



Alvin Community College Diagnostic Cardiovascular Sonography Program

AAS – Adult Echocardiography

AAS – Pediatric Echocardiography

AAS – Vascular Sonography

ATC – Adult Echocardiography

ATC – Pediatric Echocardiography

ATC – Vascular Sonography





Diagnostic Cardiovascular Sonography

What exactly is it that we do?

Diagnostic Ultrasound – The use of sound waves to see inside the body for the purpose of diagnosing disease.

Sonography - Using the reflections of high-frequency sound waves to construct an image of a body organ (a sonogram).

www.wordnetweb.princeton.edu

By beaming high-frequency sound waves into the body, sonographers and physicians can translate the "echoes" that bounce off body tissues and organs into "sound you can see," colorful, visual images that provide valuable medical information. Heart disease, stroke, abnormalities in the abdomen or reproductive system, and more - all exhibit telltale signs that ultrasound can help to detect. 1998 marked the 50th anniversary of diagnostic ultrasound.

www.sdms.org

Sonographer - The non-physician professionals who perform these procedures are known as sonographers and vascular technologists (who are sonographers specializing in imaging and tests of blood vessels).

www.sdms.org





Diagnostic Cardiovascular Sonography

OUR SCHOOL -!!!



State-of-the-art Allied Health and Sciences Building



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Diagnostic Cardiovascular Sonography



