

B.S. Geography SLOA Report 2016

RESULTS

Tracking Graduates and Alumni:

Out of the 16 BS students graduated during the review period, we were able to track job placement for 13 of them (Figure 1). These numbers show that Geography students are getting good jobs related to their field, are staying in Alaska, and are bringing benefit to the State.

Of the 13 of 16 students who we were able to track:

- 12 are in fields directly related to their degree program including 1 in graduate school.
- 8 are employed in geospatial fields.
- 3 are employed in science education.
- 1 is attending graduate school in related field
- 9 are employed in Alaska.

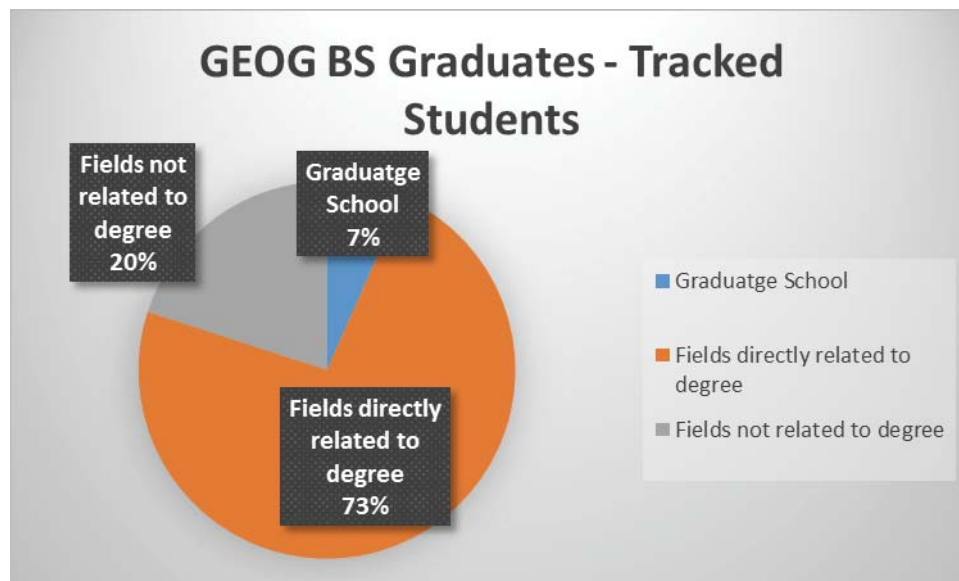


Figure 1. Results from survey of students that graduated from UAF with a BS in Geography during the review period.

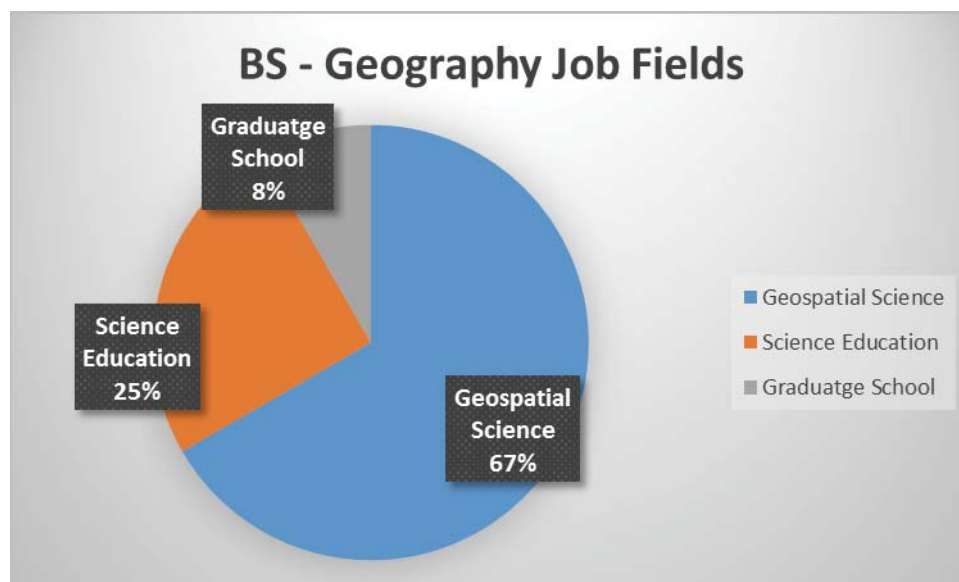


Figure 2. Breakdown of job category of students entering fields directly related to their BS Geography degree. The graph clearly shows the importance of Geospatial Science and the demand for these students in the workforce. The BS Geography – Geospatial Sciences directly addresses this demand and is the most popular BS track in the program.

