

Section 1- Program Mission, Objectives & Learning Outcomes

Oregon Tech Mission

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 services facilitate students' personal and academic development.

Core Theme 3: Statewide Educational Opportunities

Oregon Tech offers statewide educational opportunities for the emerging needs of Oregon's citizens. To accomplish this, Oregon Tech provides innovative and rigorous applied degree programs to students across the state of Oregon, including high-school programs, online degree programs, and partnership agreements with community colleges and universities.

Core Theme 4: Public Service

Oregon Tech will share information and technical expertise to state, national, and international constituents.

Program Alignment to Oregon Tech Mission and Core Themes

The OIT vascular technology degree completion program enables registered professionals in vascular technology to further their knowledge and skills necessary for career advancement, to become effective communicators, problem solvers, critical thinkers, responsible managers and leaders, and to value lifelong learning.

Program Mission

The Vascular Technology bachelor's degree completion program enables registered professionals in Vascular Technology further their knowledge and skills necessary for career advancement, to become effective communicators, problem solvers, critical thinkers, responsible managers, and leaders, and to value lifelong learning.

Section 2: Program Description and History

The Vascular Degree Completion Program averages 25 active students a quarter, ranging from 26-52 active students a quarter. The students are already registered, and all are working. The students typically take one to two classes a quarter while they work full time clinically. Most of the students are in need of completing courses in general education as well as in their major. We graduated 9 students this last year. On student exit surveys, 10 students reported increased confidence on the job and rated their experience at OIT as highly

proficient and highly prepared. The salaries range from 50,000 to 120,000, with the median salary of \$60,000. 100% percent of the students are employed, some go on to graduate school and many report job promotions because of earning their bachelor's degree.

Student Quote from the Course Evals

VAS 420A Dr. Isaacson is fantastic! I really appreciate how the observations are online as my hospital is still in strict COVID protocols. Great course- I was a bit nervous about the workload since it is 8 credits, but it's been really manageable thus far. I always enjoy your courses Professor Isaacson; you really make this degree program enjoyable!! Overall, I really enjoyed this course and my peers. Thank you for what you do.

Showcase Learning Opportunities

As stated above the students in the degree completion programs are working licensed professionals already and are working toward completing their bachelors. There are many professional meetings but the one that most students attend is the Society for Vascular Ultrasound which met in August virtually due to COVID. Students get to participate in the scientific sessions and get to meet one another to develop a great learning community. Most meetings are still virtual in this pandemic.

Students get an opportunity to look at the latest equipment and hear scientific sessions in all areas of the field. This is a large internal meeting that brings physicians and technologists together in large numbers. In the lab management course, students are asked to interview experts in human resources, lab management, workplace discrimination policy and practice. In the externship course students publish professional case studies in scientific journals. Students are writing at an advanced level and improving their communication skills.

Program Enrollment

The attached enrollment information is not separated out for the degree completion students. There are approx.23 active students in the degree completion program every quarter in 2020-2021.

Program Graduates

The data below is not separated out for the degree completion students. We graduate students every quarter and not just at the end of the year (see Appendix).

Employment Rates and Salaries

The data below is not separated out of the degree completion students. However, all the students in the program are employed and salaries range from \$50,000 to \$70, 000, with the average at \$60,000. The students are employed prior to starting the degree completion program.

Pass Rates on Board and Licensure Exam

All the degree completion students have passed their licensure exams prior to starting in the degree completion program.

Section 3 – Program Learning Outcomes

- The student will demonstrate the ability to communicate effectively in oral, written and visual forms.
- The student will demonstrate the ability to work effectively in teams.
- The student will demonstrate an ability to provide basic patient care and comfort.
- The student will employ professional judgment and discretion including ethics.
- The student will demonstrate knowledge and understanding of human gross anatomy, sectional anatomy, and normal and abnormal vascular anatomy.
- The student will demonstrate knowledge and understanding of vascular physiology, pathology, and pathophysiology.
- The student will demonstrate knowledge and understanding of vascular physical principles and instrumentation.
- The student will demonstrate knowledge and understanding of clinical vascular diagnostic procedures and testing.
- The student will demonstrate an understanding of diverse cultural and

humanistic traditions in the global society.

- The student will be able to perform scholarly research and to contribute that knowledge to the field of vascular technology.

Program Faculty Review

Program Student Learning Outcomes and Objectives were reviewed by program faculty during Fall Convocation Program Assessment Meeting.

Vascular Faculty met in the fall and spring of 2020-2021 to review the program. The Vascular Faculty met with the advisory board to be able to get feedback in all learning outcomes and discuss the needs of industry. The Advisory Board met in September 2020 and June 2021 where the results of assessment and student learning were discussed. The discussion centered around COVID. The Advisory Board consists of 5 OIT degree completion program graduates who serve the Echo and Vascular Degree Completion programs. In addition, there are 2 industry leaders that serve on the Board.

Board Members had a lot of thoughts on marketing the program and suggest attending the national meetings this year as an exhibitor. The pandemic put a halt to that as the conferences went virtual. They would like more people to know about the program. Some members were interested in talking about an advanced practice degree but so far this has been thought to be too expensive to launch. Further suggestions will take place at the next meeting in the spring.

| PROGRAM STUDENT LEARNING OUTCOMES 3-Year Cycle Vascular Technology B.S. Degree Completion | 2020-2021 | 2021-2022 | 2022-2023 |
|---|----------------------|-----------------|---------------------------------|
| 1. OIT-BVTO The student will demonstrate the ability to communicate effectively in oral, written and visual forms. | | | VAS 366 VAS 420A VAS 420B |
| 2. OIT-BVTO The student will demonstrate the ability to work effectively in teams. | | VAS 385 | |
| 3. OIT-BVTO The student will demonstrate an ability to provide basic patient care and comfort. | VAS 420A VAS 420B | | |
| 4. OIT-BVTO The student will employ professional judgment and discretion. | | | VAS420A VAS420B |
| 5. OIT-BVTO The student will demonstrate knowledge and understanding of human gross anatomy, sectional anatomy, and normal and abnormal vascular anatomy. | | | VAS 365 VAS 366 |
| 6. OIT-BVTO The student will demonstrate knowledge and understanding of vascular physiology, pathology, and pathophysiology. | VAS 365 VAS 366 | | |
| 7. OIT-BVTO The student will demonstrate knowledge and understanding of vascular physical principles and instrumentation. | VAS 365 VAS 385 | | |
| 8. OIT-BVTO The student will demonstrate knowledge and understanding of clinical vascular diagnostic procedures and testing. | | VAS420A VAS420B | |

| | | | |
|---|--------------------|---------|--|
| 9. OIT-BVTO The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society. | | VAS 385 | |
| 10. OIT-BVTO The student will be able to perform scholarly research and to contribute that knowledge to the field of vascular technology. | VAS420A VAS420B | | |

Section 4 – Curriculum Map Included in the Appendix

V. Summary of Assessment Activities

The Vascular Technology Degree Completion Program faculty conducted formal assessment of four student learning outcomes during 2020-2021. Our Institution changed in 2020-2021 to a three-year cycle of assessment, so below you will see Planning, Assess and Action. Below are the data taken from the institutional dashboards on disaggregated data for equity gaps, retention, persistence, DFWI & graduation rates. These are measured across, gender, first generation, all races and low-income students.

Assessment Three Year Cycle

Part A: Planning for next year 2022-2023 Academic Year:

NWCCU announced in 2020, that we are able to use these methods measures for student learning.

| Direct Measures | Indirect Measures |
|--------------------------------|-------------------------|
| Faculty Grades – Rubric | Faculty Grades- DFW |
| Standardized tests, exams | Surveys and Reflections |
| Pre and Post Test Designs | Course Evaluations |
| Competency Based Demonstration | Graduation Rates |
| Portfolios | Retention Rates |

The Vascular faculty met to plan for next year's (2021-2022) assessment in the area of communication, teamwork and ethical reasoning.

- PLO# 2 The student will demonstrate the ability to work effectively in teams.
- PLO#8: OIT-BVTO The student will demonstrate knowledge and understanding of clinical vascular diagnostic procedures and testing.
- PLO# 9: OIT-BVTO The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.

In Planning for academic year 2022-2023, discussion centered around where the students are performing PLOs 2, 8, and 9. It was decided that direct measures are best done by grading rubrics in the online externship courses as the students write up case studies and prepare them for publications in scholarly journals. For PLO # 10, diverse cultural and humanistic traditions in the global society is best measured in 385 by grading rubrics as direct assessment (Fall Term). Indirect Measures will be faculty grades, DFWI, graduation rates and retention rates.

Assessment Part B, Student Learning Outcome #3: The student will demonstrate an ability to provide basic patient care and comfort.