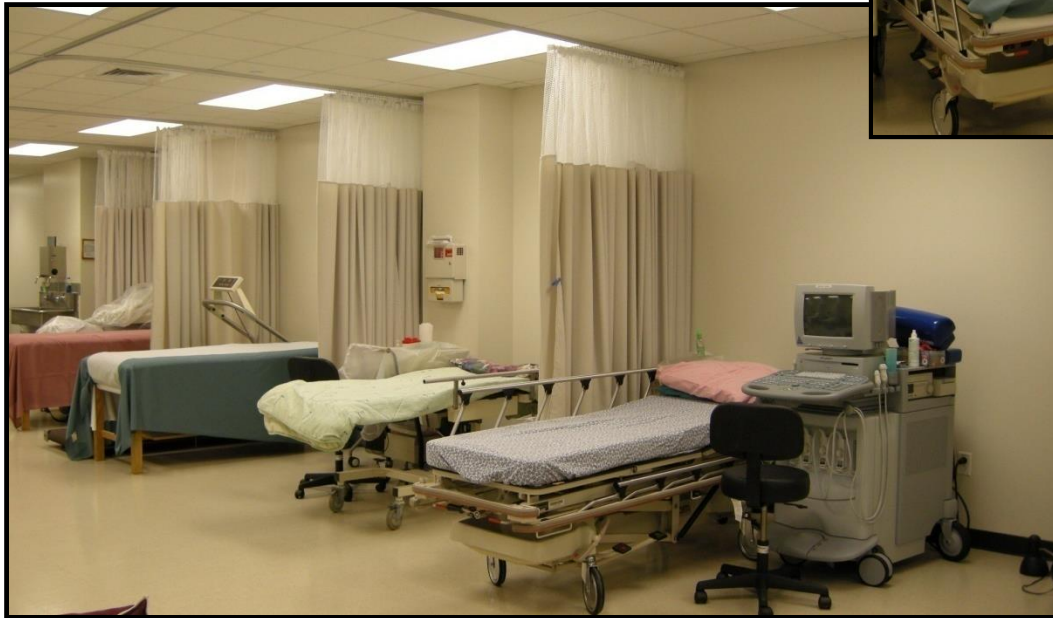
DCVS Classroom





Diagnostic Cardiovascular Sonography

DCVS Laboratory

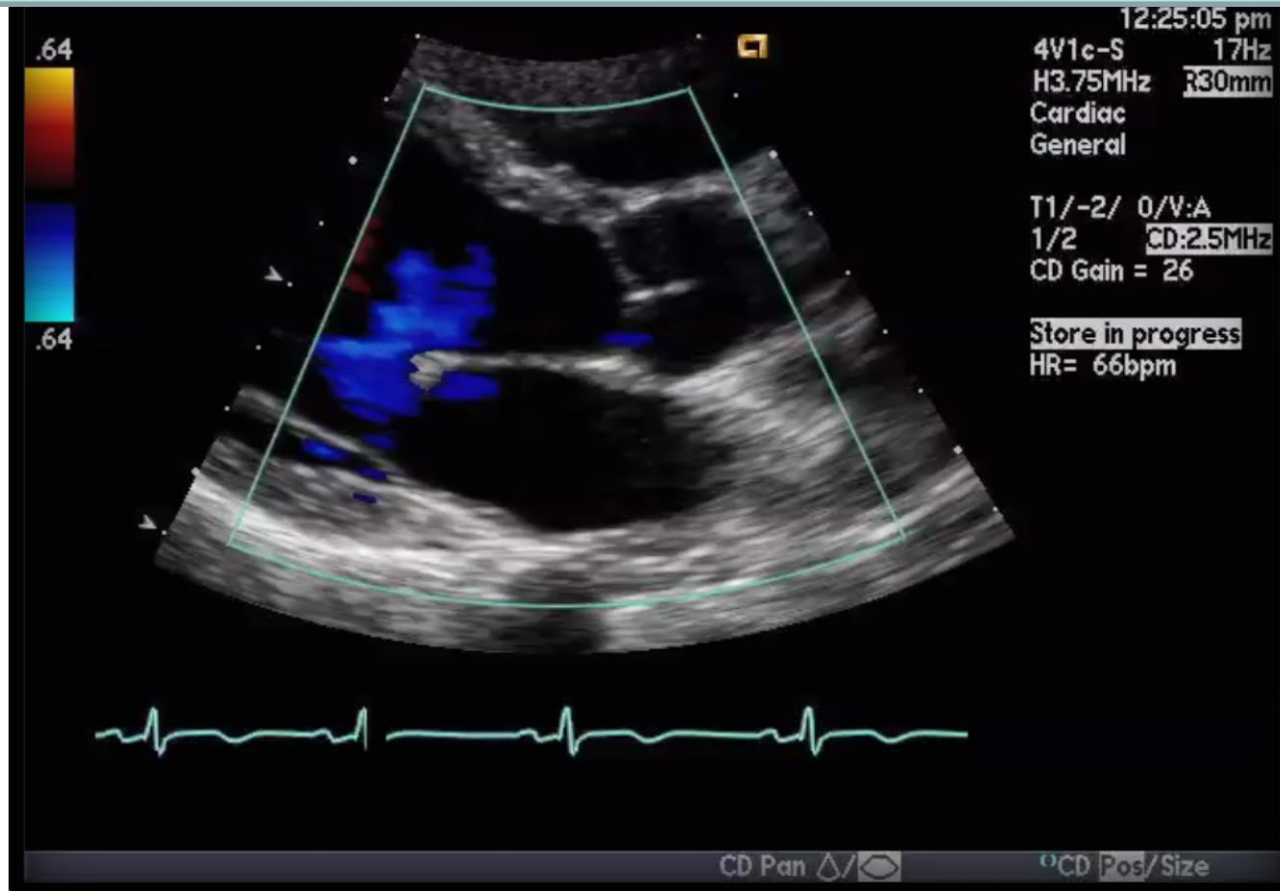


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Echo with color



RCC



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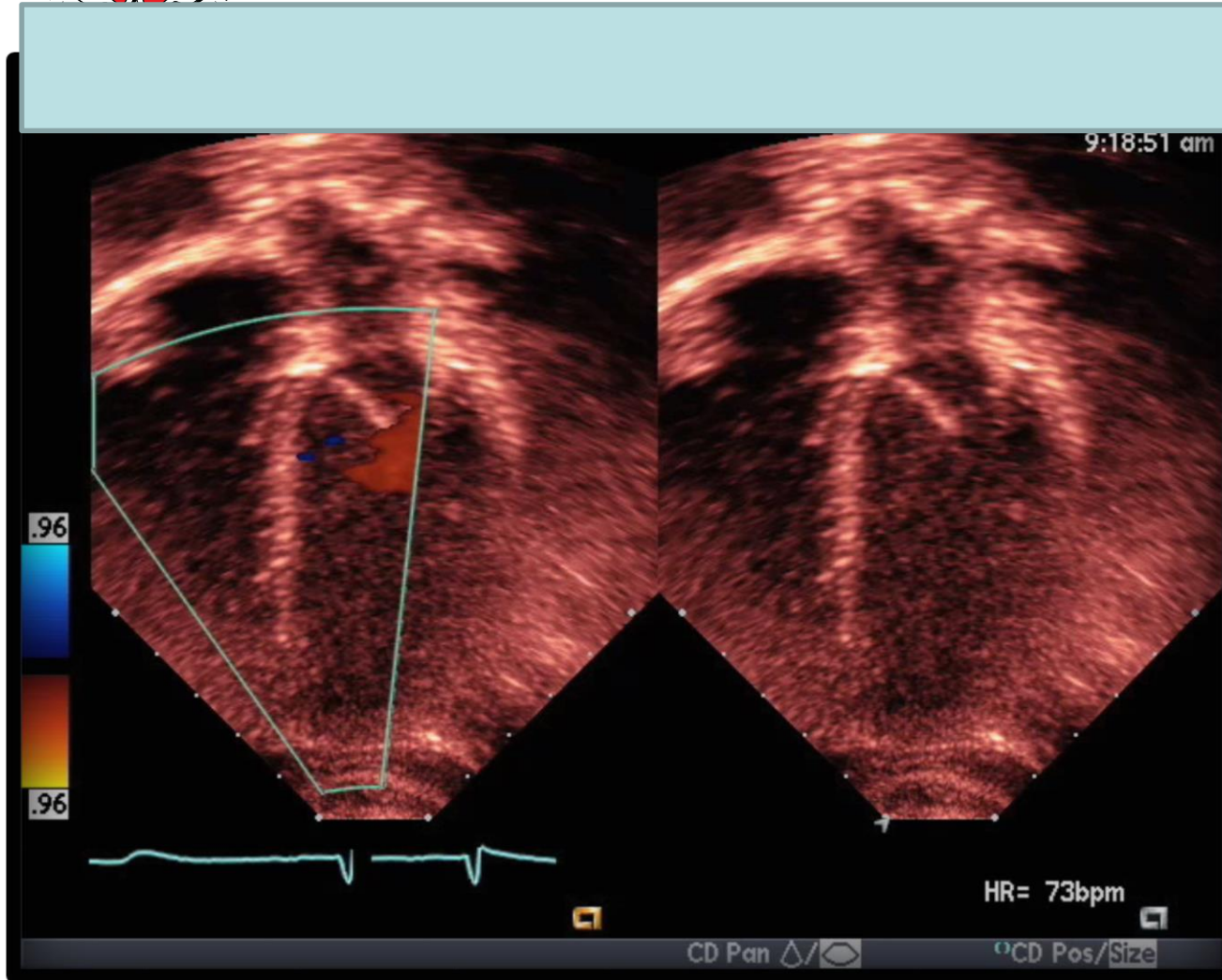
Vascular Ultrasound





Diagnostic Cardiovascular Sonography

Pediatric Echocardiogram





Diagnostic Cardiovascular Sonography

How to join the program



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Pre-Requisites

- In high school, take as many dual credit classes as you can. This saves time and money.
- English, Algebra (*MATH CORE*), Physics (*college, applied, SCIT 1420 or CTEC 1401*), Anatomy and Physiology I and II
- Take the USA – Ultrasound student assessment exam