Here are the specific job placements for those doing work related to their Geography BS degree:

- Fish & Wildlife Technician II, AK Dept. of Fish & Game.
- Business Development at LeadDog Consulting (GIS map data services)
- Survey Technician, TerraSond Limited
- Graduate Research Technician, Snow & Ice & Permafrost, Geophysical Institute, UAF; MS candidate, Geology & Geophysics, UAF.
- Hydrographic Survey Technician, TerraSond Limited.
- Engineering Assistant II, Alaska Department of Transportation.
- Earth Science Research Consultant, NASA; and Science Lab Instructor, Holy Rosary School.
- Education and Outreach Program Assistant, International Arctic Research Center, UAF.
- Survey Technician at TerraSond Limited
- Physical Science Technician with the US Geological Survey, Geosciences and Environmental Change Science Center.
- Visitor Liaison, Japan Tourism Bureau, Hokkaido, Japan.
- Science Instructor, Montana Outdoor Science School.

Workforce Development:

During the review period we have had 13 students enrolled in either Internships (GEOG 300), Undergraduate Research (GEOS 488), or employed in a field directly related to Geography while enrolled as a student (Table 1). The below table highlights these students and the Agencies and Organizations the Geography Program partnered with to prove these student opportunities. The current curriculum now requires all Geography BS students to enroll in GEOG 300 or GEOS 488 so these numbers will increase as will the partnerships we are developing. This provides students with the necessary skills and employee contacts to enter the workforce or continue onto graduate school upon graduation from the program.

Table 1. Geography students participate in a variety of Internships or undergraduate research projects. Students are also directly employed while seeking their degrees. The table shows the type of workforce development and the Agency or Business Partner involved. Geography has formed numerous partnerships with State, Federal, and local organizations to provide students with these opportunities.

Geography Student Internships, Undergrad Research, and Employment					
Student	Internship or Undergrad Research/Employment	Deg Program	Agency or Business Partner	Term	Outcome
1	Internship	BS	Alaska Department of Fish & Game	SP14	
2	Internship	BS	PhD project research assistant: Remote sensing techniques to detect and map geo-hazards such as landslides and avalanches in Whittier and Seward	SU14	
3	Internship	BS	Charlotte County, FL: Special Projects Division	SU16	
4	Internship	BS	ASRC Federal Mission Solutions	SU16	Led to a job offer from ASRC and option of financial support for graduate work.
5	Internship	BS	Gates of the Arctic/Yukon-Charley Rivers National Park and Preserve	SU16	
6	Internship	GIS Minor	Geographic Information Network of Alaska (GINA)	F16	
7	Internship		Geographic Information Network of Alaska (GINA)	F16	
8	Internship	BS	Alaska Satellite Facility.	F16	His supervisor has offered Aidan a job following graduation, and the option of full RA support to pursue a Masters or PhD at UAF.
9	Research/Employment	BS	Division of Geological and Geophysical Surveys		
10	Research/Employment	BS	Arctic Coastal Geoscience Lab		
11	Research/Employment	BS	Arctic Coastal Geoscience Lab		
12	Research/Employment	BS	Geographic Information Network of Alaska		
13	Research/Employment	BS	Museum of the North		

B.S. Geography SLOA Plan 2016, Appendix 1

EXAMPLES OF RUBRICS AND OTHER ASSESSMENT TOOLS FOR GEOGRAPHY DEGREE SLOA

Examples are shown on the following pages.

Example: Written work Rubric

W - Written work Rubric

Student's name _____	Date _____			
Title of document _____				
BS Capstone	MS Thesis	PhD Thesis	MS proposal	PhD proposal
Completed by _____				

	Yes (excellent)	Somewhat (adequate)	No (inadequate)	N/A
1. Does the work represent the student's own scientific research?				
2. Does the work discuss the significance of the student's research?				
3. Does the work clearly articulate the student's research goals?				
4. Are the methods appropriate given the student's research agenda?				
5. Is the data analysis appropriate and accurate?				
6. Are the results clearly presented and interpreted?				
7. Are the implications of the results clearly presented?				
8. Are the tables clear, effective, and properly formatted?				
9. Are the figures clear, effective and properly captioned?				
10. Does the literature review sufficiently recognize prior work in the field?				
11. Are the citations presented consistently in the text and references?				
12. Is the writing appropriate for the target audience?				
13. Is writing clear, direct, and free of language errors?				

Greatly modified from Duke University's Biology Thesis Assessment Protocol (BioTAP), Julie A. Reynolds, 2007.

Example: Poster Presentation Rubric

Summary of Poster Presentation Grades (GEOG 111x Fall 2016).

Criteria	A	B	C	D	F
Scoring	9.0 - 10.0	8.0 - 8.9	7.0 - 7.9	6.0 - 6.9	0.0 - 5.9

Category	The below information needs to be included to receive all ten points in the category. Missing or incomplete portions may result in fractional points.	Please include any critiques and suggestions that will be helpful for directing student improvement.
Organization pts _____	Logical flow to poster: Title Introduction Proposed Methods Preliminary Data/Results (if any) Expected Conclusions Acknowledgements References	Comments:
Background pts _____	1. Review of important literature 3. Rationale 4. Central question that will be examined 5. Can answer questions	Comments:
Methods pts _____	1. Briefly explain the techniques used or will be used 2. Briefly explain protocols for experiments that were/will be used (Only enough info needs to be shown as to allow readers to follow)	Comments:
Conclusions pts _____	1. Summary of results (if any) 2. Future directions or predictions for future outcomes	Comments:
Poster Presentation pts _____	1. Graphs/Tables/pictures clearly explained and presented 2. Graphs have appropriate labels/titles 3. Figures have descriptive captions, tables have descriptive labels	Comments:
Poster Style pts _____	1. Spelling/grammar 2. Appropriate labeling 3. Appropriate amount and size of text on poster 4. Contrast and color/size of poster 5. Professional appearance of poster	
Presentation Style pts _____	1. Eye contact while presenting 3. Refrain from reading poster directly 5. Professional attire	Comments:

