

**Course Assessment Report
Washtenaw Community College**

Discipline	Course Number	Title
Human Services Worker	296	HSW 296 11/30/2023- Neuropsychology of Addiction
College	Division	Department
Humanities, Social and Behavioral Sciences	Humanities, Social and Behavioral Sciences	Behavioral Sciences
Faculty Preparer		Kristy Norris
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: Describe the structure and function of neurons and glial cells, with an emphasis on communication within the nervous system, neurotransmission.

- Assessment Plan
 - Assessment Tool: Outcome-related exam questions
 - Assessment Date: Fall 2023
 - Course section(s)/other population: All sections
 - Number students to be assessed: All students
 - How the assessment will be scored: Departmentally-developed rubric

- Standard of success to be used for this assessment: 70% of students will score 75% or higher on the outcome-related questions.
- Who will score and analyze the data: Departmental 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)
2022		

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

# of students enrolled	# of students assessed
7	14

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.

This class is cross listed. 11 students were registered for PSY 296 and 7 students were registered for HSW 296. That is a total of 18 students. Of those 18 students, 14 completed outcome 1 assessment items.

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 students enrolled in the class were required to complete assessment tools throughout the semester that included embedded items for Outcome 1.

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

Multiple choice questions were presented in assessments throughout the semester. There were a total of seven questions used to assess this outcome.

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: No
 This outcome requires that 70% of the students score 75% or higher on this outcome. Five out of 14 students achieved a 75% or higher. That is 35% of the class. As a whole, the class scored a 67.3% on this outcome. The standard for success was not met.

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

100% of students assessed were able to successfully answer the question about resting potential. This suggests that students have a good grasp of that concept. 93% of students were able to identify the "all or none" law, suggesting that this is also an area where students were able to excel for this outcome.

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.

When looking at the item analysis for this assessment. Two items were scored significantly low. The depolarization question (21.4% success) and Myelin impact on action potential question (35.7% success). It is suggested that these two questions be evaluated to see if they can be re-worded for clarity or if material needs to be added to the course to increase comprehension.

Outcome 2: Describe the basic principles of pharmacology, focusing on (a) pharmacokinetics, how drugs move through the body, and (b) pharmacodynamics, how drugs cause biological changes in the body.

- Assessment Plan
 - Assessment Tool: Outcome-related exam questions
 - Assessment Date: Fall 2023
 - Course section(s)/other population: All sections
 - Number students to be assessed: All students
 - How the assessment will be scored: Departmentally-developed rubric
 - Standard of success to be used for this assessment: 70% of students must score 75% or higher on the outcome-related questions.
 - Who will score and analyze the data: Departmental 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)
2022		

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

# of students enrolled	# of students assessed
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7	16
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- 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.

This class is crosslisted. 11 students are registered as PSY and 7 are registered for HSW, for a total of 18 students. 16 students completed item items that were relevant to this outcome.

- 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 students registered in this DL class were presented with the assessment tools.

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

Multiple-choice test items throughout the semester were used to assess this outcome. There were a total of 36 multiple choice items use to assess understanding for this outcome.

- 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: No

The standard for success is that 70% of the students score a 75% or greater on this assessment. 10 of 16 students achieved 75% or greater. That would mean that 62.5% of students succeeded. This is below the 70% requirement. It should be noted that the class average for this outcome was a 77.3%.

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

Students achieved 80%, or higher, success on 22 items for this assessment. There were a total of 36 items. This suggests that students have a relatively good grasp of at least 60% of what they are being asked. All students correctly answered two items related to tolerance, suggesting that they have demonstrated a good grasp of the concept.

- 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.

Six items on this assessment had less than a 60% success level. These six items suggest that students might struggle with comprehending side effects, the difference between heroin and morphine, the term pharmacodynamic tolerance, and the TI of alcohol. It is suggested that these items be evaluated to see if the question is ambiguous or if these content areas can have supplemental material added.

Outcome 3: Explain the neurophysiology (i.e. mechanism of action) for both legal and illegal (nicotine and alcohol, stimulants, opioids, and cannabinoids) psychoactive drugs.

- Assessment Plan
 - Assessment Tool: Outcome-related exam questions
 - Assessment Date: Fall 2023
 - Course section(s)/other population: All sections
 - Number students to be assessed: All students
 - How the assessment will be scored: Answer key
 - Standard of success to be used for this assessment: 70% of students must score 75% or higher on the outcome-related questions.
 - Who will score and analyze the data: Departmental 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)
2022		

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

# of students enrolled	# of students assessed
7	16

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.

This class is crosslisted. 11 students are registered as PSY and 7 are registered for HSW, for a total of 18 students. 16 students completed item items that were relevant to this outcome.

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 students enrolled in the class were presented with the outcome assessment items.

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

Multiple-choice items were embedded throughout the course. There were a total of 18 questions used to assess this outcome.

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

The standard for success is that 70% of students score 75% or higher on this outcome. 14 of 16 students achieved the 75% or higher score. That means that 87.5% of students achieved success. This outcome met the standard for success.

