



# Assessment Report

## PART 1: CONTACT & PROGRAM IDENTIFICATION

Report Year and Contact Information:		
2019-2020	Robert J. Garner	rgarner7@cnm.edu
<b>Academic Year</b>	<b>Contact Person</b>	<b>Email</b>

Name of Program:	Courses:						
CIS Computer Programming	CIS 1250	CIS 1275	CIS 1280	CIS 1680	CIS 2235	CIS 2237	CIS 2275
	CIS 2284	CIS 2520					

## 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>Despite the challenges presented by COVID-19, we have figured out how to thrive in this challenging environment. We have exceeded all our program goals. We continue to find ways to improve our curriculum and keep it current with modern programming technologies and practices. We have successfully pioneered the real-time online lecture format for programming. Feedback from industry and educational partners validates our program outcomes and show that the set of skills and knowledge we give our students provides what employers need. Our next challenge is to increase recruitment and obtain more students.</p>

**Part 3: DATA REVIEW**

<b>Program Data</b> <b>(Each Review Year is defined as Summer, Fall, and Spring terms)</b>	<b>Review Year</b> <b>19-20</b>	<b>Review Year</b> <b>18-19</b>	<b>Review Year</b> <b>17-18</b>
Annual number of graduate awards is greater than 10	12	20	4
Number of declared majors	118	170	144
Average class size	19	20	21
Annual Average class retention rate is 70% or above (SAGE 65%)	80%	81%	84%
Annual C-Pass rate for coursework is 60% or above	65%	60%	68%
Average class fill rate at 60% or above capacity within a term or over a year	67%	66%	74%
Transfer numbers/percent	NA	5 (25%)	2 (50%)
Full-time to part-time faculty ratio	43: 4	32: 9	29: 9

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

Fill rate objective exceeded.  
 Annual retention rate is exceeded due to outstanding instruction and instructors' ability to connect with students.  
 Annual C-Pass rate was exceeded.  
 Annual number graduates' goal was also exceeded.

**Part 4: PROGRAM LEARNING OUTCOME ANALYSIS.**

Learning Outcome	Population or Course(s) Assessed	Assessment Methods	Summary of Assessment Results
Class construction: Write programs that contain a programmer-written class and demonstrate its use in the C++, Java, and C# languages.	Program Portfolio Demonstration	Class project, and Other.	
Class inheritance, and polymorphism: Write a program that contains a programmer-written class structure including a parent class and at least two children classes. The program must demonstrate polymorphism.		Class project, and Other.	
Database manipulation and Web Application: Write a program that demonstrates the ability to connect to and manipulate a SQL database.	Program Portfolio Demonstration	Class project, and Other.	

Learning Outcome	Population or Course(s) Assessed	Assessment Methods	Summary of Assessment Results
Debugging: Demonstrate the use of a debugging tool in at least two Integrated Development Environments, with at least two languages.	Test given as a part of the Capstone Class	Class project, and Other.	
Graphical User Interface and Technical documentation: Write a program that contains a Graphical User Interface that includes event handling components. These components must include components such as menus, dialog boxes, sliders, buttons, and spinners. Tooltips must be on all components, where relevant. The program must contain a help section or additional documentation for the user.	Program Portfolio Demonstration	Class project, and Other.	
Linux: Students will demonstrate how to install, configure, create user accounts, issue correct commands and options, and perform standard network administration.	Course-wide evaluation using a Linux Project measured using a common rubric.		

Learning Outcome	Population or Course(s) Assessed	Assessment Methods	Summary of Assessment Results
<p>Web research: Use a search engine, such as “Google”, to find information on classes or functions that are needed in a program. This web research includes finding the appropriate class/function, its documentation, and implementing the code in a program.</p>	<p>Program Portfolio Demonstration</p>	<p>Class project, and Other.</p>	

Interpretation of Assessment findings
<p>We exceeded our goal of 75% for each category.</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	Keep curriculum current with latest programming trends.  Continue to revise and make new programming assignments.  Continue to revise course content to keep material current to match learning outcomes.	Current publications and software upgrade literature and discussions during Advisory Committee meetings.
2020-2021	Continue to adapt curriculum to online presentation. Put courses into Brightspace.	Direction to adapt to COVID-19 as well as school objective to provide more learning approaches for students.
2020-2021	Work with BIT marketing to increase enrolment in CIS programming degree program.	Program results related to enrollment and graduation rates.

**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**

<b>Use this section to record any comments, notes, or questions from individuals who reviewed this report.</b>
<b>School Dean:</b>

SAAC Representative: