# Assessment: Program Assessment Plan



## Program (CT) - BAS- Land Surveying/Geomatics Emphasis

**Unit Mission:** The Land Surveying and Geomatics program (LSG) is committed to addressing the disparate and constantly changing needs of students - throughout Nevada and beyond - who are preparing for a geomatics career. Great Basin aims to deliver a high quality and relevant educational experience that prepares LSG students for professional success.

## Outcome: Prepare to take and pass the Fundamentals of Land Surveying examination

Prepare to take and pass the Fundamentals of Land Surveying examination developed by the National Council of Examiners for Engineering and Surveying (NCEES).

Outcome Status: Active

Assessment Year: 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020

**Start Date:** 08/31/2015

#### Assessment Measures

**Survey** - A Point-of-Contact questionnaire will be emailed to all graduates asking whether or not they passed the National Council of Examiners for Engineering and Surveying Fundamentals of Surveying (FS) exam which contains 110 multiple-choice questions. The exam appointment time is 6 hours long, which includes a nondisclosure agreement, tutorial (8 minutes), the exam (5 hours and 20 minutes), and a scheduled break (25 minutes). (Active)

**Criterion:** 70% of all GBC graduates will pass the Fundamentals of Surveying (FS) exam on their first attempt.

**Notes:** 2015 Exam results from the Fundamentals of Surveying (FS) exam had a 54% national pass rate. Graduates from GBC Land Surveying/Geomatics program have a 100% pass rate on the Fundamentals of Surveying (FS) exam from 2009 to 2015 based on the POC questionnaire that was developed and implemented in 2015.

Program data will be compiled and sent to institutional research every May 15th.

Outcome

### Outcome: Satisfy the educational requirement for licensure

Satisfy the educational requirements for licensure required by NRS.625.270 as a professional Land Surveyor in Nevada and recognize the benefit of life-long learning by participating in continuing education as students or as instructors.

Outcome Status: Active

Assessment Year: 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020

**Start Date:** 08/31/2015

#### Assessment Measures

## Program (CT) - BAS- Land Surveying/Geomatics Emphasis

**Software** - A Point-of-Contact questionnaire will be emailed to all graduates asking whether or not they passed the National Council of Examiners for Engineering and Surveying PS exam which contains 100 multiple-choice questions. It lasts 6 hours and is split into a 4-hour morning session (67 questions) and a 2-hour afternoon session (33 questions). The PS exam uses USCS measurements. (Active)

Criterion: 80% of all GBC graduates will pass the Profession Surveying (PS) examination on their first attempt.

**Notes:** 2015 Exam results from the Professional Surveying (PS) exam had a 78% national pass rate. Graduates from GBC Land Surveying/Geomatics program have a 100% pass rate on the Professional Surveying (PS) exam from 2009 to 2015 based on the POC questionnaire that was developed and implemented in 2015.

Program data will be compiled and sent to institutional research every May 15th.

#### Outcome: Proficiently apply sound measurement methods

Proficiently apply sound measurement methods, mathematics, science, and surveying tools to collect, analyze, and edit spatial information in professional applications.

Outcome Status: Active

Assessment Year: 2016-2017, 2017-2018, 2018-2019, 2019-2020

**Start Date:** 08/31/2016

#### Assessment Measures

Written Test/Exam - The final exam for SUR 280 will consist of a Level 1 certification test that is officially recognized by the National Society of Professional Surveyors (NSPS). Successful completion of the Level 1 certification exam demonstrates that he or she is minimally competent to perform surveying tasks at a specified technical level. Certification provides the individual with a sense of achievement, since it reflects advancement in the field of surveying. Certification also provides employers with a method of determining job assignments and advancement since certification is an indication of one's ability to perform specific job tasks. (Active)

**Criterion:** 80% of all GBC graduates will pass the National Society of Professional Surveyors Level 1 Certified Survey Technician exam with a 70% or better.

Written Test/Exam - The final exam for SUR 281 will consist of a Level 2 certification test that is officially recognized by the National Society of Professional Surveyors (NSPS). Successful completion of the Level 2 certification exam demonstrates that he or she is minimally competent to perform surveying tasks at a specified technical level. Certification provides the individual with a sense of achievement, since it reflects advancement in the field of surveying. Certification also provides employers with a method of determining job assignments and advancement since certification is an indication of one's ability to perform specific job tasks. (Active)

**Criterion:** 80% of all GBC graduates will pass the National Society of Professional Surveyors Level 2 Certified Survey Technician exam with a 70% or better.

### **Outcome: Convey spatial information**

Convey spatial information in graphical, textual, and verbal forms as an individual or as a collaborating member of a professional team.

Outcome Status: Active

Assessment Year: 2015-2016, 2016-2017, 2017-2018, 2018-2019, 2019-2020

**Start Date:** 08/31/2015

#### Assessment Measures

## Program (CT) - BAS- Land Surveying/Geomatics Emphasis

**Assignment - Project -** The final student project requires the application of knowledge and skills acquired in previous field experience and coursework. Projects may include field/office evidence research, urban subdivision layout, descriptions, map/plat construction, and/or a directed undergraduate research project. (Active)

**Criterion:** 80% of students will pass the senior capstone class with a 70% or better on the class presentation, poster presentation, and research paper.