**2017-2018 Annual Program Assessment Report**

Please submit report to your department chair or program coordinator, the Associate Dean of your College, and to [james.solomon@csun.edu](mailto:james.solomon@csun.edu), Director of the Office of Academic Assessment and Program Review, by September 28, 2018. You may, but are not required to, submit a separate report for each program, including graduate degree programs, which conducted assessment activities, or you may combine programs in a single report. **Please identify your department/program in the file name for your report.**

**College: Health and Human Development**

**Department: Physical Therapy**

**Program: Doctor of Physical Therapy**

**Assessment liaison: Paula Ferreira**

1. **Please check off whichever is applicable:**

**A. \_\_x\_\_ Measured student work within program major/options.**

**B. \_\_x\_\_ Analyzed results of measurement within program major/options.**

**C. \_\_x\_\_ Applied results of analysis to program review/curriculum/review/revision major/options.**

**D. \_\_\_\_\_\_ Focused exclusively on the direct assessment measurement of General Education Natural Sciences learning outcomes**

1. **Overview of Annual Assessment Project(s).** On a separate sheet,provide a brief overview of this year’s assessment activities, including:

* an explanation for why your department chose the assessment activities (measurement, analysis, application, or GE assessment) that it enacted
* if your department implemented assessment **option A**, identify which program SLOs were assessed (please identify the SLOs in full), in which classes and/or contexts, what assessment instruments were used and the methodology employed, the resulting scores, and the relation between this year’s measure of student work and that of past years: (include as an appendix any and all relevant materials that you wish to include)
* if your department implemented assessment **option B**, identify what conclusions were drawn from the analysis of measured results, what changes to the program were planned in response, and the relation between this year’s analyses and past and future assessment activities
* if your department implemented **option C**, identify the program modifications that were adopted, and the relation between program modifications and past and future assessment activities
* if your program implemented **option D**, exclusively or simultaneously with **options** **A, B, and/or C**, identify the basic skill(s) assessed and the precise learning outcomes assessed, the assessment instruments and methodology employed, and the resulting scores
* in what way(s) your assessment activities may reflect the university’s commitment to diversity in all its dimensions but especially with respect to underrepresented groups
* any other assessment-related information you wish to include, including SLO revision (especially to ensure continuing alignment between program course offerings and both program and university student learning outcomes), and/or the creation and modification of new assessment instruments

1. **Preview of planned assessment activities for 2018-19.** Include a brief description as reflective of a continuous program of ongoing assessment.

**OVERVIEW OF ANNUAL ASSESSMENT PROJECT (S)**

For the academic year of 2017-2018, the assessment plan focused on: SLO1: Demonstrate comprehension of the foundational sciences of anatomy, physiology, neurology, and pathology for application to the physical therapy clinical setting; and SLO 2: Communicate in a professional manner to a diverse population in classroom activities and in clinical settings.

In order to assess SLO1, PT 706/L (Applied Neuroscience) was selected for evaluation. The outcome measure designated for evaluation was the final grade at the end of the semester. Cohorts selected for analysis included years 2015 through 2018.

For the Assessment of SOL2, PT 798 (Clinical Internship III of two cohorts: Class 59 and 60) was selected and student performance in clinical practice using the Communication skills session of the Clinical Performance Instrument (CPI) was the elected outcome measure. The CPI was created by the American Physical Therapy Association (APTA) and has been used nationwide. The Communication session of the CPI includes the following:

* **Communicates in ways that are congruent with situational needs. SAMPLE BEHAVIORS:**

1. Communicates, verbally and nonverbally, in a professional and timely manner.
2. Initiates communication\* in difficult situations.
3. Selects the most appropriate person(s) with whom to communicate.
4. Communicates respect for the roles\* and contributions of all participants in patient care.
5. Listens actively and attentively to understand what is being communicated by others.
6. Demonstrates professionally and technically correct written and verbal communication without jargon.
7. Communicates using nonverbal messages that are consistent with intended message.
8. Engages in ongoing dialogue with professional peers or team members.
9. Interprets and responds to the nonverbal communication of others.
10. Evaluates effectiveness of his/her communication and modifies communication accordingly.
11. Seeks and responds to feedback from multiple sources in providing patient care.
12. Adjust style of communication based on target audience.
13. Communicates with the patient using language the patient can understand (eg, translator, sign language, level of education\*, cognitive\* impairment\*, etc).

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1. **SLO1 Assessment:**
   * **Demonstrate comprehension of the foundational sciences of anatomy, physiology, neurology, and pathology for application to the physical therapy clinical setting.**

Applied Neuroscience (PT 706/L) is an essential and foundational course offered during the first year of the Doctor of Physical Therapy (DPT) program. This course in Physical Therapy builds on basic neuroanatomy and neurophysiology to examine how the nervous system controls movement. Theory and application of motor control and motor learning principles are addressed. The course has both lecture and laboratory components in which examples from physical therapy practice are used for immediate application of the neuroscience principles being taught. PT 706/L contains significant foundational content that will serve as an important base/background for future classes. PT 706/L is also known for its challenging curriculum/material for students. This has reflected in the final grade at the end of the semester and in the number of students that unsuccessfully completed the course between the academic year of 2016 and 2017; with a total number of three students and two students failing the class in 2016 and 2017 respectively (Table 1).

With the goal of continually seeking improvement in instructional efficiency, while maintaining the quality of student learning outcomes, the assessment committee liaison, the department chair, and the faculty decided to implement strategies to improve academic success for PT 706/L in 2018. The strategy used focused on increasing the number of classes and the total number of hours per week designated for lecture and labs. The goal was to improve academic success by providing the faculty and students more time to go over the material as well as more opportunities for class/content discussion and mentorship.

