforce

A Balanced Approach

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Delta State University

Typical Approach

- Higher Education
  - Liberal Arts Core
  - Major Course of Study
- Student Activities
- Part-time/Summer Job

Higher Education: Liberal Core

GENERAL EDUCATION REQUIREMENTS 39 - 41

COURSE	SUB/TR	SEM	HRS	GR
ENG 101 Eng Comp			3	
ENG 102/103 Eng Comp			3	
ENG LIT Elect			3	
HIS 101, 102, 103, 104, 201, or 202			3	
*FINE ARTS			3	
PHI 201, LIT, HIS, or Fine Art not already taken			3	
MAT 103 Qt Reas/MAT 104 Col Alg/MAT 106			3	
LAB Science			3-4	
LAB Science			3-4	
**Perspectives on Society			3	
**Perspectives on Society			3	
CIS 205 Micro Applications			3	
COM 101, 102, or 202			3	

*Select one art, music, theater appreciation, history, intro course

**ANT 101; ECO 210,211; GEO 201, 303; PSC 103, 201;
PSY 101; SOC 101

WRITING PROFICIENCY REQUIREMENTS

ENG 300, CR/CAAP, CR/PPST, ENG 301			0-3	

SPECIAL DEGREE REQUIREMENTS 4

ENG 303 Technical Writing			3	
PER 101 Concepts in PE			1	

Higher Education: Major Course

GEOSPATIAL CORE

GEOSPATIAL TECHNOLOGIES 53

COURSE	SUB/TR	SEM	HRS	GR
GIS 202 Intro GIS I			3	
GIS 211 Digital Imaging Proc I			3	
GIS 310 Adv GIS II			3	
REM 316 Intro Remote Sensing			3	
GIS 341 Case Studies in GEOINT			3	
GIS 391 Topographic Mapping			3	
GIS 411 Techniques in Intel Analysis			3	
GIS 421 Trends in Spatial Technologies			2	
REM 421 Info Extract - Microwave Data			3	
GIS 461 Geosp Math, Algorithms, & Stats			3	
GIS 470 Programming GIS			3	
GIS 480 Internet, GIS, & Spat Databases			3	
GIS 490 Spatial Tech Internship			15	
CIS 235 Micro Applications II			3	

Select four of the following: 12

GIS 200 Comp Maps and Cartog			3	
GIS 231 Photogrammetry I			3	
GIS 311 Digital Image Proc II			3	
GIS 431 Photogrammetry II			3	
REM 431 Info Extract - Multi, Hyper & Spectral			3	
GIS 241 Fund Tech in Surveying			3	
GIS 351 Law and Surveying			3	
GIS 401 Advanced Surveying			3	

GEOGRAPHY 9

GEO 201 Intro Human Geography			3	
GEO 303 World Regional Geography			3	
GEO 443 Military Geography			3	

How to Make Better Use of Their Time (Value)?

