Geography BA/BS Student Learning Outcomes Assessed by the Portfolio (in the Undergraduate Catalog):

<u>Critical Thinking</u>: Analyze geographic information and apply interpretation of data toward problem solving or modeling.

Communication: Interpret and effectively communicate information spatially, graphically and/or with statistics

Below gives more specificity than the catalog regarding the components.

- Analyzing Geographic Information (Understands issues, effectively evaluates geographic literature, data, methods and assumptions, interprets patterns, relationships, differences and trends, and synthesizes information into coherent explanations)
- Applying Data Towards Problem Solving or Modeling (Understands problem, poses research question, gathers and organizes data, evaluates data and applies appropriate methods, interprets and understands findings, implications and limitations)
- **Spatial Communication /Mapping** (Presents meaningful spatial data effectively, without distortion and chartjunk; uses appropriate map and design elements, i.e. title and sources, scale, direction, labels, inset, appropriate categories, colors, tones, symbols, line weights, fonts, legend, etc.)
- **Graphical Communication** (Presents meaningful graphical data effectively, without distortion and chartjunk; uses appropriate graph and design elements, i.e. title and sources, including axis labels and units, feature labels, categories, color, tones, symbols, line weights, fonts, legend, etc.)
- Statistical Interpretation and Communication (Understands variables, data, hypotheses, correctly chooses statistical tests or models, interprets and communicates statistical findings)

Portfolio Content: Four to six samples of your best work in geography, showing diverse types of products, tied to our department's critical thinking and communication skills learning outcomes. Include at least one of each marked with an asterisk (*). You were reminded to keep copies of your graded work, which can save as photo snapshots, .pdfs or .jpgs and merge these into a document or larger .pdf using Adobe Professional[®]. If you are a B.S. student or working on the B.A. in Environmental Geosciences, content should focus on physical geography. You are also welcome to submit ungraded work as part of the portfolio performed on an internship or through work related to the profession, but as other portions these should address our major's learning outcomes.

Submit portfolio as a *.doc, *.docx or *.pdf file via e-mail to <u>mossa@ufl.edu</u> Because this is used by the department, college and university to assess student learning outcomes and we evaluate as S/U even though it is not re-graded, it is assessed using a rubric for our records. Students who do not submit this will receive an "I" for the course, which hopefully you will resolve soon after the semester ends.

Examples:

- Graph analyzing primary or secondary data*
- Map analyzing primary or secondary data, preferably in ArcGIS*
- Writing with critical thinking or data analysis, such as a journal article review, literature review, data analysis project, or honors thesis*
- Analysis of primary or secondary data using statistics or modelling*
- Projects that show the ability to use other software, such as AutoCAD, Matlab, SigmaPlot for varied applications in Geography
- Illustration, conceptual diagram, including a Photoshop or Illustrator product
- Table, concept map or compilation that synthesizes information or ideas from literature or other
- Analysis of data collected in field (GPS points, surveying skills, vegetative, hydrologic, soils or other) or laboratory (sediments, soils, water, biota, etc.)
- An economic base analysis, a site location analysis or other human geography project
- A power point poster (printed on a page for easing viewing) or presentation (in handout form) of a project associated with a class or research in Geography
- Links to web pages created (with screen capture or printout of content)
- Links to videos created (e.g. scientific animation, featuring educational content)
- Blog related to the profession
- Other professional work products relevant to geography (see instructor for questions)

Framing the portfolio and its components

- Cover page: Should include name, date, preferred e-mail (required)
- Table of contents, which describes entries as follows (required)

Portfolio Entries (Title, Background)	Achieved Goals (Outcomes, Concepts and Skills shown)			

- A resume (optional, can be helpful if also using portfolio for seeking employment)
- Captions or description of each entry describing why it was done (purpose), when it was done (class and year), the data sources and associated limitations, what you did to manipulate or analyze (if relevant), what it shows (interpretation), etc. (required)
- A reflective piece about your professional journey and future goals (optional, required for some graduate and professional schools)
- A references section with any relevant sources (optional)

Some Resources/Helpful Websites:

Books by Edward R. Tufte (Visual Display of Quantitative Information, Envisioning Information,

Visual Explanations, Beautiful Evidence)

http://www.sealthreinhold.com/tuftes-rules/rule_three.php (Graph Design)

http://www.gsd.harvard.edu/gis/manual/style/ (Map Design)

http://webdesign.tutsplus.com/articles/understanding-visual-hierarchy-in-web-design--webdesign-84 (Website Design)

Portfolio Rubric, Senior Seminar

CRITERIA & RANKING	4 (Excellent)	3 (Good)	2 (Fair)	1 (Poor)
CRITICAL THINKING				
Analyze Geographic Information (Understands issues, evaluates geographic literature, data, methods and assumptions, interprets patterns, relationships, differences and trends, and synthesizes information into coherent explanations)	Meets all criteria	Meets most criteria	Meets some criteria	Rarely meets criteria
Apply Interpretation of Data Towards	Meets all	Meets most	Meets some	Rarely meets
Problem Solving or Modeling (Understands problem, poses research question, gathers and organizes data, evaluates data and applies appropriate methods, interprets and understands findings, implications and limitations)	criteria	criteria	criteria	criteria
COMMUNICATION				
Spatial Communication /Mapping (Presents meaningful spatial data effectively, without distortion and chartjunk; uses appropriate map and design elements, i.e. title and sources, scale, direction, labels, inset, appropriate categories, colors, tones, symbols, line weights, fonts, legend, etc.)	Meets all criteria	Meets most criteria	Meets some criteria	Rarely meets criteria
Graphical Communication (Presents meaningful graphical data effectively, without distortion and chartjunk; uses appropriate graph and design elements, i.e. title and sources, including axis labels and units, feature labels, categories, color, tones, symbols, line weights, fonts, legend, etc.)	Meets all criteria	Meets most criteria	Meets some criteria	Rarely meets criteria
Statistical Interpretation and communication (Understands variables, data, hypotheses, correctly chooses statistical tests or models, interprets and communicates statistical findings)	Meets all criteria	Meets most criteria	Meets some criteria	Rarely meets criteria