



ARTICULATION AGREEMENT
Between Smith Chason College and Grossmont College

Smith Chason College
dba WCUI School of Medical Imaging
3110 North Central Avenue, Suite L100
Phoenix, AZ 85012

Grossmont College
8800 Grossmont College Drive
Cajon, CA 92020

1. Statement of Purpose

Smith Chason College dba WCUI School of Medical Imaging (“WCUI”) and Grossmont College (“GC”), by nature of their mutual acknowledgement of the academic merit of each other’s programs and offerings have entered into this Articulation Agreement (“Agreement”), for a term of three calendar years.

This Agreement is designated to facilitate a smooth transition for graduates from the AS Cardiovascular program (Adult Echocardiography) at Grossmont College into the BS Diagnostic Cardiovascular Sonography program at WCUI. Furthermore, Grossmont graduates shall receive a tuition reduction of 10%.

2. Nature of the Agreement

Administration, faculty, and staff at both institutions will work cooperatively to ensure successful implementation of this Agreement. The faculty and staff of both institutions will communicate openly and regularly to ensure accurate and timely information for students.

3. WCUI Entrance Requirements

Applicants must be graduates of Grossmont College’s AS Cardiovascular Program (Adult Echocardiography) and meet published WCUI entrance requirements (link below).

<https://wcui.edu/wp-content/uploads/2022/11/Smith-Chason-College-Catalog-VOL-2-July-1-2022-June-30-2023-Final.pdf>



4. Transfer Credits

Appendix A contains the equivalency chart for the Grossmont College Cardiovascular Technology course list and applicable credits. All transfer courses covered by this agreement must have been passed with a letter grade of C, pass or equivalent. A total of 96.0 quarter credits (64 semester credits) will be accepted from Grossmont College. All Grossmont graduates will be required to take 54 quarter credits (36 semester credits) at WCUI (as indicated in Appendix B -WCUI Course Grid).

5. Terms and Cancellation

- WCUI retains responsibility for compliance with all Accrediting Commission of Career Schools and Colleges (“ACCSC”) requirements.
- GC retains responsibility for compliance with all WCUI (“ACCSC”) requirements.
- Either WCUI or GC may dissolve this Agreement by providing one (1) year advance notice to the cooperating institution’s Chief Academic Officer or equivalent, without penalty or legal recourse.
- Should the program be dissolved, students who are participating at that time will be provided the opportunity to finish the program they have started.
- Each institution will notify the other of anticipated substantive curricular changes affecting the programs identified in this Agreement upon formal approval.
- Either party may terminate the agreement immediately due to any violation of any requirement of a federal, state, or accreditation agency or body.

6. Independent Contractors

Both WCUI and GC are always acting as independent contractors and neither they nor their respective employees shall claim to be employees, partners, joint ventures, or agents of the other.

7. Dispute Resolution

All or any disputes arising out or touching upon or in relation to the terms and conditions of this Agreement, including the interpretation and validity of the terms thereof and the respective rights and obligations of the Parties, shall be settled amicably by mutual discussion with WCUI and GC.



8. Integration

This Agreement is the entire agreement and supersedes any prior agreements or discussions. Any modification of this Agreement must be in writing and signed by all parties.

9. Choice of Law

The laws of the State of California, without giving effect to its conflicts of law principles or rules, shall govern all matters arising out of or relating to this Agreement, including, without limitation, its validity, interpretation, construction, performance, and enforcement.

10. Term of Agreement

This agreement is valid for three calendar years, January 2023 through January 2026.

This Agreement shall not be binding until signed by all parties. The persons signing this Agreement represent and warrant that they have authority to bind their respective parties.

Smith Chason College dba WCUI School of Medical Imaging

Andrew High
Signature

2/27/2023
Date

Andrew High
Name and Title

Grossmont College

M. Denise Aceves
Signature

2/27/2023
Date

M. Denise Aceves, Articulation Officer
Name and Title

Liz Barrow
Signature

Liz Barrow, Program Coordinator
Name and Title

APPENDIX A

The following chart represents the Grossmont College Cardiovascular Technology Associate of Science degree program, with course titles, descriptions, and semester credits; with the equivalent WCUI course and quarter credits. As part of the process, a detailed analysis of the curriculum was undertaken by the education department. It is noted that Grossmont college has several tracks, the evaluation determined that only graduates from the Grossmont Adult Echocardiography track will be accepted as this track closely represents the classes offered at WCUI. The Grossmont program is also programmatically accredited via the Commission on Accreditation of Allied Health Education Programs (CAAHEP) which ensures a high-quality curriculum and excellent student outcomes. The prestigious accreditation status provides an additional layer of confidence that the students will be successful when pursuing a higher degree at WCUI. The listed courses and credits from Grossmont will be accepted, per this articulation agreement, as the equivalent of the Associate of Science degree in Cardiovascular Sonography at WCUI (119.5 quarter credits).

