# SPOKANE COMMUNITY COLLEGE

# Health and Environmental Science Division







# 2022 Echocardiography Application Packet

Application Deadline: June 30<sup>th</sup>, 2022

Dear Echocardiography Applicant,

We have provided a packet that is intended to help you understand the requirements for entry into the Spokane Community College (SCC) Echocardiography Program. Please take your time in reading the entire packet. We have Allied Health Counselors located in building 1 that are a valuable resource of information regarding our program. Please take the time to visit one of our advisors. Rely on information from our advisors and from the faculty, not information from others who may not be aware of frequent changes in the program in response to accreditation or legislative bodies and the healthcare environment.

We appreciate your interest in our program and look forward to working with you. If you need additional information, please contact the Echocardiography Program (509) 533-7309 or by email: <a href="mailto:tyler.roberts@scc.spokane.edu">tyler.roberts@scc.spokane.edu</a> or one of our counselors.

Sincerely,

#### **Tyler Roberts, RDCS**

Director of Echocardiography (NCT) | Spokane Community College Bldg 9, Rm 217

<u>1810 N Greene St</u> – MS 2090 Spokane, WA 99217-5399

Work: 509.533.7309 | Fax: 509.533.8621

Website/Application - https://scc.spokane.edu/What-to-Study/Healthcare/Echocardiography

# Echocardiography Application Packet



#### **Echocardiography Building 9**

Program Director: Tyler Roberts RDCS; Office 217

#### Counselors Building 1

Advisor/Counselor: Michelle Gendusa; (509) 533-8196

#### **Spokane Community College**

1810 N Greene Street Spokane, WA 99217 Phone 509.533.7309 • Fax 509.533.8621



# Overview of Echocardiography

Welcome to the Health Sciences Division. Healthcare is an exciting field. Health professionals play a significant role in the overall wellbeing of our community.

In 1967 Dr. Paul Shields noticed a short supply of cardiovascular technicians. This was due in part to the technician's fear of the equipment and critical procedures. His idea to overcome this was to increase the training time from two weeks to two years by starting the first two-year cardiopulmonary program.

#### **Health Science Division**

| Dental Assisting              |
|-------------------------------|
| Diagnostic Medical Sonography |
| Emergency Medical Technician  |
| Health Information Technology |
| Invasive Cardiovascular       |
| Medical Assistant             |
| Noninvasive Cardiovascular    |
| Pharmacy Technician           |
| Radiology Technology          |
| Respiratory Therapy           |
| Surgical Technology           |
| Vascular Technology           |
|                               |

In 1977 Dr. Burroughs and Shields recognized the need for skilled echocardiographers. The two programs were cored and formed the Cardiovascular Technology (CVT) program. Dennis Carney was hired in 1977 to develop the curriculum for the Echocardiography/Noninvasive Cardiovascular (Echo/NCT) program and led that program until his retirement in 2011. After extensive searching for Dennis' replacement, Scott Cutler became the program director for Echocardiography in 2013. Scott has worked in the clinical, sales, and quality control aspects of this industry. Although vascular technology was always a component part of the Echo/NCT program the need for additional training in noninvasive vascular technology was recognized and in 2006 a specialty program started in Vascular Technology. The Echocardiography Program at SCC has been fully accredited since 1989 and is current through 2027.

There continues to be a shortage of cardiac sonographers and vascular technologists. In fact, the U.S. Department of Labor describes a need for sonographers with the following statement:

<sup>&</sup>quot;Employment of diagnostic medical sonographers is expected to grow much faster than the average occupations through 2020 as the population grows and ages, increasing the demand for diagnostic imaging and therapeutic technology. In addition to job openings from growth, some job openings will arise from the need to replace sonographers who leave the occupation permanently."

The purpose of the Echo/NCT program is to provide educational opportunities that will enable students to obtain the knowledge, skills, and attitudes necessary for success in Echocardiography.

All SCC programs provide educational opportunities regardless of race, color, national origin, religion, sex, age, physical challenges, academic disadvantage, or economic disadvantages.

The CVT programs provide an atmosphere to achieve the philosophical concepts identified by SCC's mission statement. The program is balanced with classroom, laboratory and clinical experience. This combination of learning environments provides the student with a solid structure which allows for fulfillment of individual capabilities.

