Thanks for your interest in the BRCC Sonography program!

This packet will assist you in understanding the prerequisites for entry into the DMS program and provide basic information you will need while completing your curriculum plan. Your advisement will occur during our *Sonography Group Advisement Information Sessions*. You may also seek advisement as needed from one of the individuals below:

Mr. Michael Beauford, Program Manager
Frazier Building, Office 228
225.216.8046
beaufordm@mybrcc.edu

Mr. Richard Goldsmith, Clinical Manager Frazier Building, Office 228 225.216.8498 goldsmithr@mybrcc.edu

The Nursing & Allied Health main office is (225) 216-8044. The fax number is (225) 216 – 8115. If you fax anything, be sure to use a cover sheet with the advisor's name to ensure proper delivery. Include your name, LOLA ID, email and phone number for us to contact you.

The BRCC DMS program is accredited by the Commission on Accreditation of Allied Health Programs (CAAHEP). Please visit the CAAHEP website at <u>www.caahep.org</u>. The GOAL OF THE DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM IS TO PREPARE COMPETENT ENTRY-LEVEL GENERAL SONOGRAPHERS IN THE COGNITIVE (KNOWLEDGE), PSYCHOMOTOR (SKILLS), AND AFFECTIVE (BEHAVIOR) LEARNING DOMAINS. YOU MAY CONTACT CAAHEP AT THE WEBSITE OR BY WRITING TO THE FOLLOWING ADDRESS: CAAHEP, 9355 - 113th St. N, #7709, Seminole, FL 33775-7709 or call 727-210-2350

Important information is available on the BRCC website in the **SONOGRAPHY PROGRAM INFORMATION PAGE** at the following link: <u>http://www.mybrcc.edu/academics/nursing_and_allied_health/aassonography.php</u>

Group Advisement and Information sessions last approximately 90 minutes and are scheduled several times each semester, including one evening session. You will receive the latest information about prerequisites and sonography as a profession, and have an opportunity to ask questions. The **Group Advisement Information Session** schedule is available online on the **Sonography Program Information** page. Registration is not required and you may invite a guest to attend with you. Meetings are held in ZOOM – click on the link of your choice.

The application packet for admission to the Sonography Program will be available online on the **Sonography Program Information** page once per year during the fall semester in August. Detailed instructions and the timeline for completing the application, submitting transcripts and scheduling the entrance test will be included in the application packet.

COMPLETING THE PREREQUISITES DOES NOT GUARANTEE ADMISSION TO THE SONOGRAPHY PROGRAM. The program includes a three semester internship at area hospitals and clinics. The number of students admitted to the program is determined by the number of clinical sites. A selective process is used to determine which students are admitted. The process is based on the student's GPA in the 30 hours of prerequisites, score on the entrance exam and numeric score in the prerequisite SONO 1011.

The Sonography program starts every spring semester in January. The program is four semesters or approximately 17 months from the time you are officially admitted to the program. Student selection is made in December after fall semester grades are posted; therefore, **you may apply for the DMS program in the fall semester while you complete prerequisites**. You will not be admitted to the program if all prerequisites are not completed by the end of the fall semester in which you make application.

You are invited to seek advisement to develop an academic plan for completion of the prerequisites. Email Mr. Mike Beauford at <u>beaufordm@mybrcc.edu</u> with explanation of what you need. Include your BRCC ID number and a phone number. After I evaluate your transcript I can send a ZOOM link for us to meet and review your documents. You should plan to submit an unofficial transcript of any courses taken at another college which you will offer for completion of the prerequisites. Attach the transcript to your email as a PDF or WORD document. DO NOT embed it in the email, DO NOT screen capture or cell phone photo it. It MUST be an attachment. You may request the issuing school to send it as an eScript to <u>beaufordm@mybrcc.edu</u> This is for advising ONLY – you must still submit an Official transcript to the BRCC Registrar to transfer the credits to your BRCC records.

