

# **A. Dean Monroe, Jr Ph. D., GISP**

## **Summary of Qualifications to Date:**

Ten years of teaching experience in lab and classroom settings, across multiple disciplines. Additional experience in the construction and deployment of online technical courses.

Interdisciplinary research experience in environmental science, remote sensing of agricultural nutrient systems, service market structures, and socio-economic geography.

Professional experience in cartography, geographic information systems, spatial and biometrical statistics, numerical analysis, and remote sensing at university and federal government agencies.

## **Education:**

### **Angelo State University (San Angelo, TX)**

Masters in Business Administration (*in process*)

### **Oklahoma State University (Stillwater, OK)**

Doctorate in Environmental Science (2008)

Emphasis in Precision Agriculture and Biostatistics

Dissertation title: *Normalized Difference Vegetative Index Based Crop Yield Prediction Models to Minimize Nitrogen Fertilizer Application.*

Masters in Geography (2001)

Emphasis in Geographical Information Systems and Statistics

Master's Research title: *Oklahoma Freemasonry: A Geographic Analysis.* Published as: *Monroe Jr, A.D and J.C. Comer. 2001. Spatial and Socioeconomic Patterns of Freemason Membership in Oklahoma. Proceedings of the Oklahoma Academy of Sciences. 82:95-109.*

### **East Central University (Ada, OK)**

Bachelors in Cartography (1999)

Minor in Mathematics

## **Certifications:**

Certified GIS professional (GISP) granted by the GIS Certification Institute (2010)

Certificate in GIS granted by Oklahoma State University (2001)

## **Experience:**

### **Angelo State University** (San Angelo, TX: August 2009 – Current)

Online Course Development (May 2010 – Current)

Center for Security Studies (Border Security Program)

Online Course construction: Introduction to Geographic Information Systems (BOR 6302)

Management and Marketing (MBA Program)

Online Course construction: Business forecasting and time series analysis (MSC 6301)

Adjunct Professor (August 2010 – Current)

Department of Biology

Courses taught: Advanced Biometrics and Experimental Design (BIO 6301) and Introduction to Biometry (BIO 4480)

Department of Geology

Course taught: Introduction to Geographic Information Systems (GEO 3371)

Department of Agriculture

Course taught: Research Methods (ANSI 6321)

Lecturer in Management Science (August 2009 – May 2010)

Department of Management and Marketing

Courses taught: Applied Research Methodology (MSC 3332), Geomapping Fundamentals (MIS 3371), and Statistical Analysis for Business and Economics (MSC 2331)

### **Northern Oklahoma College** (Stillwater, OK: August 2005 – May 2009)

Adjunct Professor

Department of Mathematics

Courses taught: College Algebra, Intermediate Algebra, and Concepts of Algebra. Mathematics tutor: Student Success Center Oklahoma State University/Northern Oklahoma College cooperative.

### **Oklahoma State University** (Stillwater, OK: August 1999 – May 2009)

Paraprofessional Researcher (January 2009 – May 2009): Optical sensor algorithm calibration

Research Assistant (June 2002 – December 2008): Doctoral research

Facilities Information Specialist (May 2001 – December 2001): Contract appointment

Teaching Assistant (August 1999 – December 2001): Department of Geography

### **Internship with Department of Commerce (Bureau of the Census)** (Suitland, MD: Summer 2000)

Cartographer (GS-1370-9): International Population Center (Census 2000 project)

### **The United States Environmental Protection Agency** (Ada, OK: 1998 - 1999)

Cartographer (GS-1370-7)

Physical Science Assistant (GS-1311-4)

## **Professional:**

### Publications

Monroe Jr, A.D. and J. C. Comer. 2002. "Spatial and Socioeconomic Patterns of Freemason Membership in Oklahoma". Proceedings of the Oklahoma Academy of Sciences. 82:95-109.

### Presentations

Monroe Jr, A.D. 2008. "Validating Variable Rate N Fertilizer Algorithms with Remote Sensing". American Society of Agricultural Engineers Annual International Meeting. Providence, Rhode Island.

### Professional Cartographic Work

Monroe Jr, A.D. and C.E. Brady. 2003. "Oklahoma Masonry". Published for the Grand Lodge of Ancient Free and Accepted Masons for the State of Oklahoma. 2nd ed. GIS Integration. Self Published.

Neman, R.L. 2002. "Guidebook for Geological Field Trips in South-Central Oklahoma". Arbuckle Geosciences, Ada Oklahoma. R.L. Neman, Professor of Chemistry, East Central University.

Monroe Jr, A.D. and C.E. Brady. 1999. "Oklahoma Masonry". Published for the Grand Lodge of Ancient Free and Accepted Masons for the State of Oklahoma. Self Published.

## **Research Support/Collegial Support**

### GIS/Cartographic and Statistical Research Support (Angelo State University)

Statistical support for student research (Carr and Honors research students).

Black, E. 2011. Effects of cognitive task of static and dynamic balance. Carr Research Scholarship. Unpublished. Adviser: Dr. Carolyn Mason.

Halfman, S. 2010. Consumer preference of a liquor store in their community and an appropriate location. Poster: Angelo State University Student Academic Showcase and Presentation: student section of the Agricultural and Applied Economics Association. Adviser: Dr. Sierra Howry.

