# **Assessment: Course Four Column**

SPRING/SUMMER 2015



# El Camino: Course SLOs (HSA) - Respiratory Care

# ECC: RC 170:Introduction to Respiratory Care Sciences and the Profession

Course SLO	Assessment Method Description	Assessment Data & Analysis	Actions
SLO #2 Range of Respiratory Competency - During classes, students will demonstrate and explain appropriate respiratory care competencies such as FIO2 monitoring and managing patients receiving prolonged artificial ventilation, pulmonary rehabilitation, life support procedures, bronchial hygiene and oxygen therapy. Course SLO Status: Active Course SLO Assessment Cycle: 2014- 15 (Spring 2015) Input Date: 04/02/2015	Exam/Test/Quiz - Assigned a clinical scenario, students will be tested on oxygen therapy. Student success will be gaged upon student understanding of all indicated precautions needed to insure patient safety throughout the procedure.  Standard and Target for Success: The standard and target for success is 70% of the class will achieve a passing score of 70% on this topic. This class is a pre-clinical class. Students enrolled in this class are in the process of establishing personal interest and identification of aptitude in the field of respiratory care. Therefore, the standard is based on those attempting the test and their score on the test indicating mastery of the learning objectives set down for the class.	Semester and Year Assessment Conducted: 2014-15 (Spring 2015)  Standard Met?: Standard Met  Thirty two students attempted the test with twenty six achieving a minimum score of 70% or better. Therefore, 87% of the class achieved the passing score of 70% and the target for success was met. (04/02/2015)  Faculty Assessment Leader: Roy  Mekaru	null.courseAction: Continue monitoring standards and target for success and adjust teaching methodology accordingly. (04/02/2015) Action Category: Teaching Strategies

# ECC: RC 172: Fundamentals of Cardiopulmonary Physiology and Pharmacology in Respiratory Care

# Course SLO

# Assessment Method Description

# Assessment Data & Analysis

# **Actions**

### SLO #2 Demonstrate RC

Competencies - During classes & labs, students will demonstrate and explain appropriate respiratory care competencies such as FIO2 monitoring and managing patients receiving prolonged artificial ventilation, pulmonary rehabilitation, life support procedures, bronchial hygiene and oxygen therapy.

Course SLO Status: Active Course SLO Assessment Cycle: 2014-15 (Spring 2015)

Input Date: 11/29/2013

Exam/Test/Quiz - Assigned a clinical scenario, students will demonstrate in Respiratory Care multimedia Lab bronchial hygiene to be performed at the highest level of safety for a patient on a ventilator. Student success will be gaged upon student employment of all indicated precautions needed to insure patient safety throughout the procedure.

## **Standard and Target for Success:**

This class is a pre-clinical class. Students enrolled in this class are in the process of establishing personal interest and identification of aptitude in the field of respiratory care. Therefore, the standard is based on those completing the class and their score on the final exam indicating mastery of the learning objectives set down for the class. Target for success is mastery by 70% of the class. This percentage indicates that while teaching strategies maybe successful in helping most students, the strategies may not help all to meet the goal.

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

Assigned a clinical scenario, students demonstrated in Respiratory Care multimedia Lab bronchial hygiene that was performed at the highest level of safety for a patient on a ventilator. Student success was gaged upon student employment of all indicated precautions needed to insure patient safety throughout the procedure. (04/08/2015)

Faculty Assessment Leader: Roy

Mekaru

**Faculty Contributing to Assessment:** 

Doug Mizukami

**null.courseAction:** review teaching strategies to insure appropriateness and proper level of difficulty for continued success of students. (04/08/2016) **Action Category:** Teaching

Strategies

# ECC: RC 176:Introduction to Respiratory Care of the Non-Critically III Patient

# Course SLO

# Assessment Method Description

# Assessment Data & Analysis

# **Actions**

# SLO #2 Demonstrate RC procedures in Non-Critical Patients -

Demonstrate and explain appropriate respiratory care competencies such as FIO2 monitoring and managing patients receiving prolonged artificial ventilation, pulmonary rehabilitation, life support procedures, bronchial hygiene and oxygen therapy.