The Vascular Technology Degree Completion faculty conducted an analysis (2020-2021) of where this outcome is reflected in the degree completion curriculum. The mapping of this outcome in the Vascular Technology Degree Completion courses can be found in Appendix A1. For student learning outcome #3, two measurements were conducted on 45 students/employers in CL VAS 420A courses during Winter term 2021 and 40 students/employers and in CS VAS420B Spring term 2021. Surveys were completed by the students and by their employers to assess the quality of patient care being provided. It should be noted that the students are all board registered and are already professionally employed. Only 35% of the surveys were returned by employer's winter term and 40% of the employers returned the survey spring term. 60% of surveys were returned by the student's winter term and 56% of the students returned the survey spring term.

Direct Measure #1 Employer Survey

A survey was sent to the employers of 45 employers in CL VAS 420 A during Winter term 2021, and 40 in CL VAS 420B Spring Term 2021. The results are shown in Table #2 and Table #3 below.

| Performance Criteria | Assessment Method | Measurement Scale | Minimum Acceptable Performance | Winter Results |
|----------------------|-------------------|-------------------|--------------------------------|----------------|
| Patient interaction | Employer survey | 1- 4 scale | 80% at 4 or 5 | 88% |
| Patient safety | Employer survey | 1- 4 scale | 80% at 4 or 5 | 90% |
| Understanding exam | Employer survey | 1- 4 scale | 80% at 4 or 5 | 93% |
| Patient comfort | Employer survey | 1- 4 scale | 80% at 4 or 5 | 84% |
| Patient history | Employer survey | 1- 4 scale | 80% at 4 or 5 | 81% |

Table 2: SLO #3: Patient Care Employer Survey CL Vascular 420A /B

Strengths: The employers that returned the surveys felt their employees performed at a 4 or 5 on the scale in each category: Patient Interaction, Patient Safety, Understanding Exams, Patient Comfort and Patient History.

Weaknesses: The fact that not all the surveys were returned by the employers makes this a bit unreliable, but it does appear the students are competent at patient care, this is not surprising as they are already working in the field and licensed. The students are already working full time in the field and have mastered patient safety skills as they are working fulltime.

Indirect Measures

Direct Overall Grades

Echo 420A The avg score was an A, ranging from F-A distribution.

Echo 420B The avg score was an A, ranging from F-A distribution.

Indirect

DFWI Echo 420A 8.3%

DFWI Echo 420B 9.1%

Retention year 75%

Course Evaluations IDEA Objectives Raw Scores and Avg Scores 4.4 & 4.6

I have enjoyed my experience and look forward to next semester. Thank you.

The course is very understandable. The instructor is very helpful and understands and is very caring.

It has been a true pleasure working with Dr. Isaacson on my Bachelors of Echo degree. I am so thankful to have had her support through this challenging couple of years. I never would have imagined a pandemic would have struck in the middle of my coursework, but Dr. Isaacson and OIT kept things running seamlessly. I will highly recommend this program with Dr. Janette Isaacson as the director to any of my co-echo techs. Although I am so excited to be finishing this degree, I will truly miss the interaction I've had with Dr. Isaacson's throughout the last couple years. Thank you! thank you for everything, I'm blessed to have you as my instructor

Dr. Isaacson is very understanding and explains everything in detail. I enjoy her classes and learning new things.

thank you for everything, you are a role model for the rest of the instructors.

Thank you for a great and informative course!

She's a wonderful, caring Professor.

Dr Isaacson has been great! I enjoyed

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

Assessment Part C: Student Learning Outcome #6: The student will demonstrate knowledge and understanding of cardiovascular physiology, pathology and pathophysiology. Direct and Indirect Measures taken from VAS 365 and VAS 366 through grading rubric and student self-assessment survey

The Vascular Degree Completion faculty conducted an analysis (2020-2021) of where this outcome is reflected in the degree completion curriculum. The mapping of this outcome in the Vascular Degree Completion courses can be found in Appendix A2. For student learning outcome #6, one direct (grading rubric) measurement was performed on 3 students in VAS 365 Winter 2021, and 8 students in VAS 366.

Direct Measure #1

The student will demonstrate knowledge and understanding of vascular physiology, pathology, and pathophysiology. A grading rubric was administered in VAS 365 on 3 students and on 8 students in VAS 366 the results are displayed in table # 6 below.

Table 3: Vascular 365 and 366, grading rubric testing for cardiovascular knowledge.

The students feel strong in their cardiovascular skills based on a grading rubric in two courses.