The Echo/NCT program goal is to prepare competent entry level cardiac sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains. Through achievement of this goal, our intent is to produce graduates who are prepared for employment in the general areas of communication, math, interpersonal relations and professional ethics. The expectation is that graduates will competently perform echocardiography examinations of adult acquired heart disease and congenital heart disease. The Echo/NCT program strives to meet the health care needs of the community in which it serves.

The Echocardiography/Noninvasive Cardiovascular Technology Student Handbook is designed to explain the policies and guidelines of the Health Science Division and the Echocardiography/Noninvasive Cardiovascular Technology Program. It is the student's responsibility to become familiar with this handbook. Faculty will refer to it throughout the academic year. In addition, the student is responsible for obtaining a copy of the SCC Student Handbook and Planner. The SCC Student Handbook provides an overview of college wide policies and procedures that set expectations for student behavior.

#### Vision

Spokane Community College is a place where students transform their lives and attain their dreams in an unsurpassed learning environment that is personalized, engaging, and affordable.

#### Mission

At Spokane Community College, we strive to provide our community accessible and affordable educational opportunities responsive to the needs of our diverse population. We do this through:

- -Industry-standard, professionaltechnical certificate and degree programs
- -Liberal arts and professionaltechnical programs transferable to four-year institutions
- -Developmental and continuing education, distance learning, and lifelong learning opportunities
- -Educational programs that emphasize four critical learning abilities: Responsibility, Communication, Problem-Solving, and Global Awareness
- -Instructional support and student services that enhance and promote student success.

As we carry out this mission, our skilled and dedicated faculty, staff and administration continuously support the individual and professional growth of our students and the economic success of our region.

#### **Program Description**

This program is commonly referred to as "Echo". Echocardiography technologists use sophisticated computers and cutting-edge technology to create and read sound waves in order to capture videos and images of the heart. These ultrasounds allow us to see into the body without pain or radiation so cardiologists can evaluate the function of the heart and plan possible treatment.

SCC's two-year program focuses on the adult heart and diseases that affect it. However, you also work with pediatric patients and even discuss the heart in the fetus. You become internationally registered by one of two international credentialing agencies that allow you to literally work anywhere in the world.

The first year of the program is the learning in the classroom with laboratory experience on real equipment and real people. Later, you begin clinical rotations in hospitals and clinics and work on real cardiac patients. During the final six months of the program, students are placed full-time in a clinical setting, refining their skills and preparing to work. During this time, many students are placed in clinical sites throughout the U.S. A few students are able to stay in Spokane.

You will be among the highest paid and most sought after allied health workers, including nursing. You can work in a large variety of healthcare facilities ranging from hospitals to clinics and even administration or sales.

#### Accreditation

The Cardiovascular Technology Programs (Invasive and ECHO) are accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Joint Review To contact the accrediting agencies:

CAAHEP 25400 U.S. Highway 19 North, Suite 158 Clearwater, FL 33763 www.caahep.org Committee for Cardiovascular Technology (<a href="www.jrccvt.org">www.jrccvt.org</a>). The Echocardiography Program at SCC has been fully accredited since 1989 and is current through 2027.

JRC-CVT 6 Pine Knoll Dr. Beverly, MA 01915-1425 www.jrccvt.org

# Echocardiography Admissions Requirements and Procedures

1. All applicants that meet or exceed the minimum qualifying admission standards will be considered for admission regardless of race, color, creed, gender, age, national origin, marital status, or possessing sensory, physical or mental challenges.

The job performance of the cardiovascular sonographer requires certain basic physical and mental abilities. Challenged persons that are capable of the following **technical standards** will be considered:

- Sufficient hearing to assess patient needs and communicate verbally with other health care providers.
- Sufficient verbal and written skills to communicate patient, and/or staff/student needs promptly and effectively in English.
- Sufficient gross and fine motor coordination to respond promptly, manipulate equipment, lift moderate weight and ensure patient safety.
- Satisfactory intellectual and emotional functions to exercise independent judgment and discretion in the safe technical performance of medical imaging procedures.
- Sufficient eyesight to observe patients, manipulate equipment

and evaluate sonographic quality.

- 2. All applicants must be high school graduates or have passed the General Education Development test (GED).
- 3. Upon acceptance all applicants **must** complete and submit a clear national background check prior to admission.
- 4. All applicants must have completed the following college level courses or equivalents and achieve at least a 2.5 grade on a 4.0 grading scale, in each course. All required courses must be completed by the end of the spring term for the placement consideration in the class beginning in September of each year. All prerequisite courses must be completed within the previous five years of the application year.

