

Course Assessment Report
Washtenaw Community College

Discipline	Course Number	Title
Physical Therapist Assistant	220	PTA 220 05/18/2020- Therapeutic Exercise I
Division	Department	Faculty Preparer
Health Sciences	Allied Health	Ann Herbert
Date of Last Filed Assessment Report		08/22/2019

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

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

Yes Spring 2019

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

<p>Over the three-year period of 2017, 2018 and 2019, 45 of 45 students were assessed. 89% (40 of 45) scored 80% or higher on the final exam. 89% also scored 80% or higher on questions related to outcome #1, and 64% scored 80% or higher on questions related to outcome #2. Questions related to Outcome #3 revealed students had difficulty selecting and describing exercises as they relate to patient diagnosis and time line of healing. However, when asked to do this in a lab practical, 98% passed with a score of 80% or higher. This discrepancy reinforced that real-life interactions enhance student decision-making skills. With regards to outcome # 4, students averages over the three-year interval showed that 97% scored 80% or higher on the lab practical examinations. Assessment data indicated several areas that students would benefit from improvement. These included adding questions that highlight the role of the PTA with regards to regulations and responsibilities as defined by the American Physical Therapy Association (APTA). Improvements also included increasing focus on exercise progression with greater clarity regarding the rationale of exercise progression as well as the ability to prioritize treatment based on patient data. Overwhelmingly so, students' decision-making strategies were better when placed in real-life scenarios vs written-test formats.</p>
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3. Briefly describe the Action Plan/Intended Changes from the previous report(s), when and how changes were implemented.

Changes influenced by the assessment report included:

- Outcome language for Outcome #2 was modified to include the rationale for the use and progression of therapeutic exercises based on interpretation of data collection and goals as established by the Physical Therapist.
- Expansion of questions related to outcome #1 to include the role of the PTA in implementation and development of the plan of care
- Inclusion of a case study assignment and lab practical exams to assess outcome #3 and #4
- Collaboration with Washtenaw Community College Fitness center to increase variety and depth of exposure to exercise modes, progression and selection criteria.

II. Assessment Results per Student Learning Outcome

Outcome 1: Describe the role of the PTA in the implementation of the plan of care and describe the relationship between the physical therapy evaluation and the development of the plan of care.

- Assessment Plan
 - Assessment Tool: Departmental written final exam
 - Assessment Date: Winter 2022
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: Each question will be scored as correct or incorrect based on the answer key
 - Standard of success to be used for this assessment: 80% of the students will score of 80% or higher on the final exam questions
 - Who will score and analyze the data: Department 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)
	2020	

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

# of students enrolled	# of students assessed

40	20
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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.

Twenty students were enrolled in both lecture and lab. All students who completed the course were assessed. The numerical value of 40 represents a duplicate counting of lab and lecture students. All students who were enrolled completed the course.

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 who completed the course were included in the assessment

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

In addition to the final exam, 14 test questions that best represented this outcome were selected. Blackboard alignment tools were used to assess these questions.

These questions focused on determining the students understanding of the relationship of the PTA in the role of the implementation of the plan of care as it relates to the physical therapy evaluation.

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 of success was met, as 100% of the students scored 80% or higher on the final exam with the average score being 92%. 95%, or 19 of 20, scored 80% or higher on the outcome-related questions. The average score for these 14 questions was 95.4%.

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

The students demonstrated a high level of understanding on the central components of 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.

While the standard of success was met, students will continue to be challenged on decision-making strategies to ensure continuity of treatment and data collection strategies between the PT and PTA.

Outcome 2: Describe the rationale for the use and progression of selected therapeutic exercises as it relates to patient data, short and long term goals identified in the plan of care established by a physical therapist.

- Assessment Plan
 - Assessment Tool: Departmental written final exam
 - Assessment Date: Winter 2022
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: Each question will be scored as correct or incorrect based on the answer key
 - Standard of success to be used for this assessment: 80% of the students will score of 80% or higher on the final exam questions
 - Who will score and analyze the data: Department 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)
	2020	

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

# of students enrolled	# of students assessed
40	20

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.

Twenty students were enrolled in both lecture and lab. All students who completed the course were assessed. The numerical value of 40 reflects a duplicate counting of lab and lecture students.

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 who completed the course were assessed.