Direct Measure #1, 2, (Two courses)

A grading rubric was developed to assess 11 student’s knowledge of special circulatory problems as they relate to vascular physiology, pathology and pathophysiology during (3) VAS 365 and (8) VAS 366 2020-2021. Results are indicated in Table #6 below:

| Performance Criteria | Assessment Method | Measurement Scale | Minimum Acceptable Performance | Results |
|----------------------|-------------------|--------------------|--------------------------------|---------|
| Venous Pathology | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 88% |
| Venous Physiology | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 100% |
| Transplant Pathology | Grading | 1-4, 80% at 3 or 4 | Baseline data | 100% |

| | | | | |
|--|----------------|--------------------|---------------|------|
| Transplant Physiology | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 100% |
| Bypass Grafts Pathology | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 88% |
| Bypass Grafts Physiology | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 88% |
| TCD Pathology | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 100% |
| TCD Physiology | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 100% |
| Renovascular pathophysiology and anatomy | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 100% |
| Mesenteric pathophysiology and anatomy | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 100% |
| Aortoiliac pathophysiology and anatomy | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 100% |
| Liver pathophysiology and anatomy | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 100% |
| Special Topics | Grading rubric | 1-4, 80% at 3 or 4 | Baseline data | 100% |

Strengths: On each assignment category the students performed at or above 80% on each criterion in both classes. This is not surprising as these students are already licensed and employed full time in the field.

Part D: Student Learning Outcome #7: The student will demonstrate knowledge and understanding of cardiovascular physical principles and instrumentation. Direct and Indirect Measures taken from CL VAS 385 (Spring) consisted of a standardized test and student surveys.

The Vascular Technology Degree Completion faculty conducted an analysis (2020-2021) of where this outcome is reflected in the degree completion curriculum. The mapping of this outcome in the Vascular Technology Degree Completion courses can be found in Appendix A3. For student learning outcome #7, one direct measurement was conducted on 16 students in CL VAS 385. The students on a 50-question exam. The indirect survey was designed to rate student self confidence in vascular physical principles and instrumentation on a scale of 1 to 4.

Direct Assessment #1

A physics test was administered in VAS 365 on 16 students and the results are displayed in Table # 7 below:

| Performance Criteria | Assessment Method | Measurement Scale | Minimum Acceptable Performance | Results |
|---|-------------------|-------------------|--------------------------------|---------|
| Sound (Test Questions #1, 13, 16, 17,21, | Test | 1 - 4 scale | 80% at 3 or 4 | 81% |
| Transducers (Test Questions #5,6, 9, 14, 18, 19, 20, 47, 50 | Test | 1 - 4 scale | 80% at 3 or 4 | 94% |
| Doppler Signal Processing (Test Questions #1,10, 25, | Test | 1 - 4 scale | 80% at 3 or 4 | 81% |
| Imaging Principles (Test Questions #2, 12, 15, 22, 28,32, 40, | Test | 1 - 4 scale | 80% at 3 or 4 | 88% |
| Tissue Mechanics (Test Questions #3, 8,23, 29, 33, 34, 48 | Test | 1 - 4 scale | 80% at 3 or 4 | 81% |
| Pressures (Test Questions | Test | 1 - 4 scale | 80% at 3 or 4 | 81% |

Table4: SLO #7: Physics Test, VAS 365

Direct Assessment #2

A physics test was administered in VAS 366, on 8 students and the results are displayed in Table # 8 below:

| Performance Criteria | Assessment Method | Measurement Scale | Minimum Acceptable Performance | Results |
|---|-------------------|-------------------|--------------------------------|---------|
| Sound (Test Questions #1, 13, 16, 17,21, | Test | 1 - 4 scale | 80% at 3 or 4 | 88% |
| Transducers (Test Questions #5,6, 9, 14, 18, 19, 20, 47, 50 | Test | 1 - 4 scale | 80% at 3 or 4 | 88% |
| Doppler Signal Processing (Test Questions #1,10, 25, 26, 38,39,42,43, 44, | Test | 1 - 4 scale | 80% at 3 or 4 | 88% |

| | | | | |
|---|------|-------------|---------------|------|
| Imaging Principles (Test Questions #2, 12, 15, 22, 28,32, 40, | Test | 1 - 4 scale | 80% at 3 or 4 | 88% |
| Tissue Mechanics (Test Questions #3, 8,23, 29, 33, 34, 48, | Test | 1 - 4 scale | 80% at 3 or 4 | 100% |
| Pressures (Test Questions #11, 27, 31, 35, 46, | Test | 1 - 4 scale | 80% at 3 or 4 | 88% |
| Instrumentation Performance (Test Questions #4, 7, 24, 30, 36,37, 41, 49, | Test | 1 - 4 scale | 80% at 3 or 4 | 100% |
| Biological Effects/Safety (Test Questions # 43, | Test | 1 - 4 scale | 80% at 3 or 4 | 100% |

Table 5: SLO #4: Physics Test, VAS 366 Summer 2021

Actions Taken: As a result of this test data, the OIT Vascular Technology faculty felt comfortable that the students remembered their physics of ultrasound. All students successfully passed the physics test, which consisted of 50 questions related to the performance criteria.

