Discipline	Course Number	Title
Computer Networking Technology	295	CNT 295 06/28/2023-CNT Cisco Certification Preparation
College	Division	Department
Business and Computer Technologies	Business and Computer Technologies	Computer Science & Information Technology
Faculty Preparer		John Trame
Date of Last Filed Assessment Report		

I. Review previous assessment reports submitted for this course and provide the following information.

1. Was this course previously assessed and if so, when?

   No

2. Briefly describe the results of previous assessment report(s).

   3.

4. Briefly describe the Action Plan/Intended Changes from the previous report(s), when and how changes were implemented.

   5.

II. Assessment Results per Student Learning Outcome

Outcome 1: Apply knowledge and skills related to network fundamentals, network access, IP connectivity, IP services, security fundamentals, and automation and programmability.

- Assessment Plan

    o Assessment Tool: CCNA Routing and Switching preparation exam

    o Assessment Date: Winter 2025

    o Course section(s)/other population: All sections

    o Number students to be assessed: All students

    o How the assessment will be scored: Answer key

- o Standard of success to be used for this assessment: 70% of students will score 70% or higher.

- o Who will score and analyze the data: The exam will be automatically graded by the Test Preparation Tool. The results will be analyzed by full-time faculty.

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
2023	2023	

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
5	3

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

Only three students completed this class.

Spring/Summer 2022 had one student.

Fall 2022 had four students.

These are all the students that have completed this course since its inception (Spring/Summer 2022).

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

All sections are accelerated 1-week DL sections.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The Cisco CCNA Practice Exam was the tool used for this analysis.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: <u>Yes</u>
One student scored 85.83%, one student scored 72.27%, and one student scored 91.6% on the CCNA Practice test. Therefore, all of the assessed students met the standard of success. The other students did not complete the final CCNA practice exam, and therefore, did not complete the course. The data shows a breakdown per topic for each of the sections of the test, corresponding to the topics listed in this learning outcome. Because all Cisco exams prior to 2023 have been archived, this is the most comprehensive data I could obtain, but I'm planning and submitting more comprehensive data in future assessments for other courses that use Cisco exams.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Strengths appear in the fundamental concepts.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Students could benefit from a lengthy review of the previous three classes, especially focusing on the advanced topics. There is a lot of material covered in the previous three classes. Some of the more advanced topics are used a limited number of times, while the fundamentals are used several times.

Outcome 2: Demonstrate test-takings strategies that will prepare the student for the CCNA Routing and Switching certification exam.

- Assessment Plan

    o Assessment Tool: CCNA Routing and Switching preparation exam

    o Assessment Date: Winter 2025

    o Course section(s)/other population: All sections

    o Number students to be assessed: All students

    o How the assessment will be scored: Answer key

    o Standard of success to be used for this assessment: 70% of students will score 70% or higher.

- o Who will score and analyze the data: The exam will be automatically graded by the Test Preparation Tool. The results will be analyzed by full-time faculty.

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

Fall (indicate years below)	Winter (indicate years below)	SP/SU (indicate years below)
2023	2023	

2. Provide assessment sample size data in the table below.

# of students enrolled	# of students assessed
5	3

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

Only three students completed this class.

Spring/Summer 2022 had one student.

Fall 2022 had 4 students.

These are all the students that have enrolled since the inception of the course (Spring/Summer 2022).

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

All sections are accelerated 1-week DL sections.

5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

The Cisco CCNA Practice Exam was the tool used for this analysis.

6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes

All three students demonstrated test-taking strategies in their preparation for the CCNA Practice test, evidenced by all three passing the test. Therefore, all of the assessed students met the standard of success.

The other two students did not complete the final CCNA practice exam, and therefore, did not complete the course.

7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

It is hard to draw a conclusion based on just three students.

8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Students could benefit from more time learning test taking strategies, such as differentiating between distractor answers and correct answers.

III. Course Summary and Intended Changes Based on Assessment Results

1. Based on the previous report's Intended Change(s) identified in Section I above, please discuss how effective the changes were in improving student learning.

There was no previous report. This is the first course assessment.

2. Describe your overall impression of how this course is meeting the needs of students. Did the assessment process bring to light anything about student achievement of learning outcomes that surprised you?

The students could benefit from the following:

a. More time reviewing the three previous classes, especially CNT 216 and CNT 226. These classes have several advanced topics/skills that need to be practiced more often to master.

b. More practice with Cisco test questions. Learning how to identify distractor answers. Many distractors look like good answers, but the student must remember that Cisco always wants the "most correct" answer. Some answers are correct in some situations, but not all situations, which makes them distractors from the most correct answer.

3. Describe when and how this information, including the action plan, was or will be shared with Departmental Faculty.

These results will be shared in a department meeting.

The course is to be discontinued but the analysis will carry over into improving future assessments for other courses as well.

Future assessments in other courses will use separate assessment tools to assess separate outcomes.

4.

Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Other: Course being discontinued	The course is being discontinued due to low enrollment.	Student demand is too low, and we haven't run the course since Winter 2023. Future assessments in other courses will use separate assessment tools to assess separate outcomes.	2025

5. Is there anything that you would like to mention that was not already captured?

6.

III. Attached Files

CNT 295 assessment data

Faculty/Preparer:	John Trame	**Date:** 10/08/2023
Department Chair:	Scott Shaper	**Date:** 10/17/2023
Dean:	Eva Samulski	**Date:** 11/02/2023
Assessment Committee Chair:	Jessica Hale	**Date:** 02/03/2025