# Respiratory Care Annual Assessment Report
# Bachelor of Science Program (Degree Completion)
# 2015-16

## I. Introduction:

The Respiratory Care degree completion program matriculated the first class at Oregon Institute of Technology in September 2005 with 13 students. The program focuses on offering degree completion to registered respiratory therapists who hold an associate's degree. Over the years from 2005 to 2016 the program has steadily grown in student numbers. Last year the average head count was 54. The previous year it was 25. This year, the number has increased to an average head count of 105.

## II. Program Purpose, Objectives and Student Learning Outcomes:

The program faculty reviewed and approved the program purpose, objective and student learning outcomes at a faculty meeting in Fall 2016.

**Respiratory Care Program Purpose**:

The purpose of the Respiratory Care Degree Completion Program, a Bachelor of Science program, is to prepare graduates for upward and broadened mobility within the respiratory care profession. The CoARC 2015-20 objectives is to promote a 70% holding of a Bachelor of Science Degree in Respiratory Care by practicing therapist with the degree completion being a significant component to meet these targets.

**Program Educational Objective:**

The program assists the students in achieving advanced professional goals. This program is to promote higher education achievements within the respiratory care career while students can continue to work within their profession.

**Expected Program Learning Outcomes:**

Students in the program will demonstrate:

1. The ability to communicate effectively in oral, written and visual forms.
2. Advanced knowledge of management of respiratory care plans for adult, neonatal and pediatric patients.
3. The knowledge and skills necessary to obtain an additional credential or certification in an advanced practice.
4. Knowledge and skills in a specialized technical emphasis (advanced respiratory care, education, management, or polysomnography).
5. The ability to design and deliver instruction for undergraduate respiratory care students.

## III. Three-Year Cycle for Assessment of Program Student Learning Outcomes:

The following table shows the three-year plan for assessing individual student learning outcomes.

| Student Learning Outcome | 2015-16 | 2016-17 | 2017-18 |
|---|---|---|---|
| 1. The ability to communicate effectively in oral, written and visual forms. | | ● | |
| 2. Advanced knowledge of management of respiratory care plans for patients. | ● | | |
| 3. The knowledge and skills necessary to obtain an additional credential or certification in an advanced practice. | ● | | |
| 4. Knowledge and skills in a specialized technical emphasis (advanced respiratory care, education, management, or polysomnography). | | | ● |
| 5. The ability to design and deliver instruction for undergraduate respiratory care students. | | ● | |

Table 1. Respiratory Therapy Education Assessment Cycle

## IV. Planned direct and indirect measures for 2015-16 SLOs

All students moving through the program complete the same courses. No students complete courses in polysomnography unless it is chosen as a minor to their Respiratory Care Bachelor of Science Degree. There are currently no programmatic course specialization options except in regard to the senior paper.

### PSLO #2: Advanced knowledge of management of respiratory care plans for patients.

Student learning outcomes were measured in RCP 366 Clinical Simulation for Distance Education through developing a clinical simulation. This method included developing a computer branching exam by students that incorporated the following: patient presentation, information gathering and decision making. This project included developing a patient admits to discharge scenario and include, but not limited to, advanced knowledge of management of respiratory care plans for a patient. Part of this assignment was to be peer reviewed as well as vetted by the instructor. Exams were created to be shared and taken by other cohort's. A rubrics system was used to measure this outcome of 2 total students who participated in this exercise.

The results below are as follows:

| Performance Criteria | Assessment Method | Measurement Scale | Minimum Acceptable Performance | Results Percentage | Results Per Student |
|---|---|---|---|---|---|
| Content | Rubric Graded Assignment | 0 -4 proficiency scale | 80% (score 3-4) | 100% | 2 of 2 |
| Organization | Rubric Graded Assignment | 0 -4 proficiency scale | 80% (score 3-4) | 100% | 2 of 2 |
| Style | Rubric Graded Assignment | 0 -4 proficiency scale | 80% (score 3-4) | 100% | 2 of 2 |
| Delivery | Rubric Graded Assignment | 0 -4 proficiency scale | 80% (score 3-4) | 100% | 2 of 2 |
| Visuals | Rubric Graded Assignment | 0 -4 proficiency scale | 80% (score 3-4) | 100% | 2 of 2 |

Table 2. Assessment Results for PSLO #2, Winter 2016

**Strengths:** The students showed strengths in the ability to create a patient scenario and to rationalize their course of hospital stay through treatment approaches and discharge planning. Students appeared to understand the development process of this project by meeting benchmark agenda's.

**Weaknesses:** The only weakness identified was that a very small sample size for this PSLO was evaluated.

**Actions:** This is an exercise that may be presented in another course to get higher sample size of students for this learning outcome.