Indirect Measure #1

A survey was sent out to 16 students administered in CL VAS 385 and the results are displayed in Table # 5 below:

| Performance Criteria | Assessment Method | Measurement Scale | Minimum Acceptable Performance | Results |
|-----------------------------|-------------------|-----------------------------|--------------------------------|---------|
| Sound | Survey | 1 - 4 scale, % at 3 or 4 | Baseline Data | 100% |
| Transducers | Survey | 1 - 4 scale, % at 3 or 4 | Baseline Data | 100% |
| Doppler Signal Processing | Survey | 1 - 4 scale, % at 3 or 4 | Baseline Data | 100% |
| Imaging Principles | Survey | 1 - 4 scale, % at 3 or 4 | Baseline Data | 100% |
| Tissue Mechanics | Survey | 1 - 4 scale, % at 3 or 4 | Baseline Data | 100% |
| Pressures | Survey | 1 - 4 scale, % at 3 or 4 | Baseline Data | 100% |
| Instrumentation Performance | Survey | 1 - 4 scale, % at 3 or 4 | Baseline Data | 100% |
| Biological Effects/Safety | Survey | 1 - 4 scale, % at 3 or 4 | Baseline Data | 100% |

Table 6: SLO #7: Survey, Student Self Confidence Physics Ultrasound and Instrumentation

Strengths: Students performed at expectations in each performance criteria and exceeded the minimum criteria. They are students who are already licensed, working in the field and they had to pass a physics exam to gain that license. They come to the degree completion program already possessing physics skills.

PART E: #10 The student will be able to perform scholarly research and to contribute that knowledge to the field of vascular technology.

Degree Completion faculty conducted an analysis (2020-2021) of where this outcome is reflected in the degree completion curriculum. The mapping of this outcome in the Vascular Technology Degree Completion courses can be found in Appendix A4. Direct assessment (2020-2021) with grading rubric was performed on 45 students in CL VAS420A and 40 students CL VAS420B by grading case studies that students submit for publication. Students were also surveyed to find out their confidence in their ability to contribute to the field.

Direct Measure #1, #2, Grading Rubric (Two Courses)

| Performance Criteria | Assessment Method | Measurement Scale | Minimum Acceptable Performance | Results |
|--|-----------------------------|-------------------|--------------------------------|---------|
| Referral Reasons and Indications | Case Study GradingRubric | 1 - 4 scale, | 80% at 3 or 4 | 88% |
| Pathophysiology of the case | Case Study GradingRubric | 1 - 4 scale, | 80% at 3 or 4 | 94% |
| Interpretation | Case Study GradingRubric | 1 - 4 scale, | 80% at 3 or 4 | 94% |
| Scholarly Literature Review | Case Study GradingRubric | 1 - 4 scale, | 80% at 3 or 4 | 88% |
| Conclusions based on scholarly review and the case | Case Study GradingRubric | 1 - 4 scale, | 80% at 3 or 4 | 88% |

Table7: Case Study Grading Rubric VAS 420A and VAS 420B Winter and Spring

Indirect Measures Student Survey Two Courses

The survey was sent to 45 students in CL VAS 420A & 40 CL VAS420 B course during Winter and Spring terms, 2020-2021. The results are shown in Table #8 below.: Students were asked to rate their own performance on patient care using a 4-point scale from 1 to 4.

| Performance Criteria | Assessment Method | Measurement Scale | Minimum Acceptable | Results |
|------------------------------------|-------------------|-------------------|--------------------|---------|
| Skills in Reviewing the Literature | Student survey | 1 - 4 scale, | 80% at 3 or 4 | 100% |
| Components of a published paper | Student survey | 1 - 4 scale, | 80% at 3 or 4 | 100% |
| Confidence in Writing | Student survey | 1 - 4 scale, | 80% at 3 or 4 | 100% |
| Confidence in Research Methods | Student survey | 1 - 4 scale, | 80% at 3 or 4 | 100% |

| | | | | |
|--|----------------|--------------|---------------|------|
| Confidence in submitting for publication | Student survey | 1 - 4 scale, | 80% at 3 or 4 | 100% |
|--|----------------|--------------|---------------|------|

Table 8: Self Confidence Survey in Professional Publication VAS 420A and VAS 420B

Students rated themselves as very confident in being able to produce scholarly materials and publish them.