BATON ROUGE COMMUNITY COLLEGE ASSOCIATE OF APPLIED SCIENCE IN DIAGNOSTIC MEDICAL SONOGRAPHY SONOGRAPHY PREREQUISITE COURSES & CURRICULUM PLAN

Student Name:			Advisor/Phone:		Date:	
B/L Number:	RCC? Yes No H		Phone:	Em	nail:	
Are you enrolled at B	RCC? Yes No F	lave you previously earn	ned a degree? Yes	No Degree/Conce	entration:	College:
PREREQUISITE COURSES	PREREQUISITE REQUIREMENTS	COMPLETIONS	SEMESER #1	SEMESER #2	SEMESER #3	SEMESTER #4
BIOL 2213/2211 (Lect/Lab) ANAT & PHYSIOLOGY I	 Eligible, MATH 1213 & Min ACT of 22 OR BIOL 1033 (1031 optional) (>= C) & elig MATH 1213 					
BIOL 2223/2221 (Lect/Lab) ANAT & PHYSIOLOGY II	BIOL 2213/2211 ANAT & PHYS I (>= C)					
ENGL 1013 ENGLISH COMPOSITION	ENGL 0093 (>=C) or PLACEMENT SCORE					
HLSC 1103 MEDICAL TERMINOLOGY						
HUMANITIES ELECTIVE	CHOOSE ONE FROM LIST (SEE INFO PACKET p 6)					
MATH 1213 COLLEGE ALGEBRA	MATH 0099 (>=C) OR PLACEMENT SCORE					
PHIL 2253 BIOMEDICAL ETHICS	Eligible ENGL 1013					
PSYC 2013 INTRO TO PSYCHOLOGY						
PHYS 1013 CONCEPTS IN PHYSICS	MATH 1213 GRADE OF C OR BETTER					
SONO 1011 FOUNDATIONS OF SONOGRAPHY	Eligible ENGL 1013 & APPROVAL					

NOTES:

Course Number	Course Title	Credit Hours	Pre-requisite Courses
MATH 1213	College Algebra	3	See BRCC Catalog ²
ENGL 1013	English Composition I	3	See BRCC Catalog ²
PSYC 2013	Introduction to Psychology	3	See BRCC Catalog ²
BIOL 2214	Anatomy and Physiology I	4	See BRCC Catalog ²
BIOL 2224	Anatomy and Physiology II	4	See BRCC Catalog ²
PHYS 1013	Concepts in Physics	3	See BRCC Catalog ²
HLSC 1103	Medical Terminology	3	See BRCC Catalog ²
PHIL 2253	Biomedical Ethics	3	See BRCC Catalog ²
HUMN ¹	Humanities Elective	3	See BRCC Catalog ²
SONO 1011	Foundations of Sonography	1	See BRCC Catalog ²
	Total Semester Hours	30	
First Semester	ALL SONOGRAPHY COURSES ARE TAKEN IN	TAKEN IN SEQUENCE	AS LISTED HERE – NO EXCEPTIONS
SONO 1102	Physics and Instrumentation I	2	Completion of prerequisite courses above and official
SONO 1143	Ultrasound Learning Lab I	3	admission to Sonography program.
SONO 1203	Sonographic Sectional Anatomy	3	
	Total Semester Hours	8	
Second Semester			
SONO 1122	Abdominal Ultrasound I	2	Completion of first semester Sonography courses.
SONO 1122	Ultrasound Practicum I	1	Completion of first semester Sonography courses.
SONO 1182	Ultrasound OB/GYN I	2	
SONO 2101	Physics and Instrumentation II	1	
50110 2101	Total Semester Hours	6	
Third Semester		0	
SONO 2123	Abdominal Ultrasound II	3	Completion of second semester Sonography courses.
			Completion of second semester Sonography courses.
SONO 2163	Ultrasound Practicum II	3	
SONO 2183	Ultrasound OB/GYN II	3	
SONO 2201	Physics and Instrumentation III	1	
D (1	Total Semester Hours	10	
Fourth			
Semester		2	Completion of third connector (
SONO 2302	Abdominal Ultrasound III	2	Completion of third semester Sonography courses.
SONO 2403	Ultrasound Practicum III	3	
SONO 2502	Ultrasound OB/GYN III	2	
SONO 2601	Comprehensive Seminar	1	Total Program Hours 62
	Total Semester Hours	8	
		62	