WCUI/Grossmont Equivalency Chart

WCUI Course Number/Title	WCUI Quarter Credit	Grossmont Course Number	Grossmont Course Title	Grossmont Course Description	Grossmont Semester Credit
GENERAL EDUCATION					
Fitness and wellness No WCUI equivalent	0	As applicable	Area E-Fitness and Wellness		3
ART 301/Art History	5		Area C-Humanities i.e Art 100, 120		3
PSY 301/Introduction to Psychology	5		Area D-Social Sciences i.e Psychology 120, 125		3
PHY 301/Introduction to General Physics	5		Area B-Natural Sciences BIO 120 (pre-req 4 units) BIO 140, 141, and 141L OR BIO 144 and 145 Physics 110 Chem 115 (pre-req 4 units)		7
BIO 301/Introduction to Biology	5				
AP 100/ Anatomy and Physiology I	7.5				
AP 200/ Anatomy and Physiology II	7.5				
OCOM 201/ Oral Communication	3		Area A-Language and Rationality Communication 120, 122, or 130		9
WCOM 201/ Written Communication	3		English 120 or 124 Math 103, 108, 110		
ALG 201/Algebra I	3				
Subtotal	44 Quarter Credits		Subtotal		25 Semester Credits
			Subtotal (converted to quarter credits 25*1.5=37.5)		37.5 Quarter Credits

General Education credits at WCUI must equal a minimum of 22.5 quarter credits for an AS degree. The quarter credit equivalency from Grossmont above equals 37.5 quarter credits. This is the maximum number of general education credits to be transferred from Grossmont.

For a full list of Grossmont GE courses offered in each Area, please refer to Appendix C (CVT Advising Sheet-updated yearly)

CORE (TECHNICAL)					
WCUI Course Number/Name	Quarter Credits	Grossmont Equivalent Course Number/ Name/Description			Grossmont Semester Credit (converted to quarter credit)
PHY 202/Ultrasound Physics and Instrumentation Lecture Also covered in: VAS201/Vascular Sonography Lecture PHY 202L/ Ultrasound Physics and Instrumentation Laboratory	9	CVTE 100	Physical Principles of Medicine I	A course in the mathematics and physical principles of medicine specifically applicable to the field of Cardiovascular Technology. Designed for students enrolled in the Cardiovascular Technology Program, the course includes studies in the use of mathematic formulas and physics used to evaluate the hemodynamics of the cardiovascular system.	5 * 1.5 = 7.5
		CVTE 110	Physical Principles of Medicine II	This course is a continuation of Cardiovascular Technology 100, with emphasis on the physical characteristics of sound, ultrasound, and Doppler ultrasound as utilized in medical diagnostic testing. The course explores the physics involved in the formation, propagation, and reflection of sound and ultrasound, the characteristics of the various types of transducers used in echocardiography and vascular duplex scanning, and the mathematical techniques employed in the use of ultrasound to measure and calculate hemodynamic function indices.	
PHY 202L/Ultrasound Physics and Instrumentation Laboratory	5	CVTE 103	Laboratory Practicum and Proficiency Testing	A practicum course designed to ensure competency in the basic skills required in the clinical practice of cardiovascular technology. Students acquire skills in the performance of indirect blood pressure measurement, ankle brachial index (ABI), patient transport, ultrasound imaging and Doppler interpretation of the heart and carotid arteries to include calculations of specified hemodynamic parameters.	2 * 1.5 = 3.0

<p>VAS 201/Vascular Sonography Lecture</p> <p>Also covered in: CAR220/Electrocardiography, MT200/Medical Terminology</p>	8	CVTE 101	Cardiovascular Physiology I	<p>A study of the anatomy, physiology, and structural relationships of the human heart and vascular system. Designed for students enrolled in the Cardiovascular Technology program, the course will concentrate on specialized terminology, cardiac and vascular anatomy, electrocardiography, and cardiac function of the normal cardiovascular system.</p>	4 * 1.5 = 6
<p>CAR 220/Electrocardiography</p>	3.5	CVTE 102	Medical Instrumentation I	<p>An integrated course in medical electronics and instrumentation for the cardiovascular technology student. The course will emphasize the concepts of electrical safety, the clinical application of electronic instruments and devices used in cardiovascular medicine, and the characteristics, recording, and measurement of bioelectric signals.</p>	3 * 1.5 = 4.5
<p>CAR 221/Cardiovascular Sonography Lecture I,</p> <p>CAR 221L/Cardiovascular Sonography Laboratory I,</p> <p>CAR 222/Cardiovascular Sonography Lecture II,</p> <p>CAR 222L/Cardiovascular Sonography Laboratory II,</p>	8, 6 8,6	CVTE 111	Cardiovascular Physiology II	<p>This course is a continuation of Cardiovascular Technology 101, Cardiovascular Physiology I, with emphasis on cardiovascular disease including arrhythmias, coronary artery disease, peripheral vascular disease, cardiomyopathies, heart failure and hypertension. Congenital heart disease will be introduced beginning with a study of the embryologic development of the heart.</p>	4 * 1.5 = 6

<p>VAS201L/Vascular Sonography Laboratory,</p> <p>MT200/Medical Terminology</p> <p>Also covered in:</p> <p>VAS201/ Vascular Sonography Lecture,</p> <p>CAR220/Electrocardiography</p>	<p>6, 3</p>	<p>CVTE 115</p>	<p>Introduction to Adult Echocardiography</p>	<p>An introduction to Adult Echocardiography. This course is in specialized techniques and cardiovascular theory to develop cognitive and manipulative skills in the clinical operation of specified ultrasound instrumentation, and in the performance of adult echocardiography</p>	<p>4 * 1.5 = 6</p>
		<p>CVTE 221</p>	<p>Diagnostic Procedures I, Adult Echocardiography</p>	<p>A course in specialized techniques using echocardiography for testing and evaluation of cardiovascular disease. Lectures will stress the performance and analysis of cardiac ultrasound studies, the relationship of ultrasound findings to cardiac pathology and the measurement and calculation of specified hemodynamic parameters. Special emphasis is given to incorporating the American Society of Echocardiography (ASE) Guidelines. The classroom laboratory provides advanced instruction in the topics and performance of diagnostics tests in echocardiography. The theory, operation, and clinical application of specified diagnostic medical instrumentation will be applied.</p>	<p>5 * 1.5 = 7.5</p>
		<p>CVTE 251</p>	<p>Diagnostic Procedures II, Adult Echocardiography</p>	<p>This course is a continuation of Cardiovascular Technology 221. It is an advanced course in the techniques utilized in the diagnosis and serial follow-up of cardiovascular disease using conventional imaging as well as strain, stress echo, and trans-esophageal echocardiography (TEE). Special emphasis is given to incorporating the American Society of Echocardiography (ASE) Guidelines. The classroom laboratory continues advanced instruction in the topics and performance of diagnostics tests in echocardiography. The theory, operation, and clinical application of</p>	<p>5 * 1.5 = 7.5</p>

				specified diagnostic medical instrumentation will be applied.	
		CVTE 114	Cardiovascular Pharmacology	This course introduces medications used in the field of cardiovascular healthcare. Emphasis will be on the mechanism of the different types of medications and their use in the care of the cardiovascular patient. Concepts of drug classification, pharmacokinetics, and application of medications to cardiovascular disease and cardiovascular procedures will be the focus of this course.	2 * 1.5 = 3
Total WCUI	8+6+8+6+6+3=37	Total GC		6+6+6+7.5+7.5+7.5+3 =36	
EPL 201/Externship Preparation Laboratory I	2	CVTE 113	Introduction to Clinical Practicum II	This course prepares the Cardiovascular Technology student for the clinical setting with topics such as the Health Insurance Portability and Accountability Act (HIPAA), Infection Control, Radiation Safety, patient transport, basic patient care, professionalism in the healthcare setting and expectations of the Cardiovascular Technology student during clinical assignments.	1 * 1.5 = 1.5
*EXT 201/Externship I (AAS), EXT 202/Externship II (AAS) Also covered in: EXT 401/Externship I (BS), EXT 402/Externship II (BS, VAS201L/Vascular Sonography Laboratory	15.5, 15.5 = 31	CVTE 130	Clinical Practicum I	This laboratory course is the first student opportunity to perform cardiovascular diagnostic testing in a clinical setting under the guidance of an experienced Cardiovascular Technologist. Basic patient interaction, routine patient care, diagnostic testing in a clinical setting, preliminary findings and the physician's final report will be introduced. The diagnostic proficiencies learned in the classroom and practiced during the first-year lab sessions of the Cardiovascular Technology Program will be applied to situations in the hospital, clinic, or doctor's office setting.	12 * 1.5 = 18