Course SLO Status: Active

Course SLO Assessment Cycle: 2014-

15 (Summer 2015) Input Date: 11/29/2013 **Exam/Test/Quiz** - oral examination describing oxygen management of a patient with hypoxemia indicating the need for 02 adjustments.

## **Standard and Target for Success:**

Achieve 100% score on the oral examination. 100% of all participants must meet the standard in two attempts.

Semester and Year Assessment Conducted: 2014-15 (Summer 2015)

Standard Met?: Standard Met

Students were able to achieve 100% on the oral examination with minimal difficulty. All were able to complete on first attempt. The high standard of 100% on the examination is vital since these same students will be training clinically with actual patients at various clinical sites where the patient's well-being is of the highest importance.

The students did report that during their preparation for the examination, newer technologies were mentioned in their researches that were not available in the RC Lab to help them prepare. The faculty was able to administer the examination successfully but may have difficulty in maintaining the standard in the future. Updated mannequins and equipment would be indicated at this time.

(07/21/2015)

**Faculty Assessment Leader: Roy** 

Mekaru

**Faculty Contributing to Assessment:** 

Vicki Robertson

**Reviewer's Comments:** 

null.courseAction: Will monitor student performance associated with oral examination to see if changes in technology maybe affecting overall performance. Possible teaching strategies include use of most current mannequins and software which allows for usage in the greatest amount of classes. (07/21/2015)

Action Category: Program/College

Support

**null.courseFollowUp:** Research possible funding sources and make requests as necessary to have continued achievement of the standard. (07/21/2016)

# ECC: RC 280:Respiratory Care of the Critically III Patient II

# Course SLO

SLO #2 Explain Ventilator & Life
Support Procedures - During classes
& labs, students will demonstrate and
explain appropriate respiratory care
competencies such as FIO2
monitoring and managing patients
receiving prolonged artificial
ventilation, pulmonary rehabilitation,
life support procedures, bronchial
hygiene and oxygen therapy.

Course SLO Status: Active Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

**Input Date:** 11/29/2013

# Assessment Method Description

Performance - Assigned a clinical scenario, students will demonstrate in Respiratory Care multimedia Lab bronchial hygiene to be performed at the highest level of safety for a patient on a ventilator. Student success will be gaged upon student employment of all indicated precautions needed to insure patient safety throughout the procedure.

Standard and Target for Success: Complete the bronchial hygeine with no errors. Students allowed two attempts to meet the standard.

# Assessment Data & Analysis

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

Assigned an ICU clinical scenario, students demonstrated in Respiratory Care multimedia Lab bronchial hygiene that was performed at the highest level of safety for a patient on a ventilator. Student success was gaged upon student employment of all indicated precautions needed to insure patient safety throughout the procedure. The students were able to complete the assigned clinical scenario within standards set down for success. The students did identify newer ventilator technology with greater safety features being used at the various clinical sites that is not available here in the ECC lab. While this did not inhibit their performance at this time, this may present performance issues at future times. (04/02/2015)

**Faculty Assessment Leader: Roy** 

Mekaru

**Faculty Contributing to Assessment:** 

Vicki Robertson

# **Actions**

**null.courseAction:** Develop plan for leasing/renting budget to acquire these newer ventilators for the multimedia lab. (04/02/2016)

Action Category: Program/College

# ECC: RC 282:Fund Perinatal/Pediatric RC

# Course SLO

# Assessment Method Description

Exam/Test/Quiz - Assigned a

neonatal ICU clinical scenario,

students will demonstrate in

Respiratory Care multimedia Lab

bronchial hygiene to be performed

Student success will be gaged upon

student employment of all indicated

precautions needed to insure patient

Complete the bronchial hygiene with

safety throughout the procedure.

**Standard and Target for Success:** 

no errors. Students allowed two

attempts to meet the standard.

at the highest level of safety for a

neonatal patient on a ventilator.

# Assessment Data & Analysis

# Actions

# **Differences** - During classes & labs, students will demonstrate and explain appropriate respiratory care competencies such as FIO2

SLO #2 Explain Peds/Neo RC

competencies such as FIO2 monitoring and managing patients receiving prolonged artificial ventilation, pulmonary rehabilitation, life support procedures, bronchial hygiene and oxygen therapy.

Course SLO Status: Active
Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

Input Date: 11/29/2013

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

Assigned a neonatal ICU clinical scenario, students demonstrated in Respiratory Care multimedia Lab bronchial hygiene that was performed at the highest level of safety for a patient on a ventilator. Student success was gaged upon student employment of all indicated precautions needed to insure patient safety throughout the procedure. All students were able to complete the assigned clinical scenario within standards set down for success. The students did identify newer ventilator technology with greater safety features being used at the various clinical sites that is not available here in the ECC lab. While this did not inhibit their performance at this time, this may present performance issues at future times. (04/02/2015)

Faculty Assessment Leader: Roy

Mekaru

**Faculty Contributing to Assessment:** 

Vicki Robertson

null.courseAction: Students were able to continue success rate achieved last spring. Students did mention that aging mannikins and aging ventilator technology did present minor problems to their success, but did not stop them from meeting the standard. Continue monitoring student success rates and request updates in mannikins and ventilator technology. (04/02/2016)
Action Category: Program/College

# ECC: RC 284:Resp Care Crit-III Patient III

## Course SLO

# Assessment Method Description

# Assessment Data & Analysis

# **Actions**

**SLO #2 Explain Diseases & Therapies** for RC Patients - During classes & labs, students will demonstrate and explain appropriate respiratory care competencies such as FIO2 monitoring and managing patients receiving prolonged artificial ventilation, pulmonary rehabilitation, life support procedures, bronchial hygiene and oxygen therapy.

Course SLO Status: Active Course SLO Assessment Cycle: 2014-

15 (Summer 2015) Input Date: 11/29/2013 Exam/Test/Quiz - Assigned a clinical scenario, students will demonstrate in Respiratory Care Multimedia Lab, management of a patient receiving bronchial hygiene on a ventilator. This demonstration will be to be performed at the highest level of safety for a patient on a ventilator. Student success will be gaged upon

safety throughout the procedure. **Standard and Target for Success:** Complete the bronchial hygiene with

student employment of all indicated

precautions needed to insure patient

no errors. Students allowed two attempts to meet the standard.

Semester and Year Assessment Conducted: 2014-15 (Summer 2015)

Standard Met?: Standard Met

100% of the students were able to complete the assigned clinical scenario within standards set down for success. The students did identify newer ventilator technology with greater safety features being used at the various clinical sites that is not available here in the ECC lab. While this did not inhibit their performance at this time, this may present performance issues at future times. (07/27/2015)

Faculty Assessment Leader: Roy

Mekaru

**Faculty Contributing to Assessment:** 

Vicki Robertson, Doug Mizukami, Taryn Parker, Raymund Adoc

**Reviewer's Comments:** 

(07/27/2016)

Action Category: Program/College Support

null.courseAction: Develop plan

acquire these newer ventilators

for leasing/renting budget to

for the multimedia lab.

null.courseAction: Develop plan for leasing/renting budget to acquire these newer ventilators for the multimedia lab. (07/27/2016)

Action Category: Program/College

# ECC: RC 286:Fund Pulmonary Rehab/Home RC

## Course SLO

# SLO #2 Demo or Explain RC pulmonary Rehab Procedures -

During classes & labs, students will demonstrate and explain appropriate respiratory care competencies such as FIO2 monitoring and managing patients receiving prolonged artificial ventilation, pulmonary rehabilitation, life support procedures, bronchial hygiene and oxygen therapy.

Course SLO Status: Active Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

Input Date: 04/02/2015

# Assessment Method Description

Exam/Test/Quiz - Assigned a clinical scenario associated with pulmonary rehabilitation, students will demonstrate in Respiratory Care multimedia Lab bronchial hygiene to be performed at the highest level of safety for a patient requiring rehabilitation. Student success will be gaged upon student employment of all indicated precautions needed to insure patient safety throughout the procedure.

