

**Fall 2012**  
**SUR4670– Geomatics Engineering Design 1**

<b>Direct Assessment</b>	<b>Student Assessment</b>	<b>Program (Student) Outcomes</b>
<b>Average</b>	<b>Average</b>	
4.05	4.55	1. An understanding of professional and ethical responsibility.
4.05	4.53	2. A working knowledge of fundamentals, engineering tools, and experimental methodologies.
4.05	4.53	3. An understanding of the social, economic, and political contexts in which engineers must function
4.05	4.60	4. Have the ability to plan and execute an engineering design to meet an identified need.
4.05	4.56	5. An ability to function on multi-disciplinary teams
4.05	4.57	6. An ability to communicate effectively.
4.05	4.63	7: Graduates will have an advanced understanding of the following areas of Geomatics Engineering: a) Surveying, including but not limited to, boundary and land surveying, subdivision and plat creation, control surveys, and construction surveys, b) geographic information systems (GIS), c) photogrammetry and remote sensing, d) mapping, to include but not limited, to topographic maps, cadastral maps, and land use maps, e) geodesy, and f) Global Navigation Satellite Positioning Systems (GPS, GLONASS, etc).
4.05	4.58	8. Graduates will have a conceptual understanding of the role of Geomatics Engineering in infrastructure planning and sustainability, including safety, risk assessment, environmental issues, and hazard mitigation
4.05	4.58	9. Graduates will be successful in finding professional employment, attaining professional licensure, and/or pursuing further academic studies.