#### Prerequisites:

BIOL 160 - General Biology w/Lab BIOL 241 - Human A & P 1 BIOL 242 - Human A & P 2 CMST 210 - Interpersonal Communications ENGL 101 - English Composition I HED 125 - Medical Terminology MATH 108 - College Algebra PHYS 100 - Introductory Physics

Applicants are encouraged to take additional courses in physics, chemistry, and biology.

- 5. Additional admission requirements:
  - a. Three confidential letters of recommendation
  - b. All college transcripts
  - c. Documentation of 10 hours as volunteer or employee in a patient care setting and 2 of those must be completed in echocardiography (either at a hospital/clinic or at our lab at SCC donating your time to be scanned by current students.) The 10 hours must be completed by the application deadline of the year the student is applying for.
  - d. Interview with the selection panel
- 6. Each potential student must complete an Application for Admissions to Spokane Community College by the deadline date for the class beginning the following September.
- 7. An admission application is not considered complete until the application is completely filled out, three letters of recommendation are received, and all high school and college transcripts are received. Students attending spring quarter classes must request that those grades be forwarded immediately upon completion of the spring term. Please submit everything in a single manilla packet, it helps admissions stay organized.
- 8. Candidates must make themselves available for a personal interview by the selection committee at the committee's request. Interviews will be scheduled in July. Applicants will be notified of the committee's decision within four weeks after the personal interview.
- 9. Student selection is based on the candidate's application, references, high school and college grades and the personal interview. The selection committee's decision on student selection is final and is not subject to appeal. However, qualified applicants who are not selected may reapply for future class positions.
- 10. Students must submit evidence of good health by receiving a physical examination from their personal physician. Physical examinations must have been performed within six weeks of the school's starting date. On or prior to the first day of school at Spokane Community College, the program director must receive a letter signed by the physician indicating a good health status with no restrictions.
- 11. All selected students will be required to sign consent and release form authorizing Spokane Community College to perform a 10 panel drug screen.

#### **Selection Procedure**

Final selection for the Echocardiography Program is based on the high school and college GPA, completion of pre-requisite courses, grades received, letters of recommendation, and the personal interview.

After entering the Echocardiography program, students are required to maintain a minimum of a 2.0 grade in each class before proceeding to the next quarter. Students need to realize that clinical site placement will *likely require relocation* outside of the immediate Spokane area and Washington State for 8 months. (1 month clinical in 4<sup>th</sup> quarter, 1 month in 5<sup>th</sup> quarter, 3 months in 6<sup>th</sup> quarter, 3 months in 7<sup>th</sup> quarter.)

