2020-2021 Assessment Report
Vascular Technology Program
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Vascular Technology Program

Bachelor of Science Degree

Section 1- Program Mission, Objectives & Learning Outcomes

Oregon Tech Mission

Oregon Institute of Technology, an Oregon public university, offers innovative and rigorous applied degree programs in the areas of engineering, engineering technologies, health technologies, management, and the arts and sciences. To foster student and graduate success, the university provides an intimate, hands-on learning environment, focusing on application of theory to practice. Oregon Tech offers statewide educational opportunities for the emerging needs of Oregonians and provides information and technical expertise to state, national and international constituents.

Core Theme 1 Applied Degree Programs

Oregon Tech offers innovative and rigorous applied degree programs.

The teaching and learning model at Oregon Tech prepare students to apply the knowledge gained in the classroom to the workplace.

Core Theme 2 Student and Graduate Success

Oregon Tech fosters student and graduate success by providing an intimate, hands-on learning environment, which focuses on application of theory to practice. The teaching and support

American Registry of Diagnostic Medical Sonography (ARDMS) Pass Rates, Employment Rates and Retention/Attrition Rates

Graduating Class o	2016	2017	2018	2019	2020
Registry Pass Rate					
ARDMS Pass rate for Sonography Physics and Instrumentati	100% (14/14)	100% (17/17)	100% (13/13)	100% (13/13)	100%
ARDMS pass rate for Gen					

Table 1

Program Enrollment

Table 2

Survey Student Quotes from the Exit Surveys & Evaluations

Name 3 strengths of the program:

1. Giving us a deep understanding of why everything works the way it does instead of just remembering it.
2. Ample time working in the field before graduation, so by the time graduation comes around it isn't an adjustment to continue working.
3. Giving us connections to collaborate with other technologists or professionals in our field.

Suggestions that would help to better prepare future graduates

Evaluation Comments

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Industry Relationships:

Arizona Doppler Specialists, Phoenix, AZ
Cedar-Sinai, Los Angeles, CA
Clevleand Clinic, Cleveland, OH
Franciscan Vascular Associates Tacoma
Hoag Heart and Vascular Institute, Long Beach, CA
James A. Haley Veteran's Hospital, Tampa, FL
Lake Washington Vascular Lab, Bellevue, WA
Milton S. Hershey Medical Center, Hershey, PA
Oregon Health & Sciences University Vascular Lab, Portland,
Oregon Heart & Vascular Institute Vascular Lab, Eugene, OR
Pacific Vascular, Inc., Bothell, WA
PeaceHealth Thoracic & Vascular Surgery
Providence Medford Vascular Lab, Medford, OR
Providence Medical Group Spokane Vascular Lab, Spokane,
Providence St. Vincent's, Portland, OR
Quality Vascular Imaging, Inc., Venice, FL
Renown Regional Medical Ctr. Vascular Lab, Reno, NV
Salem Hospital Vascular Lab, Salem, OR
Shasta Region Medical Ctr. Vascular Lab, Redding, CA
Specialists in Vascular Ultrasound, Inc., San Antonio, TX
Swedish Vascular Lab, Seattle, WA
St. Luke's Regional Medical Ctr. Vascular Lab, Boise, ID

Programmatic Student Learning Outcomes

1. The ability to communicate effectively in oral, written and visual forms.
2. The ability to work effectively in teams.
3. An ability to provide basic patient care and comfort.
4. Professional judgment and discretion including ethics.
5. Knowledge and understanding of human gross anatomy sectional anatomy and normal and abnormal vascular anatomy.
6. Knowledge and understanding of vascular physiology, pathology, and pathophysiology.
7. Knowledge and understanding of vascular physical principles and instrumentation.
8. Knowledge and understanding of clinical vascular diagnostic procedures and testing
9. An understanding of diverse cultural and humanistic traditions in the global society.

Origin and External Validation

The current set of program student learning outcomes originated from outcomes set forth by the vascular technology program's programmatic accrediting body known as the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). The outcomes have remained consistent in JRC-DMS who has been the primarily external validation for the vascular technology program since it was accredited in 2015. alidcular th Mnodgyro3-6.6 (g)2.6 (ra)10.7 (m)-9.4 Tc (

	Course	PSLO 1	PSLO 2	PSLO 3	PSLO 4	PSLO 5	PSLO 6	PSLO 7	PSLO 8	PLSO 9	ELSO

VAS 366	P			P	P	P	P	P	P	P	P	P	P		P
CHE 360															
VAS 337			P				P						P		
VAS 367			P	P	P	P	P	P	P		P	P	P		P
MIT 385	P	P								P				P	
VAS 388															
VAS 420	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C

Section5 –

Section 6 – Assessment Activity

Activity: Throughout this assessment cycle the vascular faculty used minimal assessment rubrics. All the objectives of the program provides alignment with programmatic outcomes and mission.