		CVTE 220	Clinical Practicum II	The second laboratory course providing clinical practicum for students in the Cardiovascular Technology Program. Emphasis will be on the continuation of building the skills, knowledge, and behaviors necessary for the successful Cardiovascular Technologist. The performance of specified diagnostic tests, calculation of hemodynamic data, and professional performance in the clinical environment will be stressed.	
		CVTE 250	Clinical Practicum III	This third laboratory course provides a continuation of clinical practicum for students in the Cardiovascular Technology Program. Emphasis will be on consolidating skills acquired in CVTE 220 and building upon those skills to advance the student toward program completion.	
Core Subtotal	95.5	Core Subtotal			70.5 (47 semester credits)
Gen Ed Subtotal	44	Gen Ed Subtotal			37.5 (25 semester credits)
Grand Total	139.5	Grand Total			108 (72 semester credits)
<p><i>An AS degree at WCUI must contain a minimum of 45 quarter credits in the core (technical) courses. The above listed courses and credits from Grossmont will be accepted, per this articulation agreement, as the equivalent of the Associate of Science degree in Cardiovascular Sonography at WCUI (119.5). Bachelor level courses will be taken at WCUI including General Education Courses (13 quarter credits).</i></p> <p><i>*WCUI clinical lab is conducted in a laboratory class setting whereas most of the lab hours at Grossmont are conducted in the clinical setting with preceptor</i></p>					

Appendix B

WCUI Course Grid

Grossmont graduates will be granted the following WCUI courses:

AAS in Cardiovascular Sonography	
AP100/Anatomy and Physiology I	7.5
AP200/Anatomy and Physiology II	7.5
ALG201/Algebra I	3
WCOM201/Written Communication	3
OCOM201/Oral Communication	3
ART 301/Art History	5
PSY 301/Introduction to Psychology	5
PHY 301/Introduction to General Physics	5
BIO 301/Introduction to Biology	5
TOTAL GEN EDS	44
Core	
PHY202/Ultrasound Physics and Instrumentation Lecture	9
MT200/Medical Terminology	3
PHY202L/Ultrasound Physics and Instrumentation Laboratory	5
VAS201/Vascular Sonography Lecture	8
VAS201L/Vascular Sonography Laboratory	6
CAR221/Cardiovascular Sonography Lecture I	8
CAR221L/ Cardiovascular Sonography Laboratory I	6
CAR220/ Electrocardiography	3.5



CAR222/ Cardiovascular Sonography Lecture II	8
CAR222L/ Cardiovascular Sonography Laboratory II	6
EPL201/ Externship Preparation Laboratory I	2
EXT201/ Externship I (AAS)	15.5
EXT202/ Externship II (AAS)	15.5
Total Core/Technical	95.5
TOTAL Credits Accepted from Grossmont	139.5

Grossmont graduates will take the following courses at WCUI:

BS in Diagnostic Cardiovascular Sonography	
ALG202/ Algebra II (to be reviewed by registrar MATH 103 or MATH 108 or MATH 110)	3
PATH301/ Pathology	5
ETH301/ Ethics and Leadership	5
Total Gen Eds	13
Core	
ACP301/ Advanced Cardiovascular Procedures Lecture	8
VAS202/ Advanced Vascular Sonography Lecture	8
VAS202L/ Advanced Vascular Sonography Laboratory	6
CAR301/ Adult Congenital Heart Defects Lecture	8
CAR301L/ Adult Congenital Heart Defects Laboratory	6
EPL401/ Externship Preparation Laboratory Advanced II	2.5
EPL402/ Externship Preparation Laboratory Advanced III	2.5
Total Core/Technical	41
Total Credits to be taken at WCUI* (Gen Ed + Core)	54



Total Transfer Credits Accepted (see above)	139.5
Total Credits (Current WCUI BS CVS)	193.5
Grossmont students are not required to complete Externship 401 and 402 in the BS program as they have transferred in and already received credit for the clinical training portion of the program.	
EXT401/ Externship I (BS)	15.5
EXT402/ Externship II (BS)	15.5

*WCUI’s 25% transfer credit policy requirement is waived for Grossmont College graduates based on the terms of this Articulation Agreement.