## **Course Outline During the Program**

| First Qua<br>ECHO<br>ECHO<br>ECHO<br>ECHO<br>ECHO<br>ECHO | 100<br>112<br>213<br>214<br>116<br>117<br>125            | Introduction to Echo and Vascular Vascular Fundamentals Electrocardiography Electrocardiography Lab Acute Coronary Syndrome Cardiovascular Pharm 1 Ultrasound Physics and Instrumentation I Total     | 2<br>4<br>3<br>1<br>1<br>5<br>17 |
|---|--|---|----------------------------------|
| Second Q  | )uarter  |   |                                  |
| ЕСНО  | 122  | Vascular Procedures I   | 5                                |
| ЕСНО  | 126  | Hemodynamics  | 2                                |
| <b>ECHO</b>   | 127  | Technical Skills/Reading Hemodynamics   | 1                                |
| ЕСНО  | 128  | Cardiovascular Pharm 2  | 1                                |
| ECHO  | 129  | Technical Skills/Pharmacology   | 1                                |
| ЕСНО  | 130  | Echo Fundamentals Lab   | 1                                |
| ЕСНО  | 133  | Echo Fundamentals   | 4                                |
| ЕСНО  | 135  | Ultrasound Physics and Instrumentation II   | 5                                |
|   |  | Total   | 19                               |
| Third Qu  | ıarter   |   |                                  |
| ECHO  | 131  | Core Concepts in Echo/Vasc  | 2                                |
|   |  |   |                                  |
| ЕСНО  | 136  | Comparative Imaging Analysis  | 3                                |
| ЕСНО  | 138  | Cardiovascular Physiology   | 3<br>4                           |
| ECHO<br>ECHO  | 138<br>253   | Cardiovascular Physiology<br>Echocardiography I   | 3<br>4<br>6                      |
| ЕСНО  | 138  | Cardiovascular Physiology Echocardiography I Technical Skills Echocardiography I  | 3<br>4<br>6<br>2                 |
| ECHO<br>ECHO  | 138<br>253   | Cardiovascular Physiology<br>Echocardiography I   | 3<br>4<br>6                      |
| ECHO<br>ECHO<br>ECHO                                      | 138<br>253<br>254  | Cardiovascular Physiology Echocardiography I Technical Skills Echocardiography I  | 3<br>4<br>6<br>2                 |
| ECHO<br>ECHO  | 138<br>253<br>254  | Cardiovascular Physiology Echocardiography I Technical Skills Echocardiography I Total  | 3<br>4<br>6<br>2                 |
| ECHO<br>ECHO<br>ECHO                                      | 138<br>253<br>254<br><b>Quarter</b>                      | Cardiovascular Physiology Echocardiography I Technical Skills Echocardiography I  | 3<br>4<br>6<br>2<br>17           |
| ECHO<br>ECHO<br>ECHO                                      | 138<br>253<br>254<br><b>Quarter</b><br>139               | Cardiovascular Physiology Echocardiography I Technical Skills Echocardiography I Total Surgical Asepsis   | 3<br>4<br>6<br>2<br><b>17</b>    |
| ECHO<br>ECHO<br>Fourth Q<br>ECHO<br>ECHO                  | 138<br>253<br>254<br><b>Quarter</b><br>139<br>140        | Cardiovascular Physiology Echocardiography I Technical Skills Echocardiography I Total  Surgical Asepsis Technical Skills/Surgical Asepsis Data Collection and Presentation Echo Clinical Preparation | 3<br>4<br>6<br>2<br><b>17</b>    |
| ECHO<br>ECHO<br>ECHO<br>Fourth Q<br>ECHO<br>ECHO<br>ECHO  | 138<br>253<br>254<br><b>Quarter</b><br>139<br>140<br>141 | Cardiovascular Physiology Echocardiography I Technical Skills Echocardiography I Total  Surgical Asepsis Technical Skills/Surgical Asepsis Data Collection and Presentation                           | 3<br>4<br>6<br>2<br>17           |

| Fifth Qua   | arter   |                                  |    |
|-------------|---------|----------------------------------|----|
| <b>ECHO</b> | 251     | Echocardiography Clinical II     | 6  |
| <b>ECHO</b> | 252     | Cardiovascular Pathophysiology   | 1  |
| <b>ECHO</b> | 255     | Research Methods & Biostatistics | 3  |
| <b>ECHO</b> | 263     | Echocardiography II              | 7  |
| <b>ECHO</b> | 264     | Technical Skills Echo II         | 2  |
|             |         | Total                            | 19 |
| Sixth Qu    | arter   |                                  |    |
| ECHO        | 261     | Echocardiography Clinical III    | 14 |
|             |         | Total                            | 14 |
| Seventh     | Quarter |                                  |    |
| <b>ECHO</b> | 273     | Echocardiography Clinical IV     | 14 |
|             |         | Total                            | 14 |

115 credits are required for the AAS

## **Financial Considerations**

Upon entering the Echo/NCT Program the student should be prepared to meet certain financial expenditures. The following amounts are ESTIMATES covering the entire program and should be used as a guideline ONLY. <u>All prices subject to change</u>

#### Estimated Expense List

|  | <br>          |
|--|---------------|
| Books [estimate for 7 quarters]                        | \$<br>1500.00 |
| Drug Screening (if required)                           | \$<br>15.00   |
| Immunizations Estimated Cost                           | \$<br>300.00  |
| Lab Fees [estimate for 7 quarters]                     | \$<br>500.00  |
| Liability Insurance [per-quarter-included in lab fees] | \$<br>15.00   |
| Locker [per year]                                      | \$<br>3.00    |
| Medical Insurance [per quarter]                        | \$<br>40.00   |
| National Registry Exam-ARDMS [2 exams @ \$200 & 250]   | \$<br>450.00  |
| National Registry Exam-CCI [1 exam @ \$350]            | \$<br>350.00  |
| Parking [per quarter]                                  | \$<br>22.00   |
| Student Assessment Testing Fee                         | \$<br>20.00   |
| Tuition [approximate per quarter, resident status]     | \$<br>1460.00 |
| Uniforms   | \$<br>100.00  |