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

In addition to the final exam, 18 test questions that best represented this outcome were selected. Blackboard alignment tools were used to assess these questions.

These questions focused on the student's ability to interpret data from the Physical Therapists evaluations to select and progress therapeutic exercises. These questions were formatted similar to the licensure exam in that two answers could potentially be an option, but one BEST answer required greater problem solving by the students.

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

100%, or 20 of 20 students, scored 80% or higher on the final with an average score of 92%. 75%, or 15 of 20 students, scored an 80% or higher on the outcome-related questions, with an average score of 88.9%. Two questions with a performance average below 80% were questions #8 and #19. In question #8, 15 of the 20 students chose the BEST answer, while the other five students all chose the same answer, which was the next best option. With question #19, 50% chose the BEST answer while the other 50% chose the same answer, which was also the next best option. This serves as an excellent learning tool for students to use ALL clinically relevant information for problem-solving strategies for patient treatment.

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

Overall, students are performing well. This outcome highlights test-taking strategies that mirror the format of the licensure exam and serve to highlight the higher level of understanding required to choose the BEST of two good options. This serves to prepare students to utilize all clinically relevant data to base their decision. It also serves as a tool for standardized test-taking strategies.

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.

This outcome, when compared to the prior assessment, demonstrated improved student comprehension from 64% to 75%, despite the change from face-to-face class and labs to online lecture and labs due to COVID-19. This change in format reduced the exposure, practice and experimentation that is necessary to establish the level of difficulty from one exercise to another. In addition, students were not able to go to their local fitness center or the WCC fitness center as part of their learning experience. As a part of the prior assessment, ongoing negotiations are in place to include the WCC fitness center as part of the course to provide an extensive opportunity to explore a variety of modes of exercise. At this time, this proposal is on hold from the board due to the financial strain associated with the COVID-19 pandemic.

Outcome 3: Demonstrate competence in the administering, monitoring, and adjusting therapeutic exercise interventions including strengthening, aerobic conditioning, balance and coordination, conditioning and reconditioning as identified in a plan of care established by a physical therapist.

- Assessment Plan
 - Assessment Tool: Lab practical exam and written case study
 - Assessment Date: Winter 2022
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: Both the Lab practical exam and case study assignment will be scored with a rubric
 - Standard of success to be used for this assessment: 80% of all students will score 80% or higher on the lab practical exam and written case study assignment
 - Who will score and analyze the data: Department 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)
	2020	

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

# of students enrolled	# of students assessed
40	20

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.

Twenty students were enrolled in both lecture and lab. All students who completed the course were assessed. The numerical value of 40 reflects a duplicate counting of lab and lecture students.

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 20 students who completed the course were assessed

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

Two tools were utilized to assess this outcome. The first was a case study designed for the student to address the Disablement Model and its application as well as implementation and progression of exercise based on patient data. The second tool was the lab practical exam, which was modified, as students were off-campus secondary to COVID -19. For this lab practical exam, students submitted an unedited video, which averaged 30 minutes in length, of their performance of data collection skills. Students then had to interpret the results and select and instruct in appropriate exercises that addressed the deficits they found. Students had to include progression/regression options as well as demonstrate clear monitoring of the patient throughout. Faculty scored the practical exam using a department rubric.

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 of success was met, as 19 of 20 students, or 95%, scored an 80% or higher on the lab practical, and 100%, or 20 of 20 students, scored 80% or higher on the case study.

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

The areas of strength especially in the lab video, were that students had to work on family members, who as a majority, had underlying restrictions or weaknesses that are often not seen when students perform on each other. This served as an excellent training tool that reflects clinical situations. This final lab video was one of two that were submitted, and the initial video allowed for an extensive line of questioning and problem-solving that led to their success in the final exam.

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 consistently show the greatest strength with exercise progression when they have a live patient to work with. In this case, family members were not familiar with terminology and sequence of testing, and this allowed for significant clinical problem-solving and patient instruction. Future revision of class structure may benefit from a similar assignment.

Outcome 4: Provide patient related instruction to patients, family members, care-givers and other members of the health care team.