Part F: Evidence of Student Learning

During the 2020-2021 academic year, the Vascular Technology Degree Completion faculty formally assessed the student learning outcomes summarized below.

| | |
|---|---|
| The student will demonstrate an ability to provide basic patient care and comfort. | |
| Course/Event | CL VAS 420A |
| Legend | C – Capstone |
| Assessment Measure | Direct – Employer Survey |
| Criterion | 80% of students score “proficient” or higher |
| Course/Event | CL VAS 420B |
| Legend | C – Capstone |
| Assessment Measure | Direct – Employer Survey |
| Criterion | 80% of students score “proficient” or higher |
| Course/Event | Student Survey |
| Legend | C-Capstone |
| Assessment Measure | Indirect-Student Exit Survey |
| Criterion | 80% of students will score “proficient” or higher |
| Both the employers and the students are confident that the students are good with patients in all assessment categories, which is not surprising as these students are already licensed and working in the field. | |

| | |
|--|---|
| The student will demonstrate knowledge and understanding of vascular physiology, pathology, and pathophysiology. | |
| Course/Event | VAS 365 |
| Legend | P – Practice |
| Assessment Measure | Direct – Assignment |
| Criterion | 80% of students will score “proficient” or higher |
| Course/Event | VAS 366 |
| Legend | P-Practice |
| Assessment Measure | Direct – Assignment |
| Criterion | 80% of students score “proficient” or higher |
| Course/Event | Student Survey |
| Legend | P – Practice |
| Assessment Measure | Indirect – Student Exit Survey |
| Criterion | 80% of students score “proficient” or higher |
| Results: | Students scored higher than 80% on grading rubrics and self-assessment surveys in both courses demonstrating competency on this learning outcome. In addition, the student exit surveys show that the students feel OIT contributed to their success. |

| | |
|---|---|
| The student will demonstrate knowledge and understanding of vascular physical principles and instrumentation. VAS 365 and VAS 366 | |
| Course/Event | CL VAS 385 |
| Legend | P – Practice |
| Assessment Measure | Direct – Assignment |
| Criterion | 80% of students score “proficient” or higher |
| Course/Event | CL VAS 385 |
| Legend | P – Practice |
| Assessment Measure | Direct – Assignment |
| Criterion | 80% of students score “proficient” or higher |
| Course/Event | Student Survey |
| Legend | P – Practice |
| Assessment Measure | Indirect – Student Exit Survey |
| Criterion | 80% of students score “proficient” or higher |
| Outcome | All students score above 80% on the exam and feel confident in these skills when surveyed. |
| The student will be able to perform scholarly research and to contribute that knowledge to the field of vascular technology. | |
| Course/Event | CL VAS 420A |
| Legend | C – Capstone |
| Assessment Measure | Direct – Assignment |
| Criterion | 80% of students score “proficient” or higher |
| Course/Event | CL VAS 420A & 420B |
| Legend | C – Capstone |
| Assessment Measure | Direct – Assignment |
| Criterion | 80% of students score “proficient” or higher |
| Course/Event | Student Survey |
| Legend | C – Capstone |
| Assessment Measure | Indirect – Student Exit Survey |
| Criterion | 80% of students score “proficient” or higher |
| | Based on direct assessment and student survey, the students are contributing to their scholarly field of study and possess the necessary skills in this manner. |

Part G: Assessment Cycle

2020-2021 Actions

Actions ISLO Diverse Perspectives, Cultural Sensitivity and Global Awareness: 2020-2021

Professional Development

Diverse Perspectives, Cultural Sensitivity, Global Awareness actions were by taking equity gap courses, learning how to collect and measure gaps, learning how to improve assignment designs and developing the awareness that these concepts need to be improved in the curriculum. This year was spent in learning about population health and taking a health informatics course at the University of Washington on population health. Assignments will be added for global awareness.

Areas needing improvement: Areas of improvement including adding more to the curriculum to support these concepts, to work on assignment design, syllabus design and to add population health concepts to the curriculum as well as diverse perspectives, cultural sensitivity and global awareness.

Part H: Equity Gap Report

CLOs Worksheet Report

CLOs Worksheet: CLOs worksheet was completed for all Courses that demonstrated the Program Learning Outcomes.

Findings: Students met all PLOs in courses at 80% or higher. All DFWI rates were below 12%. No equity gaps were found but I have low numbers of students across races. I need to recruit more students of color. I need to recruit more male students.