#### **Student Disabilities Statement**

In accordance with the Americans with Disabilities Act and the Rehabilitation Act of 1973, accommodations for students with disabilities will be considered at the student's request. The student will be required to register with the Disability Support Services office and provide documentation of disability. Once the student is qualified by the DSS Manager as having a disability, requested accommodations will be considered. Accommodations for the classroom, laboratory, or clinical setting will be considered according to reasonableness. Accommodations that compromise patient care, or that fundamentally alter the nature of the program or activity, are not considered to be reasonable.

A student denied accommodation may request an individualized determination to assure that the denial is not a result of disability discrimination. Concerns may be expressed to the Dean of Health and Environmental Sciences at 533-7295 or to the Manager of Disability Support Services and Testing at 533-7498. Procedures for student grievance are outlined in the SCC Student Handbook and in the SCC Center for Students with Disabilities Student Handbook.

## **Application Checklist**

The following materials must be submitted to the Curriculum Advisor:

**Krystal Janzen**Curriculum Advisor

Spokane Community College

Phone: (509) 533-7005 / Fax: (509) 533-8181

Krystal.Janzen@scc.spokane.edu

#### . We prefer that everything is submitted in one packet. Letters, transcripts, volunteer hours, etc

| SCC General Admission Application Form or Student Update Form   |  |  |
|---|--|--|
| Application Form: <a href="http://www.scc.spokane.edu/Admissions/Apply.aspx?page=PV2">http://www.scc.spokane.edu/Admissions/Apply.aspx?page=PV2</a> |  |  |
| Update Form: <a href="http://ccs.spokane.edu/Forms/Registration/ccs-40-194.aspx">http://ccs.spokane.edu/Forms/Registration/ccs-40-194.aspx</a>      |  |  |
| Three confidential letters of recommendation (in a sealed envelope)   |  |  |
| Documentation of 10 hours of volunteer hours (see form on next page)  |  |  |
| Transcripts – Only submit if transcripts are from any college other than SCC.   |  |  |
| Send complete admissions packet to:   |  |  |
|   |  |  |
| Krystal Janzen  |  |  |
| Spokane Community College   |  |  |
| 1810 N Greene St., MS 2150  |  |  |
| Spokane, WA 99217   |  |  |

Interviews will be held on July 18<sup>th</sup> and 19<sup>th</sup>, 2022. Students will be notified of their interview appointment by July 15<sup>th</sup>, 2022. **Notification of appointment will be distributed by e-mail only.** Please make sure your records have an accurate and working e-mail address. Exceptions may be made by the program director at his discretion. —



# Spokane Community College Spokane Community College Echocardiography Program

## (OPTIONAL) Volunteer/Work Related Experience Time Sheet

| Student's Name:   |             |        |  |  |  |
|---|-------------|--------|--|--|--|
| Facility:   |             |        |  |  |  |
| Supervisor:   | Phone:      |        |  |  |  |
| Supervisor's Signat   | ure:Date:   |        |  |  |  |
| Requirement: 10 Hours of Volunteer or Work Related Experience in a Patient Care Setting. At a minimum of of these hours to be done in an Echocardiography Department. MUST INVOLVE DIRECT PATIENT CARE and must be completed prior to June 23 <sup>rd</sup> . |             |        |  |  |  |
| Data  | Description | Harris |  |  |  |
| Date  | Description | Hours  |  |  |  |
|   |             |        |  |  |  |
|   |             |        |  |  |  |
|   |             |        |  |  |  |
|   |             |        |  |  |  |
|   |             |        |  |  |  |
|   |             |        |  |  |  |
|   |             |        |  |  |  |
|   |             |        |  |  |  |
|   |             |        |  |  |  |
|   | Total Hours |        |  |  |  |

For questions or concerns please contact: Scott Cutler (Phone# 509-533-7309 or e-mail Scott.Cutler@SCC.Spokane.edu Fax# 509-533-8621)

SCC is an Affirmative Action/Equal Employment Opportunity Institution.