- Assessment Plan
 - Assessment Tool: Lab practical exam and written case study assignment
 - Assessment Date: Winter 2022
 - Course section(s)/other population: All
 - Number students to be assessed: All
 - How the assessment will be scored: Both the lab practical exam and case study assignment will be scored with a rubric
 - Standard of success to be used for this assessment: 80% of all students will score 80% or higher on the lab practical exam and written case study assignment
 - Who will score and analyze the data: Department 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)
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2. Provide assessment sample size data in the table below.

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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.

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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 20 students who completed the course were assessed.

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

Two tools were utilized to assess this outcome. The first was a case study designed for the student to address the Disablement Model and its application as well as implementation and progression of exercise based on patient data. The second tool was the lab practical exam, which was modified, as students were off campus secondary to COVID -19. For this lab practical exam, students submitted an unedited video, which averaged 30 minutes in length, of their performance of data collection skills. Students then had to interpret the results and select and instruct in appropriate exercises that addressed the deficits they found. Students had to include progression/regression options as well as demonstrate clear monitoring of the patient throughout. Faculty scored the practical exam using a department rubric.

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 of success was met, as 19 of 20 students, or 95%, scored an 80% or higher on the lab practical, and 100%, or 20 of 20 students, scored 80% or higher on the case study.

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

The areas of strength, especially in the lab video, were that students had to work on family members, who as a majority, had underlying restrictions or weaknesses

that are often not seen when students perform on each other. This served as an excellent training tool that reflects clinical situations.

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 consistently show the greatest strength with exercise progression when they have a live patient to work with. In this case, family members were not familiar with terminology and sequences of testing, and this allowed for significant clinical problem-solving and patient instruction to achieve the desired result. Future revision of class structure may benefit from a similar assignment.

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.

The standard of success was met in all but one outcome. Outcome #2 was partially met with all students scoring 80% or higher on the final exam. However, in the outcome-related questions, 75% scored 80% or higher. It was noted that the most challenging questions required a higher level of understanding and will remain a valuable learning tool for test-taking skills. This semester, students are introduced to clinical reasoning skills, and this is a higher level of understanding. This was the first time students were tested along the lines of the licensure format. This method of examination continues in the forthcoming course work.

Students were given an excellent price reduction to the WCC Fitness Center as well as a class field trip to the center for exploration and instruction in a wide variety of exercise modes. While, given the impact of COVID-19, we had limited time to utilize this change, when compared to last year, students demonstrated a larger capacity and creativity when selecting and progressing exercise.

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 assessment brought to light the higher degree of learning that was brought about with the lab video project. Practicing on patients that are more likely to have underlying stiffness or weakness enhanced their comprehension of the relationship to evaluation and the plan of care.

Washtenaw Community College PTA students are consistently praised for their high level of knowledge and patient skills. PTA 220 is aligned in our program just before students go into their first clinical. Unfortunately, with the impact of

COVID-19, student clinical rotations were cancelled and deferred until Fall 2020. This project served as a simulation of clinical demands. Teaching methods will continue to be explored to ensure this mode of learning is effective.

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

This information will be shared with all faculty members.

4. Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
No changes intended.			

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

6.

III. Attached Files

[Outcome #1 questions](#)
[Outcome#2 questions](#)
[Outcome #3,4](#)
[case study rubric](#)
[Video rubric](#)
[Blackboard Outcome #1](#)
[Outcome #2](#)
[Blackboard Alignment](#)

Faculty/Preparer: Ann Herbert **Date:** 05/27/2020
Department Chair: Kristina Sprague **Date:** 05/28/2020
Dean: Valerie Greaves **Date:** 06/01/2020
Assessment Committee Chair: Shawn Deron **Date:** 08/25/2020

Course Assessment Report
Washtenaw Community College

Discipline	Course Number	Title
Physical Therapist Assistant	220	PTA 220 05/17/2019- Therapeutic Exercise I
Division	Department	Faculty Preparer
Health Sciences	Allied Health	Ann Herbert
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?

Yes

Spring 2012

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

Over a three-year period, 27 of 54 students were assessed. 90% of the students assessed passed the final written exam with an 80% or higher. For the final practical exam, 96% of the students passed with an 80% or higher. The standard of success was met. Question-specific assessment revealed a need to enhance teaching methods that focus on teaching elements of exercise progression as it relates to a patient's diagnosis and/or condition and the ability to modify and/or progress the exercise based on clinical conditions.

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

Changes influenced by the assessment report included:

Revision of the master syllabus to provide better clarity to students on the expectations of PTA 220 along with alignment of outcomes with objectives to clarify teaching, learning and performance expectations.

An assignment was added to address the Disablement Model and its application to implementation of Therapeutic exercise.

Students were enrolled in a free, web-based exercise tool kit for access to over 200 different types of therapeutic exercises. This was used in the assignment noted above.

II. Assessment Results per Student Learning Outcome

Outcome 1: Describe the role of the PTA in the implementation of the plan of care and describe the relationship between the physical therapy evaluation and the development of the plan of care

- Assessment Plan
 - Assessment Tool: Departmental written final exam.
 - Assessment Date: Winter 2011
 - Course section(s)/other population: one
 - Number students to be assessed: random sample of students (50% of each section and/or no less than 4 per section)
 - How the assessment will be scored:
 - Standard of success to be used for this assessment:
 - Who will score and analyze the data:

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)
	2019, 2018, 2017	

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

# of students enrolled	# of students assessed
96	45

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.

48 students were enrolled in both lecture and lab. All students who completed the course were assessed. The numerical value of 96 reflects a duplicate counting of lab and lecture students. Three students withdrew from the program, resulting in 45 students.

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 who completed the course were included in the assessment.

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

In addition to using the final exams, seven multiple choice questions were selected from the final exam that best represented this outcome. Questions were scored as correct or incorrect by faculty.

These questions mainly focused on determining a student's competency in data collection techniques necessary for implementing appropriate exercise programs (Outcome 1, Objective #2 in the master syllabus).

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 of success was met, as 89% (40 of 45) scored 80% or higher on the final exam. 80% scored 80% or higher on the outcome-related questions. Outcome-related questions were answered correctly on average 89% over the three years (2017: 86%, 2018: 87%, 2019: 94%).

Question #5 in 2017 and 2018 had the lowest score (31%); however, by 2019 it was answered correctly 80% of the time. This question focused on consistency in data collection between physical therapist and physical therapist assistant.

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

Overall, students from all three years demonstrated a high level of understanding of the central components related to 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.

Although the standard of success was met, future exams will include questions that highlight the role of the Physical Therapist Assistant in regards to regulations and responsibilities as defined by the American Physical Therapy Association (APTA). Defining these roles aids in creating the preferred PT/PTA relationship.

Outcome 2: Describe the rationale for the use and progression of selected therapeutic exercises and relate to the short and long term goals identified in the plan of care established by a physical therapist.

- Assessment Plan
 - Assessment Tool: Departmental written final exam.
 - Assessment Date: Winter 2011
 - Course section(s)/other population: one
 - Number students to be assessed: random sample of students (50% of each section and/or no less than 4 per section)
 - How the assessment will be scored:
 - Standard of success to be used for this assessment:
 - Who will score and analyze the data:

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)
	2019, 2018, 2017	

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

# of students enrolled	# of students assessed
96	45

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.

48 students were enrolled in both lecture and lab. All students who completed the course were assessed. The numerical value of 96 reflects a duplicate counting of lab and lecture students. Three students withdrew from the program, resulting in 45 students.

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 who completed the course were included in the assessment.

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

In addition to the final exam, nine multiple choice questions were selected that best represented this outcome. Questions were scored as correct or incorrect by the faculty.

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 measure of success was met: 88% of students (40 of 45) scored 80% or higher on the final exam. However, when looking at the outcome-related questions, 64% (29 of 45) of the students scored 80% or higher. This allowed us to identify areas where students are having more difficulty.

Question #19 and #40 consistently had the lowest scores over all three years. Respectively, the percentage correct for question #19 and #40 were 53% and 69% in 2017, 47% and 76% in 2018, and 33% and 47% in 2019. Question #19 dealt with a very specific treatment technique, and question #40 required integration of data collected as it applies to specific treatment techniques. These concepts are more challenging to identify in written format. In 2019, winter weather cancelled five full days of class, reducing valuable classroom time.

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

Overall, students' knowledge of Therapeutic Exercise concepts were satisfactory over these three years.

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.

Teaching methods that focus on definition and labeling of rationale behind Therapeutic exercise progression will be addressed. In addition, exposure to a larger variety of exercise modes through collaboration with Washtenaw Community College's fitness center will be incorporated into this course.

Outcome 3: Demonstrate competence in the administering, monitoring, and adjusting therapeutic exercise interventions including strengthening, aerobic conditioning, balance and coordination, conditioning and reconditioning as identified in a plan of care established by a physical therapist.

- Assessment Plan
 - Assessment Tool: Written exam and lab practical exam
 - Assessment Date: Winter 2011

- Course section(s)/other population: one
- Number students to be assessed: random sample of students (50% of each section and/or no less than 4 per section)
- How the assessment will be scored:
- Standard of success to be used for this assessment:
- Who will score and analyze the data:

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)
	2018, 2019, 2017	

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

# of students enrolled	# of students assessed
96	45

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.

48 students were enrolled in both lecture and lab. All students who completed the course were assessed. The numerical value of 96 reflects a duplicate counting of lab and lecture students. Three students withdrew from the program, resulting in 45 students.

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 who completed the course were included in the assessment.

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

The main tool selected was the final practical exam.

In addition, specific questions that best represented this outcome were selected from the final written exam: Four multiple-choice and one short answer question from 2017 and 2018, and three multiple-choice questions from 2019.

The best evaluation for this outcome is the final practical exam where students are asked to gather range of motion and strength data from a patient and then implement a therapeutic intervention to address those findings.

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 of success was met in regards to the lab practical exam, as 98% passed with a score of 80%. 88% passed with a score of 80% or higher on the written final exam.

However, when looking at specific written questions 49% (27 of 45) scored 80% or higher. In 2017, 62% scored correctly on question #46 and in 2018, 53% scored correctly on question #64. Both of these questions indicated difficulty for the student with selecting and describing an exercise as it related to patient diagnosis and timeline of healing. In 2019, multiple-choice question #29 proved to be a challenge for the student in determining the most appropriate exercise based on stage of healing.

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

The high success with the practical exam reinforced that the ability to develop a treatment rationale based on the real life interaction with a patient is strong.

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.

A key role of the PTA is interpretation of data to identify areas of concentration in a treatment plan. A large amount of "up front" material that is presented in the first few weeks of the semester in regards to Therapeutic Exercise prescription concepts and theory. The difference in success between written and practical testing revealed that students have an easier time applying theory when a patient is directly in front of them. Increasing written patient scenarios and case study review will be highlighted in future years to improve the students' ability to prioritize treatment rationale based on patient data.

Outcome 4: Provide patient related instruction to patients, family members, care-givers, and other members of the health care team.

- Assessment Plan

- Assessment Tool: Written exam and lab practical exam
- Assessment Date: Winter 2011
- Course section(s)/other population: one
- Number students to be assessed: random sample of students (50% of each section and/or no less than 4 per section)
- How the assessment will be scored:
- Standard of success to be used for this assessment:
- Who will score and analyze the data:

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)
	2019, 2018, 2017	

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96	45

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.

48 students were enrolled in both lecture and lab. All students who completed the course were assessed. The numerical value of 96 reflects a duplicate counting of lab and lecture students. Three students withdrew from the program, resulting in 45 students.

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 who completed the course were included in the assessment.

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

In all years, the final lab practical exam was reviewed. The lab practical was the best measure for this outcome. A section of the practical required the student to interpret data collected and develop exercise specific to that patient based on their

findings and timeline of healing. Faculty scored student responses as correct or incorrect.

In addition to the practical exam, three short answer questions (#35, #41 and #46) from 2017 and 2018 were selected that provided another opportunity for students to provide patient instruction. Faculty scored questions as correct, partially correct or incorrect. These questions were not part of the final written in 2019.

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 of success was met: In 2017, 92% scored 80% or higher on the lab practical examination, and 85% scored 80% or higher on the short answer questions. In 2018, 100% scored 80% or higher on the lab practical exam, and 94% scored 80% or higher on the short answer questions. In 2019, where only the lab practical exam was used as the assessment tool, 100% scored 80% or higher.

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

Students consistently and accurately provided patient related instruction.

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 showed the greatest strength in a direct contact situation. Increased emphasis on examination of patient data and exercise prescription design from written text will increase carryover to clinical situations.

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.

The standard of success was met in all areas. Even with the inclusion of a written assignment as well as access to a web-based exercise program, difficulty in exercise progression as it relates to patient condition and timeline of healing continued to be the area of greatest difficulty. This concept improves as students go out into the clinic and experience real patient contact. This area is reassessed in

PTA 225 and 198 the following semester, and consistently, student scores are high at this point in their training.

Alignment of outcomes will be further clarified to include the role of the PTA in relationship to the Therapist evaluation and development of the plan of care.

- 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?

Washtenaw Community College PTA students are consistently praised for their high level of knowledge and patient care skills. PTA 220 is aligned in our program just before students go into their first clinical experience. The exposure in the clinic enhances the "big picture" of individualized patient care strategies. Teaching methods will continue to be improved to ensure thorough coverage and implementation of these concepts.

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

This information will be shared with all faculty members.

- Intended Change(s)

Intended Change	Description of the change	Rationale	Implementation Date
Outcome Language	Outcome #2 will now read: Describe the rationale for the use and progression of selected therapeutic exercises as it relates to patient data, short- and long-term goals identified in the plan of care established by the physical therapist.	Data collection and interpretation are foundational to entry-level PTA skills.	2020
Assessment Tool	Outcome # 1 will be further aligned to specific final examination questions that relate	Minimal questions addressed Outcome # 1 as it was worded. The main focus was on data	2020

	<p>to the role of the PTA and the relationship to the therapist evaluation for development of patient treatment.</p> <p>Outcome # 3 and 4 will be no longer be assessed through written final examination questions. These outcomes will be assessed through the written assignment case study as it relates to the Disablement model as well as the lab practical examination.</p>	<p>collection techniques necessary for implementation. Further expansion to include the role of the PTA in this process will be included.</p> <p>The case study project better reflects a patient scenario over time to allow students to use clinical reasoning as it applies to patient treatment. This project requires review of patient condition and timeline of healing with application of a variety of modes of exercise.</p>	
<p>Course Materials (e.g. textbooks, handouts, on-line ancillaries)</p>	<p>We will collaborate with Washtenaw Community College's fitness center to expose students to a larger variety of exercise modes.</p>	<p>The assessment results demonstrated that students could benefit from additional emphasis on the therapeutic exercise concepts in Outcome 2.</p>	<p>2020</p>

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

6.

III. Attached Files

[2019 Assessment data](#)

[2017 Assessment data](#)

[2018 Assessment data](#)
[Practical exam rubric](#)

Faculty/Preparer:	Ann Herbert	Date: 05/24/2019
Department Chair:	Kristina Sprague	Date: 05/31/2019
Dean:	Valerie Greaves	Date: 06/14/2019
Assessment Committee Chair:	Shawn Deron	Date: 08/19/2019

COURSE ASSESSMENT REPORT

I. Background Information

1. Course assessed:
 Course Discipline Code and Number: PTA 220
 Course Title: Therapeutic Exercise I
 Division/Department Codes: Math, Science, Health

2. Semester assessment was conducted (check one):
 Fall 20__
 Winter 20__
 Spring/Summer 2012_

3. Assessment tool(s) used: check all that apply.
 Portfolio
 Standardized test
 Other external certification/licensure exam (specify):
 Survey
 Prompt
 Departmental exam
 Capstone experience (specify):
 Other (specify): Final Comprehensive Practical Exam

4. Have these tools been used before?
 Yes
 No

If yes, have the tools been altered since its last administration? If so, briefly describe changes made.

5. Indicate the number of students assessed and the total number of students enrolled in the course.
 2008 = 7 students assessed; 14 in the class
 2009 = 10 students assessed; 20 in the class
 2010 = 10 students assessed; 20 in the class

6. If all students were not assessed, describe how students were selected for the assessment. *(Include your sampling method and rationale.)*
 Random selection of at least 50 percent of the students enrolled in the course. This was the method described in the Master Syllabus for PTA 220. The sections were not separated out due to how the exams were stored. They were stored as a class, not by sections.

II. Results

1. Briefly describe the changes that were implemented in the course as a result of the previous assessment.
 This is the first assessment for PTA 220.

2. List each outcome that was assessed for this report exactly as it is stated on the course master syllabus. *(You can copy and paste these from CurricUNET's WR report.)*
 - a. Describe the role of the PTA in the implementation of the plan of care and describe the relationship between the physical therapy evaluation and the development of the plan of care.
 - b. Describe the rationale for the use and progression of selected therapeutic exercises and relate to the short and long term goals identified in the plan of care established by a physical therapist.
 - c. Demonstrate competence in the administering, monitoring, and adjusting therapeutic exercise interventions including strengthening, aerobic conditioning, balance and coordination, conditioning and reconditioning as identified in a plan of care established by a physical therapist.
 - d. Provide patient related instruction to patients' family members, caregivers and other members of the health care team.

2. For each outcome that was assessed, indicate the standard of success exactly as it is stated on the course master syllabus. *(You can copy and paste these from CurricUNET's WR report.)*

COURSE ASSESSMENT REPORT

The Standard of Success for the assessment is: There was only one standard of success documented for PTA 220: 80% of the students will pass both final examinations (written and lab practical) with a score of 80% or greater. In reviewing all of the outcomes listed above, a standard of 80% success/passing rate will be applied.

3. Briefly describe assessment results based on data collected during the course assessment. Indicate the extent to which students are achieving each of the learning outcomes listed above and state whether the standard of success was met for each outcome. ***In a separate document, include a summary of the data collected and any rubrics or scoring guides used for the assessment.***

For Outcome A, 11(2008)-12 (2009-2010) questions from the final written exam were reviewed. These questions mainly focused on determining a student's competency in data collection techniques necessary for implementing appropriate exercise programs (Outcome A, Objective #2 in the master syllabus). The average number of correct responses for these questions over a 3-year period was 83%, with the lowest year being 2008, the first year the course was taught, and 92% in 2010, the third year data was collected. It was found that there were 3 questions over the assessment period that students consistently missed. In review of the curriculum, syllabus and lecture notes related to those questions indicated that the material was not covered adequately. In one question, in 2008, all students missed the correct answer. In review of the material – at that time – it was found that there was a typo in the lecture handout. This was fixed immediately in 2008/2009.

For Outcome B, 6 multiple choice questions and 3 to 4 short answer questions from the written final were assessed. These questions mainly relate to the student's ability to address the appropriateness of an exercise technique given a patient's diagnosis and/or condition and the ability to modify and/or progress the exercise based on clinical conditions. Over a 3-year period, 83% of the multiple choice questions were answered correctly by the students, and for the short answer questions, 89% of the questions were answered where full credit was rewarded. Again, it was noted that in that 3 year period there was one question that was consistently answered incorrectly. This question related to exercise intensity. Wording of the question appears to be adequate, but the issue may lie with how the information is presented. It has been recognized that this "rule" only gets emphasized at the beginning of the semester, but needs to be incorporated more throughout the course. This should help students understand and perform better.

For Outcome C, The overall performance in the final comprehensive practical and written exam of randomly selected students was assessed. The best indicator for this Outcome is the final practical where students are given a written patient scenario and asked to incorporate all elements taught in this course and others, and perform appropriate tests and measures implement appropriate exercises based on the information they gather and document the session, just like they will do in the clinic. Over the 3-year assessment period, 96% of the students surveyed passed the final comprehensive practical with an 80% or greater. For the final written exam, 90% of the students surveyed for this period passed with an 80% or greater.

For Outcome D, a section of the final practical exam was reviewed where students need to teach an appropriate stretching and strengthening technique to the patient. For this outcome, how many students passed these sections versus failure was assessed. Overall, for the 3-year assessment period, 83% of the students surveyed passed these sections. In 2009, only 70% of the students surveyed passed these sections. In review of those who didn't pass, it was found that students struggled in several areas that "lead" up to this section of the practical. As an example, there was one student who did not stretch or strengthen the correct muscle, and this was due to a testing error by the student earlier in the practical. Overall, the students performed well, especially in the practical exam.

In looking at the standard of success for PTA 220 that was written in the master syllabus, over the 3-year period, 90% of the students reviewed passed the final written exam with an 80% or greater. For the final comprehensive practical exam, 96% of the students reviewed passed with an 80% or greater. This is felt to be very positive as the passing benchmark on all exams in the PTA Program is 73%.

COURSE ASSESSMENT REPORT

4. Describe the areas of strength and weakness in students' achievement of the learning outcomes shown in the assessment results. *(This should be an interpretation of the assessment results described above and a thoughtful analysis of student performance.)*

Strengths: As the program and course has progressed over this first assessment cycle, based on the numbers, the students' ability to apply knowledge into practical demonstrations and cases has improved. The students' overall knowledge of theory of Therapeutic Exercise Principles is strong. The ability to develop and implement appropriate exercises is also strong.

Weaknesses: The overall performance of the students is satisfactory. An area that will be emphasized more is the thoroughness of the teaching elements involved in therapeutic exercise. This needs to be emphasized by the instructors more in the classroom and lab. Another consideration for the lower results for outcome D may be due to "tester fatigue". The final practical combines elements from 2 courses, and mimics a real patient treatment, about 45 minutes in length.

Another "weakness" for this course is the amount of material taught. There is a lot of "up front" material that is presented in the first few weeks of the semester. This information is necessary before the students can proceed to learning and implementing data collection and exercise techniques. It appears that some information that the faculty deem important is not being presented well enough to the students.

III. Changes influenced by assessment results

1. If weaknesses were found (see above) or students did not meet expectations, describe the action that will be taken to address these weaknesses. *(If students met all expectations, describe your plan for continuous improvement.)*

Overall the students are meeting expectations in the areas of theory, application and critical thinking as they relate to basic therapeutic principles. It is felt that some areas that the students are tested on need to be covered more thoroughly in the classroom and lab. These adjustments were informally made in 2011/2012.

2. Identify intended changes that will be instituted based on results of this assessment activity (check all that apply). Please describe changes and give rationale for change.

a. Outcomes/Assessments on the Master Syllabus

Change/rationale: The outcomes and objectives will be revised to provide better clarity in what is and should be presented to the students and to allow the students to better understand the expectations of PTA 220.

b. Objectives/Evaluation on the Master Syllabus

Change/rationale: The Objectives will be revised as needed to align with the designated outcomes for PTA 220 and to provide better clarity on teaching and learning and performance expectations.

c. Course pre-requisites on the Master Syllabus

Change/rationale:

d. 1st Day Handouts

Change/rationale: The schedule and topics covered is continually being adjusted to promote clarity of teaching topics, and information covered in class and lab.

e. Course assignments

Change/rationale: An assignment was added in 2011 to address the Disablement Model and its application to the implementation of therapeutic exercise.

f. Course materials (check all that apply)

Textbook

Handouts

X Other: The PTA Program, in 2011, enrolled in a free, web-based exercise tool kit for the students. The students have free access to over 200 different types of therapeutic exercises. This is being used in the assignment, noted in "e" above.

g. Instructional methods

Change/rationale:

COURSE ASSESSMENT REPORT

h. Individual lessons & activities
Change/rationale:

3. What is the timeline for implementing these actions? While some have already been implemented, the revised master syllabus will be completed for Winter 2012. This is the next time PTA 220 is offered.

IV. Future plans

1. Describe the extent to which the assessment tools used were effective in measuring student achievement of learning outcomes for this course. While the outcomes and standards of success did not completely align, it is felt that the assessment tools used are appropriate and effective. As stated earlier, the final comprehensive practical looks at all elements that were presented in the course and tests the students' ability to perform basic therapeutic exercise techniques as well as incorporate important elements of patient care. These are skills necessary for student success in the clinic. The students go out to clinic, for the first time, one week after this course is completed. As far as the final written exam, the questions will be revised and written to align better with the course outcomes and objectives. This should allow for a more efficient and clear assessment process.

2. If the assessment tools were not effective, describe the changes that will be made for future assessments.

3. Which outcomes from the master syllabus have been addressed in this report?

All X Selected _____

If "All", provide the report date for the next full review: Spring/Summer 2014.

If "Selected", provide the report date for remaining outcomes: _____

Submitted by:

Print: <u>Kathleen A. Cook, PT, DPT</u> Faculty/Preparer	Signature: <u><i>Kathleen A. Cook</i></u>	Date: <u>6-7-12</u>
Print: <u>Connie Foster</u> Department Chair	Signature: <u><i>Connie Foster</i></u>	Date: <u>6/14/12</u>
Print: <u>Martha A. Showalter</u> Dean/Administrator	Signature: <u><i>Martha Showalter</i></u>	Date: <u>6/20/12</u>