Equity Gap Report

Equity Gap Dashboards: Student Success Dashboard Reflection Questions Retention Dashboard

- What is the retention rate for all students in your program?

Retention in the Vascular Degree Completion Program 75%

In 2019, there were 9 transfer students and 3 students stopped and all students are part time. One student is first generation almost all female. Of the three, 2 were white and 1 was African American. Only 1 student was low income.

| Retention 75% 2019-2020 | Action Plans |
|---|--|
| 2/3 students were white with 1 African American | Recruit more male students |
| 1 student is low income | Recruit more students of color |
| 1 first generation | Offer more financial aid options |
| Most students were white that left at 4 th term or took classes locally. | Survey and hang onto African American and all Races of Students Survey and hang onto first generation students. |
| Minorities are very low in number so losing any of them has a large impact. | ESL Tutors Better Financial Aid Options Mentors that check in with students weekly Most students leave after the first quarter, survey them and plan interventions for that first quarter. Most drop in the first week. |

- How do the retention rates compare across gender, racial groups, first-generation students and low socio-economic students?

Minorities are very low in number so losing any of them has a large impact. Most of the students that were not retained were white.

- What opportunities do you see for improvements? What actions do you plan to take to improve the retention rates in this coming quarter and year?

- Offer more financial aid options
- Recruit more students of color
- Recruit more male students and retain them
- Survey and hang onto African American and all Races of Students
- Survey and hang onto first generation students.
- ESL Tutors



- Better Financial Aid Options
- Mentors that check in with students weekly
- Most students leave after the first quarter, survey them and plan interventions for that first quarter. Most drop in the first week.
- Make assignments clearer with better alignment
- Have more advising appointments the first quarter for transfer students
- Survey students who dropped first quarter

Graduation Dashboard

• What is the 6-year graduation rate for students in your program? 50.8%, is the institutional graduation rate at 6 years, Vascular Technology is 66.7%

• How do graduation rates compare across gender, racial groups, first-generation students and low socio-economic students? These are all low numbers. Numbers across races are low.

• What opportunities do you see for improvements? What actions do you plan to take to improve the graduation rates in this coming quarter and year? DFWI Dashboard D= D grade, F= Fail grade, W=Withdrew, I= Incomplete
Vascular 365 DFWI 0%, Vascular 366 DFWI 0%, Vascular 375 DFWI 0%, Vascular 385 DFWI 0%

• What are your DFWI rates across the courses in your program and are they above >12%. How do the DFWI rates in your programmatic courses compare across gender, racial groups, first-generation students and low socio-economic students?

None are above 12%. The students of race are so low in number.

• What are your gatekeeper courses in your program? What actions do you plan to take to improve (strategies) the DFWI rates in courses in your program this coming quarter and year? Pharmacology, WRI 122 and A&P

After looking at the disaggregated data from all three dashboards, list the top three equity gaps within your program and discuss plans (strategies) to try to close them. What input and/or suggestions for actions or initiatives do you think your college or the university as a whole can do that might help with closing a gap?

The majority of students who defaulted are white. The problem is in general there are low numbers of students of color. We need to recruit and retain students of color.

Section 8 – Curriculum Map

F – Foundation – introduction of the learning outcome, typically at the lower-division level, P – Practicing – reinforcement and elaboration of the learning outcome, or

C – Capstone – demonstration of the learning outcome at the target level for the degree

Curriculum Map for Vascular Degree Completion Program

SLO: 3 The student will demonstrate an ability to provide basic patient care and comfort.

| | | Vascular Degree Completion Courses | | Fall | Winter | Spring | Summer |
|-----|---------------|---|---|------|--------|--------|--------|
| BIO | 220* | Cardiovascular Physiology | 4 | | | | |
| BUS | 316 | Total Quality in Health Care | 3 | | | | |
| BUS | 317 | Health Care Management | 3 | | | | |
| CHE | 210* | Clinical Pharmacology | 3 | | | | |
| SPE | 321* | Small Group & Team Comm | 3 | | | | |
| VAS | 335* | Radiographic Vascular Anatomy | 3 | | | | |
| VAS | 337* | Survey of Echocardiography** | 3 | FP | | FP | |
| VAS | 365* | Abdominal Vascular Disease | 4 | FP | FP | FP | FP |
| VAS | 366* | Special Circulatory Problems | 4 | FP | | FP | |
| VAS | 375* | Survey of Abdominal Sonography** | 3 | | | | |
| VAS | 385* | Vascular Laboratory Management | 3 | | | | |
| VAS | 420 A * | Special Vascular Technology Externship | 8 | C | C | C | C |
| VAS | 420 B * | Special Vascular Technology Externship | 7 | C | C | C | C |
| | * | Communication elective (from Gen Ed list) *** | 3 | | | | |