Appendix C

CARDIOVASCULAR TECHNOLOGY

ASSOCIATE IN SCIENCE DEGREE

General Education Requirements for Cardiovascular Technology Students Only Grossmont College

This general education applies to students entering the Grossmont College Cardiovascular Technology program for the **2022-2023 academic year.**

NAME COUNSELOR

AREA A – LANGUAGE AND RATIONALITY (minimum 9 units)

Complete three courses, one course from A1, A2, and A3.

- A1: Written Communication* – English 120, 124; English as a Second Language 122**
- A2: Oral Communication – Communication 120, 122, 130**
- A3: Analytical Thinking* – Geography 104; Mathematics 103, 108, 110, 120, 125, 126, 150, 160, 170, 175, 176, 178, 180, 245, 280, 281, 284, 285; **Philosophy 125, 130; Physical Science 120, Statistics: Anthropology 215, Biology 215, Economics 215, Math 160, Psychology 215, Sociology 215**

****Students using PHIL 125 or 130 to meet the Analytical Thinking requirement must still meet the Math competency requirement to graduate. Competency requirements are located in the college catalog.**

***A1 and A3 must be completed with a grade of “C” or better, or “P” to satisfy competency requirement.**

AREA B - NATURAL SCIENCES (minimum 7 units)

Complete two courses.

Biology (140, 141, and 141L) OR (144 and 145)

All courses must be completed with a “C” grade or higher.

Chemistry 115 OR equivalent is required for the major. See “Prerequisites” on back panel.

AREA C - HUMANITIES (minimum 3 units)

Complete one course.

American Sign Language 120, 121, 140, 220, 221, 250; Arabic 120, 121, 122, 123, 148, 220, 221, 250, 251; Art 100, 120, 124, 126, 129, 140, 141, 142, 143, 145, 146, 147, 171; Chinese 120, 121, 220, 221, 250, 251; Communication 135, 137, 144, 145; Dance 110, 120; English 122, 126, 134, 135, 136, 137, 201, 203, 215, 217, 218, 219, 221, 222, 231, 232, 236, 237, 238, 277; ESL 115; Ethnic Studies 126, 127, 134, 143, 144, 236, 237, 238; French 120, 121, 152, 220, 221, 250, 251; German 120, 121, 220, 221, 250, 251; History 100, 101, 103, 105, 106, 113, 126, 135, 136, 137, 148; Humanities 110, 120, 125, 130, 135, 140, 160, 170; Italian 120, 121, 220, 221, 250, 251; Japanese 120, 121, 149, 220, 221, 250, 251; Media Communications 111; Music 110, 111, 115, 116, 117, 123, 189; Philosophy 110, 111, 112, 114, 116, 118, 140, 141, 145, 150, 155, 160; Photography 150, 154; Religious Studies 120, 130, 140, 150, 170; Russian 120, 121, 220, 221, 250, 251; Spanish 120, 121, 122, 123, 141, 145, 220, 221, 250, 251; Theatre Arts 101, 110, 130, 143, 144, 205

AREA D - SOCIAL SCIENCES (minimum 3 units)

Complete one course.

Administration of Justice 110; Anthropology 120, 122, 127, 140; Child Development 115, 125, 131, 134, 145, 153; Communication 124, 126, 128; Economics 110, 120, 121; Ethnic Studies 114, 115, 118, 119, 125, 128, 130, 131, 132, 133, 135, 145, 154, 155, 160, 161, 180, 181; Family Studies 115, 120; Gender Studies 116, 117, 154, 155; Geography 100, 101, 106, 130, 170; Health Education 120, 201; Health Science 110; History 107, 108, 109, 114, 115, 118, 119, 122, 123, 124, 130, 131, 154, 155, 160, 161, 180, 181; Media Communications 110, 210, 250; Nutrition 155, 158, 159; Political Science 120, 121, 124, 130, 140, 150, 160; Religious Studies 165; Psychology 120, 125, 132, 134, 138, 140, 170, 211, 220; Sociology 114, 120, 125, 130, 138, 140, 150

AREA E – FITNESS AND WELLNESS

Minimum two courses.

Dance: 68, 71A, 71B, 72A, 72B, 74A, 74B, 78A, 78B, 80A, 80B, 80C, 80D, 81A, 81B, 81C, 81D, 82A, 82B, 83A, 83B, 84A, 84B, 84C, 84D, 88A, 88B, 88C, 88D, 91A, 91B, 91C, 91D, 99A, 99B, 99C, 116, 118A, 118B, 118C, 118D