From the academic years of 2015 to 2017, PT 706/L met one time per week with a total of 4 hours/week. The following modifications were implemented during Spring 2018:

- change in the schedule from meeting once per week to two times per week, and

- increase the number of hours per week from four hours to six hours.

The assessment aimed to analyze if students’ academic success would improve with the change in class schedule/total number of hours per week.

A total of 127 students were assessed in this study (Table1).

**Table 1:** Cohort by year, class schedule (hour per week), number of students that failed the course and the final grade per cohort.

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| Cohort (Academic year) | Number of students | Hours per week | Number of students that failed the course | Final Grade (Mean±SD) |
| 2014-2015 | 30 | 4 | 0 | 88.43±5.06 |
| 2015-2016 | 32 | 4 | 3 | 81.37±6.05 |
| 2016-2017 | 32 | 4 | 2 | 85.91±5.15 |
| 2017-2018 | 33 | 6 | 0 | 85.38±4.23 |

The results indicate that although there was slight decrease in the average Final Grade in Spring 2018 compared to Spring 2017 (Graph 1), students successfully completed the course as required per the American Physical Therapy Association to progress to the second year DPT program. Additionally, a significant difference was noticed between the average Final Grade of Spring 2016 and Spring 2018 (p=.13), differences were also found in the passing rate (p=.03) between these two years.

Graph 1: Mean±SD final grade per semester and cohort by year.

Graph 2 shows the grade break down per semester by year. There was a significant difference between Spring 2015 and 2016 regarding the number of students scoring A (92-100%), differences were also noticed between Spring 2015 and Spring 2018 (p=.006 and p=.04 respectively). Differences were also found in the number of students scoring C (75-76%): between Spring 2015 and Spring 2016, and Spring 2016 and Spring 2017 (p=.01 and p=.015 respectively); with significantly fewer students scoring C in Spring 2018 as compared to 2016. Collectively, these results demonstrate that changes in the class schedule and the total amount of hour per week significantly impacted student’s academic success in Spring 2018.

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Graph 2: Grade brake down per semester and cohort by year. Grade A, 92-100%; Grade A-, 90-91%; Grade B+, 88-89%; Grade B, 82-87%; Grade B-, 80-81%; Grade C+, 77-79%; Grade C, 75-76%; Grade F, <75%, a final grade of less than 75.00 % result in not passing the class. An asterisk (\*) indicates that the group differs on these variables in the Mann-Whitney test, p<.05.

1. **SOL2 Assessment:**
   * **Communicate in a professional manner to a diverse population in classroom activities and in clinical settings**

PT 798 (Clinical Internship III) of two cohorts (Class 59 and Class 60) was selected to assess SLO2. The outcome measure designated for the evaluation was the Communications skills session of the Clinical Performance Instrument (CPI) score. The primary goal of our analysis was to identify the overall student performance in the Communication session of the CPI. APTA guidelines expect students to perform between the advanced intermediate and entry level by at the end of their final clinical experience. Secondly, our goal was to assess the impact of the multicultural experience on the ability to communicate in clinical practice by comparing the CPI communication scores of students who participated in the international course provided by the Physical Therapy department (elective course) to those were not in the international class.

Participation in international service learning has been shown to benefit nursing and medical students in their ability to interact with patients and in different levels of cognition over one academic semester, showing significantly more growth than those who did not have such experience (Lee 1997; Haq 2000). A study with physical therapist students (SPTs) performed by Sauyer and Lopopolo in 2004, showed that international experience fosters personal growth and enhances one’s international viewpoint. Additionally, SPTs in this project reported significant changes in their abilities to focus on relevant information, to think critically, to strategize systematically, and to problem solve effectively in their provision of care. The SPTs reported gains in knowledge, confidence, independence, and communication abilities similar to those reported by nursing and medical students in previous studies (Lee 1997, Haq 2000).

The means and standard deviations of the Communication criteria of the CPI (during the midterm and final evaluation of the Final clinical experience for Class 59 and Class 60) are shown in Figure 2. A total of 56 students were assessed: 37 from group 1 (not enrolled in the international class) and 19 from group 2 (enrolled in the international class).

**Entry Level**

**Advanced Intermediate**

Figure 2: CPI scores of the Communication session, Class 59 and Class 60, during the clinical experience. Midterm scored by Clinical Instructors (CI) and Self-scores are shown; Group 1 represents students not enrolled in the international class and Group 2 represents students that participated in the international class.

Our results revealed that there was a significant improvement in scores from midterm to final assessment for both CI scores and self-scores (p<.01). At midterm, on average, students performed at the level between the advanced intermediate and entry level. No students performed below the advanced intermediate level. At the end of the internship, all students performed at the entry level as expected by APTA. Overall, these results show the importance of providing feedback during the midterm. Students were able to not only improve overall scores but also exceed the expected performance level required by APTA by the end of their clinical experience.

When comparing students that were enrolled in the international class with those that were not enrolled, there was no significant difference among them (p>.05). Regarding the assessment of the impact of the international class in the Communication score of the CPI, it is possible that the sample size was not enough to detect changes between groups. Increased sample size and further outcome measures should be considered in future analysis to assess the impact of multicultural experience in communication skills in a clinical setting.

1. Preview of planned assessment activities for 2018-19. Include a brief description as reflective of a continuous program of ongoing assessment.

According to our 6-year Assessment Plan, we will assess SLO 3 and SLO 4:

* SLO 3: Practice in an independent and interdependent role in providing physical therapy services
* SLO 4: Practice as a reflective and competent clinician whose clinical decision-making skills are guided by ethical practice standards.

We plan to use both direct measurements (e.g. embedded questions in clinical courses) and indirect measurements of CPI results to identify whether or nor our students will be able to meet the goals of these two SLOs.