

Assessment Report

PART 1: CONTACT & PROGRAM IDENTIFICATION

Report Year and Contact Information:		
2019-2020	Theresa Watson	twatson16@cnm.edu
Academic Year	Contact Person	Email

Name of Program:	Courses:
Geographic Information Technology AAS Degree	GIS 1001 GIS 2001 GIS 2011 GIS 2096

PART 2: PROGRAM SUMMARY

Provide a high-level review of the program to include highlights, successes, challenges, significant changes, and significant resources needed to support the program.
<p>The GIT Program is a small program that has courses that cross-over with Surveying, UAS and Geography. The UAS courses that started in GIS have been tremendously successful and have now branched off into their own program: UAS. There is still crossover between the two programs, which continues to be encouraged. However, there has been a significant change in the Surveying program, and that may impact the future of GIS in terms of structure and students.</p> <p>Job Placement outcomes for GIT, that have not been reported to OPIE:</p> <p>Students placed in related jobs and/or transferred to university programs 2019-2020: (?).</p>

Part 3: DATA REVIEW

Program Data (Each Review Year is defined as Summer, Fall, and Spring terms)	Review Year 19-20	Review Year 18-19	Review Year 17-18
Annual number of graduate awards is greater than 10	6	2	2
Number of declared majors	32	36	36
Average class size	9	14	13
Annual Average class retention rate is 70% or above (SAGE 65%)	96%	90%	86%
Annual C-Pass rate for coursework is 60% or above	93%	71%	81%
Average class fill rate at 60% or above capacity within a term or over a year	30%	47%	46%
Transfer numbers/percent	NA	1 (50%)	0 (0%)
Full-time to part-time faculty ratio	5: 0	3: 0	5: 0

Summarize how your program met or did not meet the target measures based on the data above.

The number of graduates has increased significantly in the last year. From discussions with students, many state that they are more interested in an associate degree than a Certificate for job and career placement. This may explain why there are more Degrees than Certificates in the program.
 The number of declared majors has stayed mostly steady with a small decline in the last year.
 Class size has diminished, but retention rates have increased.

Part 4: PROGRAM LEARNING OUTCOME ANALYSIS.

Learning Outcome	Population or Course(s) Assessed	Assessment Methods	Summary of Assessment Results
1. Demonstrate understanding of theoretical concepts related to geographic data including spatial references, data models, data file structures and database management. (Questions)	GIS 1001	Test or quiz.	This assessment used 5 specific questions in an exam. Pass rate of 88% of students on this assessment. This exceeded the 80% minimum target.

Learning Outcome	Population or Course(s) Assessed	Assessment Methods	Summary of Assessment Results
<p>2. Lab exercise: Data Sources, Metadata, Coordinate Systems, and Projections Students complete a lab whereby they download various data sets from different sources and identify the appropriate Coordinate System and Projection by examining the metadata. They then need to use the proper GIS tools, in the correct order to align the data to a unified Coordinate System and Projection.</p>	<p>GIS 1001</p>	<p>Other.</p>	<p>This assessment used a Laboratory Exercise, partially completed in class, but also as homework. Pass rate of 89% of students on this assessment. This exceeded the 80% minimum target.</p>
<p>3. Lab exercise: Distance Analysis Using Raster data, Advanced Students complete a lab whereby they download data, identify, and use appropriate geoprocessing tools and workflows. Students calculate weighted distance, create cost surfaces, perform least-cost path analyses.</p>	<p>GIS 2007, 2092</p>	<p>Other.</p>	<p>This assessment used a Laboratory Exercise, partially completed in class, but also as homework. Pass rate of 100% of students on this assessment. This exceeded the 80% minimum target.</p>

Learning Outcome	Population or Course(s) Assessed	Assessment Methods	Summary of Assessment Results
<p>4.Lab exercise: Overlay Analysis with Model builder Students must identify the problem, describe it, and determine steps to address it. They must determine the appropriate data needed, the geoprocessing tools to apply, and the order of steps for the procedures. This assignment requires building a workflow model and using the modeling tool with the GIS.</p>	<p>GIS 2001</p>		<p>This assessment used a Laboratory Exercise, partially completed in class, but also as homework. Pass rate of 89% of students on this assessment. This exceeded the 80% minimum target.</p>

Interpretation of Assessment findings
<p>Overall, students demonstrated understanding of concepts and demonstrated abilities to complete GIS tasks.</p> <p>There was a thinness of data in previous cycles, and therefore more an additional assessment was added to GIS 1001. The mid-level courses GIS 2001 and 2096 only run once a year, also making assessment a challenge. Additionally, GIS 2096 is a new course that will be transitioning to a permanent course next year.</p>

Part 6: ADDITIONAL ACTION PLAN IN SUPPORT OF STUDENT LEARNING (IF APPROPRIATE)

Upcoming year	Changes planned for the upcoming year	Data motivating this change
2020-2021	Additional assessment for GIS 2011 will be added. Exam Question- Outcome: Outcome: Students must be able to define and explain the difference between spatial, temporal, spectral, and radiometric resolutions.	Need to assess more advanced topics for the degree.
2020-2021	Address Class fill rate. Recruit students across the GIT program, including UAS and Surveying. Extend to MSE- Geography as well.	Decreasing class size fill rate.
2020-2021		

Please Select all the following that characterize the types of changes described in the above action plan:

- Assessment criteria revision Assessment methodology revision Assignment revision
- Budgetary reallocation Change in teaching approach Course content revision
- Curricular Revision Faculty training/development Process revision

Part 6: COMMENTS



Use this section to record any comments, notes, or questions from individuals who reviewed this report.

School Dean:

SAAC Representative: