Oregon Tech
Medical Imaging Technology Department
Echocardiography Program
2016-2017 Assessment

I. Introduction

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II. Program Purpose, Educational Objectives, and Student Learning Outcomes

The Echocardiography

Additional Student Learning Opportunities, and Programmatic Input

Students have been encouraged to attend meetings sponsored by northwest regional chapter of the American Society of Echocardiography (the Willamette Valley Society of Echocardiography - WVSE) held quarterly in Portland, and try to attend other regional society conferences held near their externship sites throughout the year.

Clinical Instructor input was accessed through late 2016 conference calls, and discussions covered the logistics of student documentation and updated verbal evaluation of the Trajecsys externship reporting system, areas of didactic concern, modifications to the current externship Competencies, and overall success of the program. Continuing modifications will be directed towards an update of the Competency Evaluations used on externship, better reflecting current practice models, and towards elimination many of the scoring areas that more properly fit within the Echocardiography Professional Evaluation. CME's will be made available through SDMS for clinical site staff directly involved in the hands-on training for students on their Clinical Externship, started during the 2016 – 2017 Externship year. Echocardiography Clinical Instructors will be invited to the spring 2018 Clinical Instructor Workshop, and all programs will combine CI inputs and suggestions.

The program Advisory Board/Committee will meet via teleconference spring/summer 2016. Results and input from the discussions will be made available as needed. The program's Medical Director was frequently updated on the progress of the program's development, provided input as needed, and visited campus and gave lectures to the junior and sophomore classes spring 2016. The Medical Director's overview and assessment of the program was a part of the JRC-DMS accreditation site visit, May 2015. An Advisory Board/Committee meeting

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

The faculty also confirmed the assessment cycle planned, as listed in Table #2 below.

Echocardiography Degree Student Learning Outcomes Assessment Schedule	2016-17	2017-18	2018-19	2019-20	2020-21	2021-2022
1. The student will demonstrate the ability to communicate effectively in oral, written and visual forms.	X(1)			X(1)		
2. The student will demonstrate the ability to work effectively in teams.	X(4)			X(4)		
3. The student will demonstrate an ability to provide basic patient care and comfort.		X			X	
4. The student will employ professional judgment and discretion, including ethics.			X(3)			X(3)
5. The student will demonstrate knowledge and understanding of human gross anatomy sectional anatomy and normal and abnormal cardiovascular anatomy.	X			X		
6. The student will demonstrate knowledge and understanding of cardiovascular physiology, pathology, and pathophysiology.		X(2)			X(2)	
7. The student will demonstrate knowledge and understanding of cardiovascular physical principles and instrumentation.		X(5)			X(5)	
8. The student will demonstrate knowledge and understanding of clinical echocardiography diagnostic procedures and testing			X			X
9. The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.						

Table #1. Echocardiography Degree Assessment Cycle – (number) indicates a PSLO that incorporates proposed ESLO's. The pattern is subject to modification.

IV. Summary of 2016-17 Assessment Activities

A. Essential Student Learning Outcome #1 (PLSO #1): The student will demonstrate the ability to communicate effectively in oral, written and visual forms.

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The performance criteria for written communicate are:
1. Writing is clear, focused and understandable.
2. Order & structure are clear with satisfying introduction and conclusion.
3. Document is well supported.
4. Voice and wording are appropriate and compelling.
5. Standard writing conventions are used effectively.

O a C   a

The performance criteria for oral communication are:
1. Content is supported, informative and persuasive.
2. Presentation is well organized with smooth transitions.
3. Topic is well understood and conveyed with enthusiasm.
4. Delivery is effective and poised.

Direct Assessment #1

Externship Preparation classes in spring term each year. Example of adequate case studies will be made available for review.

Direct Assessment #3
The faculty also reviewed Clinical Instructors assessment of this outcome at Externship sites fall term 2016 using the Student Competency Evaluations available to sites via the Trajecsys reporting system. The Clinical Instructors rated the proficiency of 18 senior students using the performance criteria described in Table 4 below.

Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Maintains clinical records	Student Monthly Logs	0-100%	90% with a score of 80 or better	100% scored 80

Indirect Assessment #1

B. Essential Student Learning Outcome #4 (PLSO #2). The student will demonstrate the ability to work effectively in teams.

Direct Assessment #1

The faculty assessed this outcome in ECHO 333 in fall term. Student group presentations were assigned, with groups aware that the assignment would be graded utilizing the Oregon Tech ISLO Team and Group Work Rubric. Twenty Echocardiography juniors participated in the assessment. The faculty rated the proficiency of students using the performance criteria described in Table #6 below.

Performance Criteria	Assessment Methods	Measurement Scale	Minimum Acceptable Performance	Results
Identify and achieve goal/purpose	ISLO Rubric	Score of 1 – 4 (no/limited proficiency – high proficiency	80% with 3 or higher	All students scored 3 or higher

Direct Assessment #2

The faculty assessed this outcome in ECHO 420 from the 2016–2017 academic year using spring 2017 student competencies for echocardiography as assessed by industry. Eighteen students participated in the assessment. The faculty rated the proficiency of students using the performance criteria described in Table #7 below.

Performance Criteria	Assessment Methods	Measure Scale	Minimum Acceptable Performance	Results -% with Target or higher
Student recognizes his/her role as a student and displays initiative in helping in the daily echocardiography lab team effort.	Echo 420 Spring Competency (various)	1 – 10 Scale		

Indirect Assessment #1

The faculty assessed this outcome in ECHO 420 from the student 2016-17 exit surveys asking them to rate how well the OIT Echocardiography program prepared them for learning outcome #2. The students rated their proficiency using the performance criteria described in Table #8 below.

Table #8, E

Direct Assessment #1

The faculty assessed this outcome through Competency Evaluations completed by Clinical Instructors on 18 senior students during ECHO 420 externship winter term 2017. The proficiency of students was rated using the performance criteria described in Table 9 below.

Performance Criteria	Assessment Methods	Measure Scale	Minimum Acceptable Performance

Indirect Assessment #1
This outcome was also assessed in exit surveys evaluating the Echocardiography Program, completed by both senior students nearing or upon completion of their clinical externship in ECHO 420, spring term 2017. Nineteen Clinical Instructors at externship sites participated in the program evaluation. The criteria and results are provided in Table 10 below.

Evaluation scale: (1) Poor (2) Satisfactory (3) Good (4) Excellent (n/a)

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