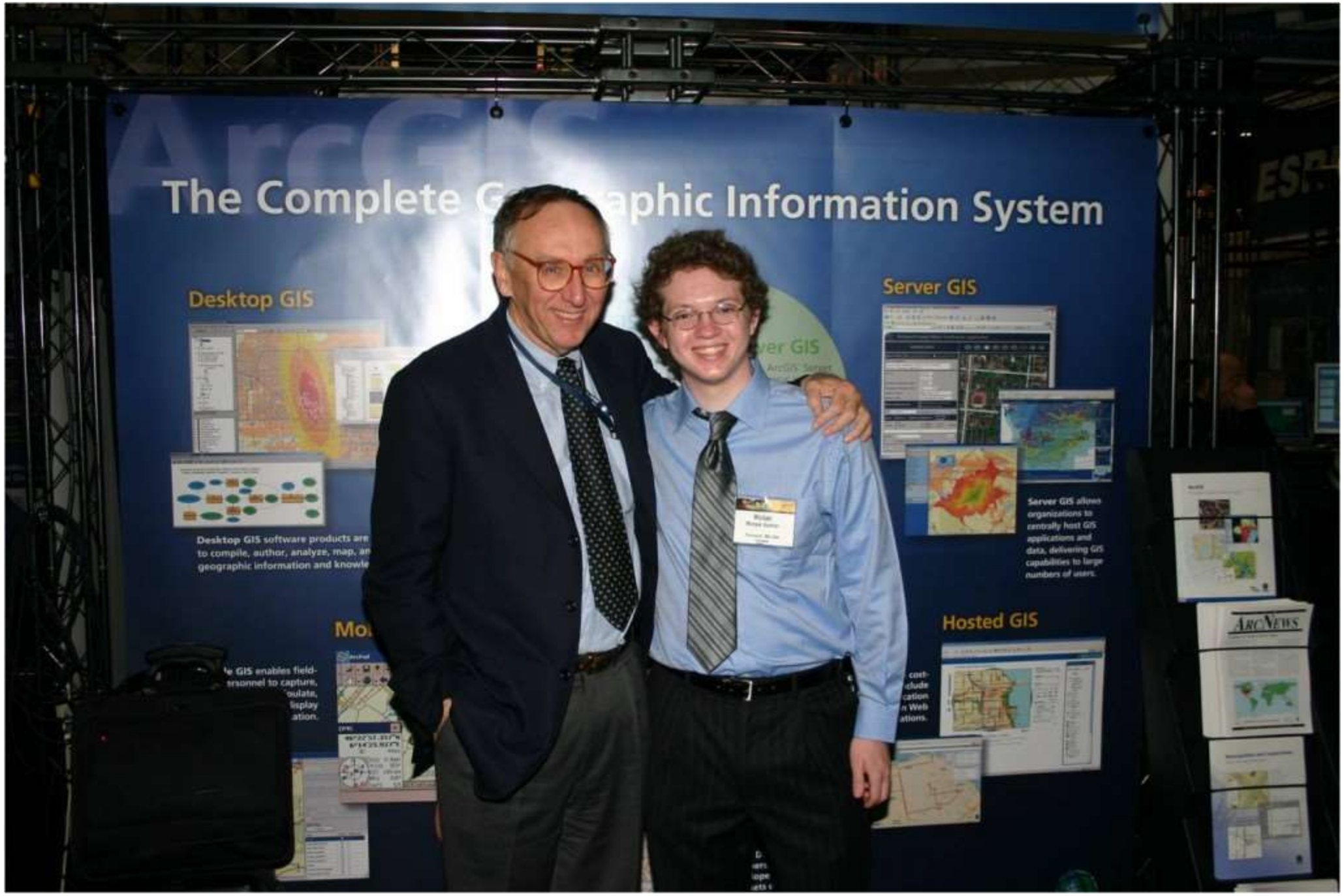
Balance Through Cooperative Education

GEOSPATIAL CORE

GEOSPATIAL TECHNOLOGIES 53

COURSE	SUB/TR	SEM	HRS	GR
GIS 202 Intro GIS I			3	
GIS 211 Digital Imaging Proc I			3	
GIS 310 Adv GIS II			3	
REM 316 Intro Remote Sensing			3	
GIS 341 Case Studies in GEOINT			3	
GIS 391 Topographic Mapping			3	
GIS 411 Techniques in Intel Analysis			3	
GIS 421 Trends in Spatial Technologies			2	
REM 421 Info Extract - Microwave Data			3	
GIS 461 Geosp Math, Algorithms, & Stats			3	
GIS 470 Programming GIS			3	
GIS 480 Internet, GIS, & Spat Databases			3	
GIS 490 Spatial Tech Internship			15	
CIS 235 Micro Applications II			3	

Tele Atlas


Desktop GIS
Server GIS
Hosted GIS
ArcNews

DSU
ALUMNI

Making Cooperative Education Count

- Tie Experience to Education via Certification
- Example
  - 4-5 years part-time experience plus full-time summers
  - Geospatial core curriculum
  - Specialized upper-division courses
  - Student should pass USGIF journeyman-level exams (initial success rate being tested now)

The New Balance

- 4-year degree
- Typical student activities
- 2-4 year’s commensurate experience
- Experience and education leveraged to earn certifications

The Big Ask

- How do we make Cooperative Education more commonplace in Geography, particularly with respect to the common skills needed (but which are un-popular with many academic geographers – ex, programming, data management, analytic techniques…)?
- How do we further tighten the linkage between SOC, geography/geospatial degrees, certification, and cooperative education such that there is a well recognized continuum feeding the workplace?