Curriculum Map for Vascular Degree Completion Program

SLO 6: The student will demonstrate knowledge and understanding of vascular physiology, pathology, and pathophysiology.

| | | Vascular Degree Completion Courses | | Fall | Winter | Spring | Summer |
|-----|---------------|---|---|------|--------|--------|--------|
| BIO | 220* | Cardiovascular Physiology | 4 | C | | | |
| BUS | 316 | Total Quality in Health Care | 3 | | | | |
| BUS | 317 | Health Care Management | 3 | | | | |
| CHE | 210* | Clinical Pharmacology | 3 | | | | |
| SPE | 321* | Small Group & Team Comm | 3 | | | | |
| VAS | 335* | Radiographic Vascular Anatomy | 3 | | | | |
| VAS | 337* | Survey of Echocardiography** | 3 | | | | |
| VAS | 365* | Abdominal Vascular Disease | 4 | FP | FP | FP | FP |
| VAS | 366* | Special Circulatory Problems | 4 | FP | | FP | |
| VAS | 375* | Survey of Abdominal Sonography** | 3 | | FP | | |
| VAS | 385* | Vascular Laboratory Management | 3 | | | | |
| VAS | 420 A * | Special Vascular Technology Externship | 8 | C | C | C | C |
| VAS | 420 B * | Special Vascular Technology Externship | 7 | C | C | C | C |
| | * | Communication elective (from Gen Ed list) *** | 3 | | | | |

Curriculum Map for Vascular Degree Completion Program

SLO 7: The student will demonstrate knowledge and understanding of vascular physical principles and instrumentation.

| | | Vascular Degree Completion Courses | | Fall | Winter | Spring | Summer |
|-----|---------------|---|---|------|--------|--------|--------|
| BIO | 220* | Cardiovascular Physiology | 4 | | | | |
| BUS | 316 | Total Quality in Health Care | 3 | | | | |
| BUS | 317 | Health Care Management | 3 | | | | |
| CHE | 210* | Clinical Pharmacology | 3 | | | | |
| SPE | 321* | Small Group & Team Comm | 3 | | | | |
| VAS | 335* | Radiographic Vascular Anatomy | 3 | | | | |
| VAS | 337* | Survey of Echocardiography** | 3 | FP | | FP | |
| VAS | 365* | Abdominal Vascular Disease | 4 | FP | FP | FP | FP |
| VAS | 366* | Special Circulatory Problems | 4 | FP | | FP | |
| VAS | 375* | Survey of Abdominal Sonography** | 3 | | FP | | |
| VAS | 385* | Vascular Laboratory Management | 3 | | | | |
| VAS | 420 A * | Special Vascular Technology Externship | 8 | C | C | C | C |
| VAS | 420 B * | Special Vascular Technology Externship | 7 | | | | |
| | * | Communication elective (from Gen Ed list) *** | 3 | | | | |

Curriculum Map for Vascular Degree Completion Program

SLO 10: The student will be able to perform scholarly research and to contribute that knowledge to the field of vascular technology.

| | | Vascular Degree Completion Courses | | Fall | Winter | Spring | Summer |
|-----|---------------|---|---|------|--------|--------|--------|
| BIO | 220* | Cardiovascular Physiology | 4 | | | | |
| BUS | 316 | Total Quality in Health Care | 3 | | | | |
| BUS | 317 | Health Care Management | 3 | | | | |
| CHE | 210* | Clinical Pharmacology | 3 | | | | |
| SPE | 321* | Small Group & Team Comm | 3 | | | | |
| VAS | 335* | Radiographic Vascular Anatomy | 3 | | | | |
| VAS | 337* | Survey of Echocardiography** | 3 | | | | |
| VAS | 365* | Abdominal Vascular Disease | 4 | FP | FP | FP | FP |
| VAS | 366* | Special Circulatory Problems | 4 | FP | | FP | |
| VAS | 375* | Survey of Abdominal Sonography** | 3 | | FP | | |
| VAS | 385* | Vascular Laboratory Management | 3 | | | | |
| VAS | 420 A * | Special Vascular Technology Externship | 8 | C | C | C | C |
| VAS | 420 B * | Special Vascular Technology Externship | 7 | C | C | C | C |
| | * | Communication elective (from Gen Ed list) *** | 3 | | | | |