USA EXAM

- The USA exam is designed to identify strong candidates for Sonography programs
- It will test things like visual acuity, spatial recognition, hand-eye coordination, problem solving, critical thinking, and ethical awareness.
- It is not timed but allow 2-4 hours to take it
- It is FUN so enjoy the test!
- There are NO RETAKES



Must APPLY and be Accepted

- Applicants must apply to the DCVS program
 - See official Information and Application packet
- And apply to Alvin Community College
 - Go online to www.alvincollege.edu to apply to ACC



Diagnostic Cardiovascular Sonography

- AAS
 - Apply by Feb 15th of every year
 - Orientation in April
 - Starts in June
- ATC
 - Apply by October 15th
 - Orientation in December
 - Starts in January





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Other Requirements

- Observation Hours
- Official and Professional Reference Letters
- Official Transcripts
- Shot Records/titers
- Mandatory Info Session
- CPR





About Observations

- Call or email to schedule
 - Susan at 281-756-5625 sbutler@alvincollege.edu
- 4 hours in each specialty **IS REQUIRED**
 - Helps you determine which specialty to apply for
 - Helps meet ADA requirements so you know what the physical and mental job requirements are. Review Technical Standards for details
 - Dress is professional casual



ATC Requirements

- ATC deadline is October 15th each year.
- Applicants must be in a patient care based allied health profession with minimum of AAS or higher to qualify.
- Must have a current professional credential or licensure in the US such as RN, RRT, RT-R, RDMS (AB, OB, etc),
- ALL ATC candidates will take the USA exam





Immunizations

- Must be COMPLETE to apply
- Hep B
 - Dates, series, 3 injections, spacing
 - Positive Titer (those immunized as babies are not Hep B positive into adulthood and boosters may be needed if the Hep B titer is negative)
- Varicella history of disease is NOT accepted. All doses or positive titer is required
- MMR history of disease is NOT accepted. All doses or positive titer is required.
- TDaP – within the last 10 years and since the age of 18
 - Pertussis is required (TD only is not accepted)





CPR

- ONLY AHA Healthcare Provider CPR is accepted
- AAS
 - Take AFTER May so it lasts all 2 years of the program. Due in July after you start the program
- ATC
 - Take immediately, required at the time of application





Guidelines may change

- Check out the latest DCVS application packet for current requirements and application guidelines.
- Call or email for the most current packet



Program Size

- AAS (Starts in Summer)
 - Adult Echo 10
 - Vascular 10
 - Pedi Echo 6-7
- ATC (Join the AAS, starts in Spring)
 - Minimum #'s (More may be accepted depending on current freshmen class size)
 - Adult Echo 5
 - Vascular 5
 - Pedi Echo 1-2



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Once Accepted

- Acceptance is competitive based on USA rank, GPA in pre-reqs, especially A&P as well as reference letters and professional qualities.
- Those accepted are required to
 - Complete a mandatory criminal background check, drug screen, and physical exam
 - Attend mandatory new student orientation for the DCVS program





Benefits of Becoming a DCVS STUDENT . . .





Diagnostic Cardiovascular Sonography

- *Our program is accredited by **CAAHEP**, the national organization recognizing allied health programs in the US.*
- *Go to www.caahep.org to find accredited programs.*
- *We are accredited in Adult Echo, Pediatric/Fetal Echo, and Vascular Sonography*





Why Accreditation Matters

- Students in CAAHEP accredited programs are
 - eligible for professional society scholarships, travel grants and reimbursement for registry exams
 - eligible to take the SPI exam after the first year and the Specialty exam PRIOR to graduation
- Accreditation is the standard for Sonography Programs – settle for nothing less.





Diagnostic Cardiovascular Sonography

- *Our students have top academic scores with a competitive enrollment process.*
- *Our students are eligible to take their ARDMS physics test during the program and the specialty exam 30 days PRIOR to graduation so they can enter the workforce as a credentialed sonographer.*
- *Our program has excellent credentialing pass rates that are well above the national average.*





Honors Program - Enrichment

- Highly motivated students are encouraged to participate in the Honors Program
- We have many students who choose to complete honors projects each semester.