Rubric: The activities were scored and evaluated by the vascular faculty separate from course grade. The rubrics provides illustration of the performance criteria, assessment methods, measurement scale, minimum acceptable performance, and results.

Sample: 15-20 students were used to complete each activity; [illegible]

Summary of 2020-2021 Assessment Activities

Student Learrning Outcome	***Assessment Method***	***Course***	***F - Foundation P – Practice C - Capstone***
PSLO# 6 – The student will demonstrate knowledge and understanding of vascular physiology, pathology and pathophysiology	Direct Assessment Final Lab Practical performance and case study questions	VAS 365	Practice
	Direct Assessment Extern Competency	VAS 420	Capstone
	Indirect Assessment Extern Survey	VAS 420	Capstone

PSLO #7 - The student will demonstrate knowledge and understanding of clinical - C13.3 (i)2 (cd)-2 (e)6 (n)-2 (t)7 (S)10t21.91.]C /Pa181 re 485.88 121.1 Tf 0.002-T691.]-

A. Student Learning Outcome #6: The student will demonstrate knowledge and understanding of vascular physiology, pathology, and pathophysiology.

The Vascular Technology faculty conducted an analysis of whether this outcome is reflected in the curriculum. The mapping of this outcome in the Vascular Technology courses can be found on pages 6&7, Table #3 of this report.

Direct Assessment #1

The faculty assessed this outcome with 15 students in the VAS 365 Abdominal Disease course during fall term 2010, using the final practical patient history and physical and a case study. The faculty rated the proficiency of students using the performance criteria described in Table #6 below.

Performance Criteria	Assessment Methods	Measure Scale	Minimum Acceptable Performance	Results- % with Target. or higher
Evaluates evidence from patient history and physical	Final Practical	100% scale per 5 choices used	80% with 80% or higher	100%
Performs appropriate physiological tests	Final Practical	100% scale per 5 choices used	80% with 80% or higher	100%

As a result of the data, and what has been learned as a result of conducting this

B. Student Learning Outcome #7: The student will demonstrate knowledge of vascular physical principles and instrumentation.

The Vascular Technology faculty conducted an analysis of where this outcome is reflected in the curriculum. The mapping of this outcome in the Vascular Technology courses can be found on pages 6&7, Table #3 of this report.

Direct Assessment #1

The faculty assessed this outcome with 16 students in the MIT 231 Sonographic Principles and Instrumentation I course during winter term 2021, using final exam questions. The faculty rated the proficiency of students using the performance criteria described in Table #9 below.

Performance Criteria	Assessment Methods	Measure Scale	Minimum Acceptable Performance	Results-% with Target or higher
Demonstrate understanding of the nature of sound waves	Final Examination Questions	% scale of 4 questions used	75% with 3 or more questions correct	81%
Interpret interaction of ultrasound with various media	Final Examination Questions	% scale of 4 questions used	75% with 3 or more questions correct	69%
Identify component function of the transducer	Final Examination Questions	% scale of 4 questions used	75% with 3 or more questions correct	31%

Students performed above expectations in all categories listed above. Although the Students were under the COVID distance delivery for the MIT 232 Sonographic Principles and Instrumentation II course, not only had these students been successful on campus, but on their extern experience as well.

As a result of the data, the vascular technology faculty had agreed to maintain the high standards required for on campus (MIT 231 & 232) courses. The professor for both courses was commended for the unique graphics adopted to make difficult concepts easier to understand and was encouraged to develop or discover more through Internet sources.

Indirect Assessment #1

The faculty assessed this outcome with 20 students in VAS 402 Extern course using student 2019-2020 exit surveys which asked them to rate how well the OIT Vascular Technology program and their extern site prepared them for learning outcome #7. The students rated their proficiency using the performance criteria described in Table #1 below.

Performance Criteria	Assessment Methods	Measure Scale	Minimum Acceptable Performance	Results % with Target Av. or higher
Student rating of how OIof				

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C. Student Learning Outcome #8. The student will demonstrate knowledge and understanding of clinical vascular diagnostic procedures and testing.

The Vascular Technology faculty conducted an analysis of whether this outcome is

Direct Assessment #2

The faculty also assessed this outcome with 20 students in the VAS 420 Extern course from the 2020-2021 class using random student scanning competencies where this outcome was assessed by industry. The faculty will rate the proficiency of students used in the performance criteria described in Table #13 below.

Performance Criteria	Assessment Methods	Measure Scale	Minimum Acceptable Performance	Results-% with Target or higher

Indirect Assessment #1

The faculty assessed this outcome in VAS 420, from the student 2019-20 exit surveys of 20 students, asking them to rate how well the OIT Vascular Technology program and their extern site prepared them for this learning outcome #8. Student rating is described in Table #14 below.

Performance
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