Points: Fractional points may be given in any category. Please list your points for each category in the left box. The total of this form should be 80 points. The coordinator will total the points on the form.

Example: Oral Presentation Rubric

Oral/Visual Presentation Rubric, GEOG 490

Student's name _____ Date _____
Course <u>GEOG 490</u> Semester _____
Title of presentation <u>Landscape:</u> _____
Completed by _____

	Excellent (10)	Good (8)	Average (7)	Adequate (6)	Poor (5)
1. Appropriate and substantial content? (Displays thorough grasp of subject matter?)					
2. Engaging presentation?					
3. Clear organization?					
4. Good use of graphics/images?					
5. Creativity of images, arrangement, media?					
6. Talk complements, rather than duplicates visuals?					
7. Adequate energy level?					
8. Relaxed and confident?					
9. Does the student effectively interact with the audience?					
10. Confident and appropriate response to questions?					
11. TOTALS					

Comments:

EXAMPLE: Undergraduate Exit Survey (We plan to incorporate this survey online in conjunction with the Geoscience Department)

Geography Degree (circle one)

BA BS-Environmental Studies BS-Geospatial Sciences BS-Landscape Analysis & Climate Change Studies

What semester and year are you Graduating?

How many years did you spend in our program?

Were you a full time or part time student?

Did you transfer from another institution?

What semester did you transfer?

What is your plan after graduating?

- a. industry job related to geography/geospatial sciences/resource management
- b. agency/nonprofit job related to geography/geospatial sciences/resource management
- c. informal science education/teaching
- d. K12 teaching job for geography/geospatial sciences/other
- e. community college faculty job in geography/geospatial sciences/other
- f. continuing for another degree in geography or related field at UAF/another institution
- g. job unrelated to geology/geophysics (comment box)
- h. other (please specify)

What inspired you decision to declare a Geography major? (mark as many as apply) I took

Geography 101x.

I took Geography 111x.

I took Geography 302.

I took an introductory geography course at another institution.

I took a summer program in high school or college. Which one? I decided because of my high school classes/teachers.

I decided based on media representations of geography concepts (such as newspaper articles, television, movies) Which one?

My parent or other close family member encouraged me to consider geography.

A friend inspired me to consider geography.

Other.

COMMENT BOX (for all)

How were you supported during your time at UAF? (click or mark all that apply):

My family provided financial support.

I took out student loans.

I received a scholarship.

I had a job to pay for school.

If possible, please provide rough percentages for how your were supported (for example 25% from family, 50% student loans, 25% scholarships).

COMMENT BOX

Please state whether you strongly agree to strongly disagree with these statements. Please provide comments to help us improve each situation.

1. The undergraduate program was well suited to my personal or professional goals.
a. Comment Box
2. My employment is directly related to my degree/concentration in the geography program.
a. Comment Box
3. My degree/concentration is relevant to geography employment opportunities.
a. Comment Box
4. The program prepared me for employment in a geography-related field.
a. Comment Box
5. I would recommend the program to another student.
a. Comment Box
6. I would recommend my academic advisor to another student.
a. Comment Box
7. I was active in the Geography Club.
a. Comment Box
8. The Geography Club provided a valuable community/friends/study partners to make my undergraduate experience better.
a. Comment Box
9. I feel well prepared to face expected professional challenges.
a. Comment Box
10. The quality of undergraduate instruction in the program was high.
a. Comment Box
11. The undergraduate instruction in the program provided the right breadth and depth of content so that I felt confident in conversing with colleagues.
a. Comment Box
12. Equipment in labs was modern, functional, available, and adequate for our lab assignment needs
a. Comment Box
13. The computer room computers and software were adequate and available for my needs.
a. Comment Box
14. I took advantage of opportunities for undergraduate research at UAF.
a. Comment Box
15. My undergraduate research mentor was supportive and provided a valuable experience.
a. Comment Box
16. I was able to find summer jobs or internships in geography.
a. Comment Box
17. The faculty were helpful in my finding summer jobs or internships in geography.
a. Comment Box
18. The faculty in the program provided the mentoring I needed to find and apply an appropriate post graduation positions (whether academic, industry, agency, or other).
a. Comment Box

Please provide any additional comments or suggestions about your experience in the program that will help us improve in the future.

1. The best part of my undergraduate experience was (comment box).
2. If I could change one thing in the undergraduate program that would be (comment box).