Review Curriculum and time requirements

- Curriculum outlines
 - Review academic options (CORE choices)
 - Review Math and physics options
 - Other ACAD courses can be taken early
- Lecture, lab and clinical hours are listed to help you budget your time
- Plan additional outside hours for reading, studying, writing, and SCANNING





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OPEN enrollment courses

Strongly consider

- DMSO 1210 – Intro to Sonography
- DSAE 2303 – CV Concepts

Only if you have time

- DMSO 1304 – Intermediate Ultrasound physics
- DSAE 1340 - Electrocardiography



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Program is HAND ON

- Students scan each other and community volunteers
- Students can bring in models such as spouse, close friends and family
- ALL lab scans are supervised by a credentialed sonographer faculty member



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DCVS students, prior to rotating through our clinical affiliate sites, must complete preparatory clinical education, including coursework in:

- Basic Patient Care Skills
- Cardiovascular Concepts
- Anatomy and Physiology
- Physics
- HIPPA
- Ethics
- Infection Control
- Medical Terminology
- Introduction to Sonography
- Electrocardiography (EKG)

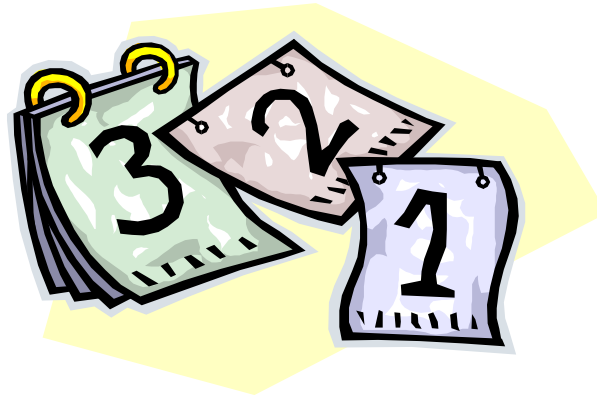
The students are prepared for a medical environment before they enter a clinical site





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Students typically attend clinical rotations two to three days a week, depending on the semester. This program is **HANDS-ON**





OVER 44 Clinical Affiliates

- Methodist DeBakey Heart and Vascular Center
- Baylor CHI Texas Heart Institute
- Memorial Hermann Heart and Vascular Institute
- Memorial Hermann Children's
- UT MD Anderson Cancer
- University of Texas Medical Branch in Galveston
- Texas Children's Hospital
- University of Texas Medical Center
- And many more all over Houston





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Community Service

The DCVS students participate in local ultrasound society meetings by attending and volunteering their time at these events.



ACC

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Community Service

Our students are involved in many activities outside of the classroom.

They volunteer at:

- Health fairs
- Career days
- Recruiting events
- Professional meetings
- Church events





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College and Career Fairs



THAT COW can SCAN!