## **Standard and Target for Success:**

Complete the bronchial hygiene with no errors. Students allowed two attempts to meet the standard.

# Assessment Data & Analysis

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

Assigned a clinical scenario associated with pulmonary rehabilitation, students demonstrated in Respiratory Care multimedia Lab bronchial hygiene that was performed at the highest level of safety for a patient requiring rehabilitation. Student success was gaged upon student employment of all indicated precautions needed to insure patient safety throughout the procedure. The students were able to complete the assigned clinical scenario within standards set down for success. Students did achieve standard for success. The students did identify newer computer technology being used at the various clinical sites that is not available here in the ECC lab. While this did not inhibit their performance at this time, this may present performance issues at future times. (04/02/2015)

Faculty Assessment Leader: Roy

Mekaru

**Faculty Contributing to Assessment:** 

Raymund Adoc

# **Actions**

null.courseAction: Develop plan to acquire these newer computer technologies for the multimedia lab. Students were able to continue success rate achieved last spring with minimal difficulties. Continue monitoring student success rates and request purchase of computer technologies. (04/02/2016)

Action Category: Program/College

# ECC: RC 290:Adv Specialty Resp Gases

## **SLO #2 Administration of Specialty**

Gases - During classes & labs, students will demonstrate and explain appropriate respiratory care techniques and competencies to deliver specialty gases safely and effectively to the patient

Course SLO Status: Active
Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

Course SLO

**Input Date:** 11/29/2013

# Assessment Method Description

**Exam/Test/Quiz** - Assigned a clinical scenario, students will demonstrate in Respiratory Care multimedia Lab usage of specialty gas such has nitric oxide to be delivered to a patient on a ventilator.

## **Standard and Target for Success:**

Complete the demonstration with no errors. Students allowed two attempts to meet the standard.

# Assessment Data & Analysis

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

Assigned a clinical scenario, students demonstrated in Respiratory Care multimedia Lab usage of the specialty gas, nitric oxide, on a patient on a ventilator. Student success was gaged upon setup and demonstration of appropriate technique of usage of nitric oxide on a patient on a ventilator (04/08/2015)

**Faculty Assessment Leader: Roy** 

Mekaru

**Faculty Contributing to Assessment:** 

Vicki Robertson

# **Actions**

null.courseAction: The students were able to complete the assigned clinical scenario within standards set down for success. The students did identify newer ventilator technology to assist with usage of specialty gases such as nitric oxide with greater safety features being used at the various clinical sites that is not available here in the ECC lab. While this did not inhibit their performance at this time, this may present performance issues at future times. The program will develop plan for acquisition this newer technology for the multimedia lab (04/08/2016)

Action Category: Program/College

# ECC: RC 291:Adv SpcIty Vent/Oxgn Dlvry Dev

## Course SLO

# Assessment Method Description

# Assessment Data & Analysis

# Actions

SLO #2 Explain or Demo Waveform Interpretation - During classes & labs, students will demonstrate and explain appropriate respiratory care ventilatory management techniques and competencies including the ability to interpret ventilatory waveforms and correctly monitor the patient receiving PAV.

Course SLO Status: Active
Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

**Input Date:** 11/29/2013

Exam/Test/Quiz - Assigned a clinical scenario, students demonstrated in Respiratory Care multimedia Lab interpretation of ventilator waveforms for a patient on a ventilator. Student success was gaged upon student appropriate interpretations of all indicated waveforms.

**Standard and Target for Success:** 

Complete the interpretations of ventilator waveforms with no errors. Students allowed two attempts to meet the standard.