**PSLO #3: The knowledge and skills necessary to obtain an additional credential or certification in an advanced practice.**

Program student learning outcomes were measured in RCP 366 Clinical Simulation for Distance Education by a "pass" or "no pass" by the National Boards of Respiratory Care (NBRC). The Advanced Critical Care Specialist (ACCS) is an exam highly respected by physicians nationwide as documented in many reputable medical journals as being challenging, yet yields competence in the critical care environment. There were 20 students in this class. All but 2 took this course pathway to meet the course description of this class. Out of the 18 students who attempted this exam, 14 had passed acquiring

the ACCS credential through the NBRC with national recognition. The following illustrates the outcome of the NBRC exams reflecting their grade in the course.

| **Number of students taking the NBRC's ACCS Exam.** | PASS | NO PASS | **Percentage of students passing the ACCS exam.** |
|---|---|---|---|
| 18 | 14 | 4 | 77.8% |

Table 3. Assessment Results for PSLO #3, Winter 2016

**Strengths:** This assessment could not be measured by a better instrument then the measure by the NBRC itself that give the credentials that this course advocates in earning. This PSLO allowed participating students to challenge the ACCS Exam by the NBRC with a 77.8% pass rate (12 students) within the class. These students have proven to meet PSLO #3 just by its definition. The remaining 12.2% (4 students) will continue to study for this exam and have actively been in communication with Oregon Tech on their progress.

**Weaknesses:** This is the first built in PSLO within distance education for respiratory care. Though resources for studying for this exam were given to students by name, it should be mandatory to buy the most respectable sources of studying for this particular exam. Another place for improvement could be benchmarking using a more formal measure of study in the future as students move towards their goal in challenging the ACCS. Though this course has a national average of 79.4% pass rate last fiscal quarter and 84.5% average over a two year period, we feel that we are close to meeting the national average in a 3 month preparation time for this exam. We would like to achieve at least an 80% pass rate for the ACCS Exam by respiratory care students from Oregon Tech.

**Actions:** Provide mandatory sources for study instead of recommendations. Encourage seminars given biannually in Oregon for passing the ACCS. Create a benchmark analysis of studying progress to assure a higher past success rate in the future.

## V: Summary of Student Learning

**Strengths:** The strengths from last year were none. This year we have started building PSLO assessments in the program with the help of Gary Zimmerman who has successfully acquired distance education assessment in the past. Though we have had historically low head count in the past the distance education for the Respiratory Care Program has been growing year-after-year significantly. There is a change in program directors.

**Weaknesses:** We have had low head count numbers until this year. There are concerns about writing classes prior to being allowed core respiratory courses. It is difficult to

communicate with other distance education instructors given that they are adjunct and trying to create an assessment through them is difficult. There was a change in program directors.

**Actions:** The new program director, Jeff Pardy, will implement all assessments into his courses to alleviate confusion amongst other adjunct faculty. Assessments will be built into the courses taught by the program director to meet the measurement needs of assessments for this program. The new program director has seeked out actions on being mentored by others on how they best collect data for assessment measures through distance education.

## Appendix A-1
## Institutional Student Learning Outcomes-Course Matrix
## 2015-16

**ISLO #2: Advanced knowledge of management of respiratory care plans for patients.**

Courses that are shaded below indicate that the PSLO above is taught in the course, students demonstrate skills or knowledge in the PSLO, and students receive feedback on their performance on the PSLO.

I = Introduced
R = Reinforced
E = Emphasized

| Course | Title | Emphasis |
|---|---|---|
| COM 205 | Intercultural Communication | |
| SPE 321 | Small Group and Team Communication | |
| WRI 227 | Technical Report Writing | |
| RCP 335 | Exercise Physiology and Education | |
| RCP 366 | Clinical Simulation | E |
| RCP 389 | International Neonatal Respiratory Care | |
| RCP 440 | Case Management/Credentials I | |
| RCP 441 | Case Management/Credentials II | |
| RCP 442 | Case Management/Credentials III | |
| | Social Science Electives | |

**SLO #3: The knowledge and skills necessary to obtain an additional credential or certification in an advanced practice.**

I = Introduced
R = Reinforced

E = Emphasized

| Course | Title | Emphasis |
|---|---|---|
| COM 205 | Intercultural Communication | |
| SPE 321 | Small Group and Team Communication | |
| WRI 227 | Technical Report Writing | |
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| RCP 389 | International Neonatal Respiratory Care | |
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| RCP 441 | Case Management/Credentials II | |
| RCP 442 | Case Management/Credentials III | |
| | Social Science Electives | |