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Show me the MONEY





Salary

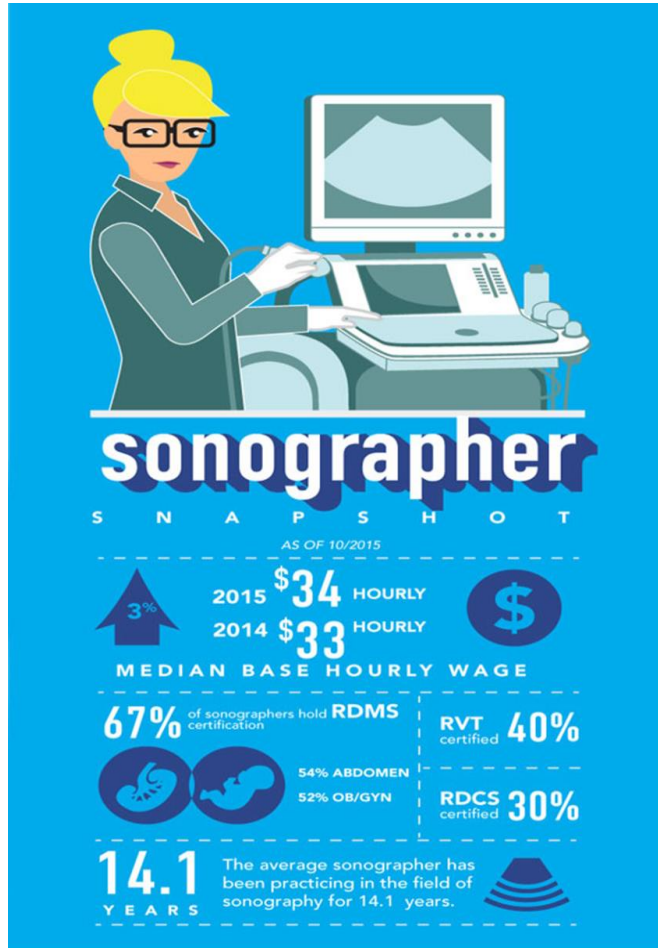
- Students are often hired prior to graduation while still a student.
- Student salary ranges from 22-26\$/hr.
- Once a student graduates the salary range is from 26-30\$/hr.
- If a graduate cross trains into a second specialty their salary increases to 30-35\$/hr.
- Median Salary is \$34/hr across the country according to the SDMS.





Diagnostic Cardiovascular Sonography

JOB OUTLOOK



- No one really knows what the future holds with the healthcare changes in progress.
- However, Sonography is projected to continue to grow by up to 17% over the next 10 years according to the BLS.





JOB OUTLOOK

- Sonography is very accurate
- Lower cost, portable
- Non-ionizing, safe for everyone
- And the technology just keeps getting better
- www.sdms.org/Newswave





Diagnostic Cardiovascular Sonography

“These students are taught our methods and procedures and become **prime candidates for future hires**. Students who are pleased with their clinical experience are usually happy and excited about their work, and this alone improves the attitude and atmosphere within the department.”

-- *Manager, Cardiopulmonary,
Bayshore Medical Center*





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“Students benefit us by bringing their classroom knowledge and questions to the clinical sites. This **helps to keep our staff stimulated** through questions and answers exchanged while acting as the student’s preceptor. You get first hand knowledge about a student’s skill, cognitive development and temperament for potential hiring.”

--Director, Memorial Hermann Heart and Vascular Institute





Diagnostic Cardiovascular Sonography

“The students we have hired is a great asset to St. Luke's. They take initiative and have a great drive to learn new things. They are is becoming a **wonderful resource in our Echo Lab.**”

-- Director of Non-Invasive Cardiology St. Luke's Hospital





Experienced Faculty

Dina DuBose, AAS, CCT, RVT, RVS

Deb Kleinhans, AAS, RVT

Theresa Saenz, AAS, RDCS

Kathryn Trantham, AAS, RVT, RDMS (AB/OB)

DeeDee Metzcher-Carr, BS, JD, RVT

- Our faculty are credentialed and have many years of clinical experience and teaching experience.





Program and Clinical Directors are multi-credentialed and highly experienced

Jessica Murphy, BS, RRT (NPS), RDCS, RCS,
RVT, CCT

Suzanne Poston, AAS, RDCS (AE, PE, FE),
RCS, RCCS, FASE.

- Program and clinical directors have almost 30 years of experience each in the field of Cardiovascular Sonography.



Diagnostic Cardiovascular Sonography

How to Learn MORE

- Volunteer for the program
- Get a free scan
- Get community service volunteer hours for your academic resume or extra credit
- See anatomy and physiology LIVE so you can learn it better
- Invite your family and friends to come in for a free scan.
- Attend a DCVS info session



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Diagnostic Cardiovascular Sonography

We would personally like to invite you to become a part of this outstanding program by becoming a volunteer for our students.

Call or email

Susan 281-756-5625

sbutler@alvincollege.edu

to schedule observations or volunteer 
appointment

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Thank you for your attention.

Please call us if you have any further questions
281-756-5650