**Semester and Year Assessment Conducted:** 2014-15 (Spring 2015)

Standard Met?: Standard Met

Assigned a clinical scenario, students demonstrated in Respiratory Care multimedia Lab interpretation of ventilator waveforms for a patient on a ventilator. Student success was gaged upon student employment of appropriate interpretations throughout the scenario. All students completed scenarios within the described standard (04/08/2015)

**Faculty Assessment Leader: Roy** 

Mekaru

Faculty Contributing to Assessment:

Vicki Robertson

null.courseAction: The students were able to complete the assigned clinical scenario within standards set down for success. The students did identify newer ventilator technology with greater safety features being used at the various clinical sites that is not available here in the ECC lab. While this did not inhibit their performance at this time, this may present performance issues at future times. Action is to develop plan for leasing/renting budget to acquire these newer ventilators for the multimedia lab. (04/08/2016)

Action Category: Program/College

# ECC: RC 292:Adv Clnic App/Interp Bld Gases

## Course SLO

# **SLO #2 Solve ABG Problems -** During classes students will demonstrate and explain arterial blood gas problems and ways to insure accuracy of reported blood gas results using the latest ABG equipment available for patient care.

Course SLO Status: Active
Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

Input Date: 11/29/2013

# Assessment Method Description

Exam/Test/Quiz - Assigned a clinical scenario, students will demonstrate in Respiratory Care multimedia Lab appropriate explanations and ways to insure accuracy of arterial blood gas results for a patient on a ventilator. Student success will be gaged upon student employment of all indicated solutions and appropriate explanations needed to insure accuracy throughout the procedure.

## **Standard and Target for Success:**

Complete the explanations and employment of solutions with no errors. Students allowed two attempts to meet the standard.

# Assessment Data & Analysis

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

Assigned a clinical scenario, students demonstrated in Respiratory Care multimedia Lab appropriate explanations and ways to insure accuracy of arterial blood gas results for a patient on a ventilator. Student success was gaged upon student employment of all indicated solutions and appropriate explanations needed to insure accuracy throughout the procedure. All students met the standard (04/08/2015)

Faculty Assessment Leader: Roy

Mekaru

**Faculty Contributing to Assessment:** 

Raymund Adoc

# Actions

null.courseAction: The students were able to complete the assigned clinical scenario within standards set down for success. The students did identify newer ventilator technology with greater safety features being used at the various clinical sites that is not available here in the ECC lab. While this did not inhibit their performance at this time, this may present performance issues at future times. . The Program will work to establish leasing fund for these newer ventilators since possibly more economical then purchasing ventilators. (04/08/2016)

**Action Category:** Program/College Support

**null.courseFollowUp:** need to continue monitoring student success and add newer ventilator technology as appears on market. (05/18/2016)

# ECC: RC 293:Cardiac Monitrng Adv Resp Care

## Course SLO

# Assessment Method Description

# Assessment Data & Analysis

# **Actions**

SLO #2 Respond appropriately to Cardiac Monitoring Data - During classes & labs, students will demonstrate the ability to interpret cardiac monitor data and take or recommend the appropriate action according to AHA ACLS protocols.

Course SLO Status: Active Course SLO Assessment Cycle: 2014-15 (Spring 2015)

**Input Date:** 11/29/2013

**Exam/Test/Quiz** - Assigned a clinical scenario, students will demonstrate in Respiratory Care multimedia Lab appropriate cardiac monitor data and recommend appropriate action according to AHA ACLS protocols.

**Standard and Target for Success:** 

Student success will be gaged upon student employment of all appropriate actions needed according to AHA ACLS protocols and be completed with no errors.

Students allowed two attempts to meet the standard.

**Semester and Year Assessment Conducted:** 2014-15 (Spring 2015)

Standard Met?: Standard Met

Assigned a clinical scenario, students demonstrated in Respiratory Care multimedia Lab acquisition of appropriate cardiac monitor data and recommendations for appropriate actions according to AHA ACLS protocols.

The students were able to complete the assigned clinical scenario within standards set down for success. The students did identify newer AHA ACLS technology that is not available here in the ECC lab. While this did not inhibit their performance at this time, this may present performance issues at future times.