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

Students scored 100% on five items in this outcome and at/above 80% on 12 out of 18 items. Students seem to have a good grasp of the neurophysiology of psychoactive drugs.

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.

Two items on this assessment had a success rate below 50% for the items. The question asking about a drug that only acts on GABA receptors had a 7.1% success. This question is either hard to understand or students may need to have supplemental material added to the class for this concept.

Outcome 3: Explain the neurophysiology (i.e. mechanism of action) for both legal and illegal (nicotine and alcohol, stimulants, opioids, and cannabinoids) psychoactive drugs.

- Assessment Plan

- Assessment Tool: Outcome-related assignment
- Assessment Date: Fall 2023
- Course section(s)/other population: All sections
- Number students to be assessed: All students
- How the assessment will be scored: Departmentally-developed rubric
- Standard of success to be used for this assessment: 70% of students will score 75% or higher.
- Who will score and analyze the data: Departmental 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)
2022		

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

# of students enrolled	# of students assessed
7	0

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.

Due to the timing of the master syllabus update (effective Winter 2023) and the course being canceled, there was no outcome-related assignment available to use to assess student learning from Fall 2022. The department will evaluate whether having an additional assessment tool is necessary or if the outcome-related exam questions are sufficient to measure student learning.

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.

This tool was not available for assessment.

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

This tool was not available for assessment.

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>No</u>
This tool was not available for assessment.

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

Students scored 100% on five items in this outcome and at/above 80% on 12 out of 18 items. Students seem to have a good grasp of the neurophysiology of psychoactive drugs.

- 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.

Two items on this assessment had a success rate below 50% for the items. The question asking about a drug that only acts on GABA receptors had a 7.1% success. This question is either hard to understand or students may need to have supplemental material added to the class for this concept.

Outcome 4: Recognize the biological and psychological components of the major explanations for drug use and abuse, with an emphasis on the holistic approach known as the biopsychosocial model.

- Assessment Plan
 - Assessment Tool: Outcome-related exam questions
 - Assessment Date: Fall 2023
 - Course section(s)/other population: All sections
 - Number students to be assessed: All students
 - How the assessment will be scored: Departmentally-developed rubric
 - Standard of success to be used for this assessment: 70% of students will score 75% or higher on the outcome-related questions.
 - Who will score and analyze the data: Departmental faculty

- 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)
2022		

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

# of students enrolled	# of students assessed
7	15

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.

This class is crosslisted. 11 students are registered as PSY and 7 are registered for HSW, for a total of 18 students. 15 students completed item items that were relevant to this outcome.

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 students are asked to complete assessments throughout the semester that includes the assessment items.

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

Multiple-choice items are embedded throughout the course. There were a total of 15 questions used to assess this outcome.

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: No

The standard for success is written that 70% of those assessed must score at a 75% or higher on the assessment. 5 of the 15 students assessed scored at or above the 75% range. 33% of the class achieved success.

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

Students scored at or above 90% on three items for this outcome. It would seem that students have a good grasp of reinforcers and how drugs have reinforcing qualities.

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.

Two items on this assessment had a success rate below 50%. One of those items had a success of 7.1%. Students struggled with factors that do not enhance reinforcement and identifying disadvantages of experiments on hospital wards. These two questions may need to be evaluated to see if they are ambiguous or supplemental content may need to be added to the class to boost understanding.

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.

N/A this is the first 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?

This assessment has been tricky. The class was not assessed in a timely manner and the course has run for an extensive time without assessment. The creator of the course also revised the class and adjusted measurements in late 2022, early 2023. However, the class was then cancelled for low enrollment. This assessment was completed based on a pre-modified section, when the class last ran with a reasonable enrollment number. The creator of the class has earmarked a number of essay questions to be used in the assessment evaluation, but it was not possible to attain the outcome of those essay questions in this Fall 2022 class, because of the way the assessment component was mixed in with a larger question. For the revised class this has been addressed and the items will be easily obtained. This could impact the outcome values for the next assessment, as some students can articulate understanding better with words than with multiple choice selections.

It should also be noted that this Fall 2022 class was offered before the prerequisites were established for the class. That could play a role in the success of outcomes going forward.

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

This assessment report will be shared with department faculty and the course creator.

4.

Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Assessment Tool	It is suggested that item analysis be used to evaluate items that score below 60% and those items be evaluated to determine if they could be reworded for clarity or if additional content be added to the course to bolster understanding in those area.	There are a number of questions on the item analysis that have significantly low scoring. These items warrant further investigation.	2024
Assessment Tool	Evaluate the need for a second tool to assess Outcome #3 (outcome-related assignment).	The outcome-related exam questions may be sufficient to assess student learning for Outcome #3.	2024

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

6.

III. Attached Files

[Outcome Data from BB F22](#)

Faculty/Preparer: Kristy Norris **Date:** 12/07/2023

Department Chair: Starr Burke **Date:** 12/08/2023

Dean: Anne Nichols **Date:** 12/11/2023

Assessment Committee Chair: Jessica Hale **Date:** 07/21/2024