Cartographic work for the Small Business Development Center.

Dave Erickson 325.942.2098

GIS research for the Community Development Initiatives.

Kenneth Steward 325.486.6423

Map for Elder Index July 5 2011 (initial release)

### GIS/Cartographic and Statistical Research Support (Oklahoma State University)

Spatially weighted population prediction model (2007) Dr. Tracy Boyer

Spatial modeling of nutrient load on Wister Lake, OK (2005) Dr. Dan Storm

Advanced spatial analysis course (2004) Dr. Jon Comer

Hydrologic network analysis (2001) Dr. Dale Lightfoot

## **Technical Experience:**

### **Computer Aided Drafting and Design (CADD), Photogrammetry, and Field Methods**

Software: AutoCAD versions 12r1 – Acad2000, AutoCAD Overlay (v2000), AutoCAD World (v2000), and Datem (geo-registration software).

Experience: Kelish and B-8 Wilde photogrammetric stereo-compilers. Limited softcopy experience. Familiarity with surveying and navigation equipment and on the job training in public land surveying. Inventory, facilities, and infrastructure in utility management.

### **Illustration**

Software: CorelDraw, Freehand, and OS/FS Inkscape and OpenOffice products.

Experience: Map design and enhancement, science illustration, and publication graphics.

### **Statistical/Numerical Analysis Software**

Software: SAS, SPSS, S-Plus, Excel, Surfer, Matlab, and Derive. Specialization in OS/FS R for Statistics.

Experience: teaching and research in statistical programming methods.

### **GIS and Remote Sensing**

Software: ArcView(3.x – primary extensions), ArcGIS (v9.2 – 10), Idrisi, and ERDAS. Limited use of OS/FS GRASS. Image pre-processing and fourier analysis experience with Matlab and ERDAS.

## **Service:**

### **Honor Societies**

Sigma XI: The Scientific Research Society: Elected 2004, current membership at Oklahoma State University.

Gamma Theta Upsilon. Elected 1997, alumni status.

### **Professional Societies**

American Association of Geographers

American Society for Photogrammetry and Remote Sensing

South Central Arc Users Group

Phi Delta Kappa

### **Community Service**

Masonic fraternity and affiliated bodies. (1997- current, state level offices held)

Benevolent and Protective Order of Elks (2002 – current, local offices held)

## **References:**

### **Angelo State University**

Dr. Gil Engdahl (Department of Animal Science) 1.325.942.2029

Dr. Tom Badgett (Department of Management and Marketing) 1.325.942.2383

Dr. Carol Diminnie (Department of Management and Marketing) 1.325.942.2304 ext.230

Dr. Sudhir Chawla (Department of Management and Marketing) 1.325.942.2304

### **Northern Oklahoma College**

Debbie Quirey (Director) 1.405.744.2212

### **Oklahoma State University**

Dr. William Raun (Department of Plant and Soil Sciences) 1.405.744.6418

Dr. Jon Comer (Department of Geography) 1.405.744.9176

Dr. Dale Lightfoot (Department of Geography) 1.405.744.6250

## Teaching Evaluations:

### IDEA Center Diagnostic Form Report

#### Angelo State University

Geomapping Fundamentals  
(MIS 3371)

Applied Research Methodology  
(MSC 3332)

Statistical Analysis for Business and  
Economics

(MSC 2331)

Introduction to Biometry  
(BIO 4480)

Research Methods  
(ANSI 6321)

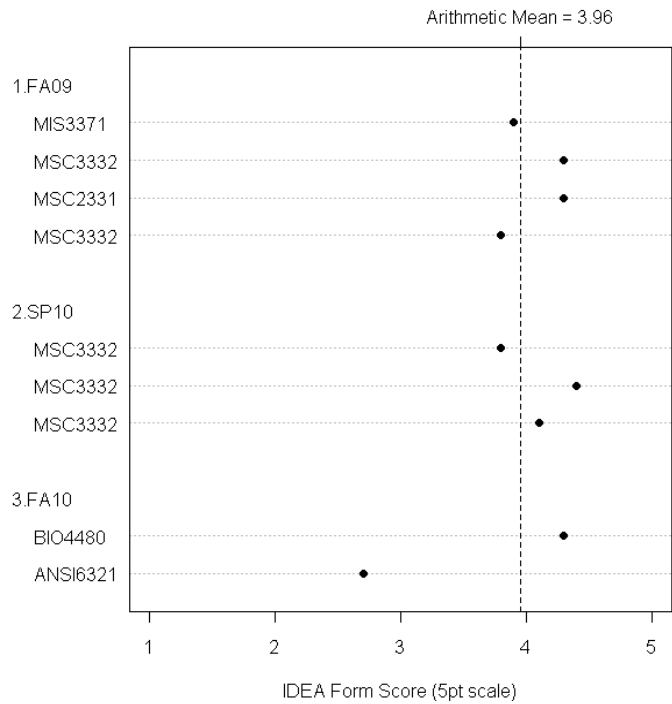


Figure 1: Average Adjusted Summary Evaluations. FA =Fall, SP = Spring and year (i.e. FA09 = Fall 2009).