(04/08/2015)

**Faculty Assessment Leader: Roy** 

Mekaru

**Faculty Contributing to Assessment:** 

Vicki Robertson

null.courseAction: Will monitor student performance associated with clinical scenarios to see if changes in technology maybe affecting overall performance. Develop plan for acquisition of this new technology for the multimedia lab. (04/08/2015)
Action Category: Program/College

# ECC: RC 294:Pulmnry Tstng in Adv Resp Care

## Course SLO

# Assessment Method Description

# Assessment Data & Analysis

# Actions

## SLO #2 Demo Use of PFT Devices &

Problems - During classes & labs, students will demonstrate and explain bedside and laboratory Pulmonary Function Testing competencies such as performing a ERV,IRV, IC, FVC, FRC, esophageal pressures and RV.

Course SLO Status: Active
Course SLO Assessment Cycle: 2014-

15 (Summer 2015) Input Date: 11/29/2013 **Exam/Test/Quiz** - Students will perform appropriate pulmonary function testing techniques to yield accurate Inspiratory Capacity and Functional Residual Capacity values

using bedside spirometers in the El

**Standard and Target for Success:** 

Camino Multimedia Lab.

100% of the students will complete the testing procedure with no errors. Students allowed two attempts to meet the standard.

Semester and Year Assessment Conducted: 2014-15 (Summer 2015)

Standard Met?: Standard Met

100% of the students were able to meet the thresh hold with minimal issues at this time. The students did identify newer technology being used at the various clinical sites that is not available here in the ECC lab. While this did not inhibit their oral examinations at this time, this may present performance issues at future times. (07/27/2015)

**Faculty Assessment Leader: Roy** 

Mekaru

**Faculty Contributing to Assessment:** 

Raymund Adoc

**Reviewer's Comments:** 

**null.courseAction:** Will monitor student performance associated with bedside spirometers available in Lab compared to performance in clinical sites to see if the difference in technology maybe affecting overall performance at the various clinical sites. (07/27/2016)

**Action Category:** Program/College Support

null.courseAction: Cost of plethysmograph prohibitive at this time. Seek newer technologies in bedside spirometers maybe more in line with available funding. (07/27/2016)

Action Category: Program/College

# ECC: RC 295:Phrmclgy in Advanced Resp Care

# Course SLO

# Assessment Method Description

# Assessment Data & Analysis

# Actions

# SLO #2 Demonstrate Cognitive Knowledge of Advanced

Pharmacology in RC - Students who stay in the course till the end of semester will take a comprehensive final multiple choice examination on conducting, using and interpreting Advanced PFT in RC and 80% will obtain a grade of 70% or better.

Course SLO Status: Active
Course SLO Assessment Cycle: 2014-

15 (Summer 2015) Input Date: 11/29/2013 **Exam/Test/Quiz** - oral examination describing medication and treatment modalities' needed to treat various pulmonary patients.

**Standard and Target for Success:** 

Achieve 100% score on the oral examination. 100% of all participants must meet the standard in two attempts.

Semester and Year Assessment Conducted: 2014-15 (Summer 2015)

Standard Met?: Standard Met

Students were able to achieve 100% on the oral examination with minimal difficulty. All were able to complete on first attempt. The high standard of 100% on the examination is vital since these same students will be training clinically with pulmonary patients at various clinical sites where the patient's well-being is of the highest importance. (08/13/2015)

**Faculty Assessment Leader: Roy** 

Mekaru

**Faculty Contributing to Assessment:** 

Vicki Robertson

**Reviewer's Comments:** 

**null.courseAction:** monitor and review examination results and feedback from students about newer technologies in clinics that the program needs to acquire to help students stay current (09/08/2016)

**Action Category:** Program/College Support

null.courseAction: Will monitor student performance associated with oral examination to see if changes in pharmacology maybe affecting overall performance. Possible teaching strategies include use of most current software training tools designed specifically for respiratory care such as Decision Simulation Software which allows for usage in the greatest amount of classes. (08/13/2015)

**Action Category:** Teaching Strategies

**null.courseFollowUp:** Research possible other possible teaching strategies and make requests as necessary to have continued achievement of the standard. (08/13/2016)