1 To be selected from the Humanities General Education requirements listed on page 6.

2 See current BRCC Catalog for a comprehensive list of pre-requisites for each course.

- 1. Admission to the Diagnostic Medical Sonography program is competitive. IT IS IMPORTANT TO UNDERSTAND THAT MEETING MINIMUM REQUIREMENTS DOES NOT GUARANTEE ADMISSION TO THE SONOGRAPHY PROGRAM
- 2. Applicants must have a GPA of 2.75 or higher & a grade of "C" or higher in the required hours of prerequisite courses below (this may not be the same as your overall GPA):

Course No. Course Title Credit			
MATH 1213	College Algebra		3
ENGL 1013	English Composition I		3
PSYC 2013	Introduction to Psychology		3
BIOL 2213/2211	Human Anatomy & Physiology I		4
BIOL 2223/2221	Human Anatomy & Physiology II		4
PHYS 1013	Intro to Concepts in Physics		3
HLSC 1103	Medical Terminology		3
PHIL 2253	Biomedical Ethics		3
HUMN	Humanities Elective (Choose one,	page 6)	3
SONO 1011	Foundations of Sonography		1
General Education and Prerequisite Credit Hours			30

- 3. A minimum score of 65% on the entrance exam (ATI TEAS) is required to be considered for admission.
- 4. All applicants chosen for admission to the Sonography program must submit to, pay for and satisfactorily complete the following items. Applicants chosen for admission will receive an information packet with vendors in the Baton Rouge area where all of the requirements can be met. This is done ONLY if you are chosen for admission to the Sonography Curriculum.
 - a. Criminal background check, healthcare exclusion list check and fingerprinting
 - b. 10 panel drug screen
 - c. Physical exam and check of immunity to a list of communicable diseases
 - d. CPR certification
 - e. Purchase of student liability insurance
 - f. Purchase of uniform (black scrubs)
- 5. **AN ADMISSION SCORE** is calculated for all applicants according to the following formula. The students with the highest scores are invited into the program. Scores are calculated to three decimal places (ie: xx.XXX).

GPA = 60 % (in prerequisite courses only) TEAS = 30 %

SONO 1011 Numeric Score = 10%

The GPA is the largest component of the admission score, but the ATI TEAS exam is extremely important. It is strongly recommended that students acquire study materials and prepare for the TEAS exam.

- 6. BIOLOGY: You must complete Anatomy and Physiology I & II lecture and lab (4 credits). Prerequisite for BIOL 2213 & 2211 is BIOL 1033 (Biology I for Science Majors) with C or better OR ACT Composite or Super Composite score of 22 or higher; and eligibility for college algebra
- 7. FINANCIAL AID & SCHOLARSHIPS: The Sonography program qualifies as full time for purposes of qualifying for TOPS and Federally Guaranteed Student Loans (Financial Aid). However, F.A. reimbursement amount is determined by credit hour load. In order to receive the maximum F.A. you must schedule at least 12 credit hours per semester. If you need to receive the maximum Financial Aid, consider scheduling other electives to reach 12 credit hours.

Assessment Technologies Institute (ATI) – TEST OF ESSENTIAL ACADEMIC SKILLS (TEAS)

Baton Rouge Community College Diagnostic Medical Sonography requires the ATI TEAS entrance test for all qualified applicants to the Sonography program. The ATI TEAS exam comprises 30% of the applicant's admission score.

The test is taken during the fall application period in October either at the BRCC Testing Center in Magnolia Building OR from home on computer with an online proctor. When you log in the day of the exam you will pay the exam fee via credit or debit card.

You may purchase a study manual and practice exam from ATI Testing, Inc. at the web links posted below. It is strongly recommended that applicants utilize these study aids to prepare. The practice exams are administered by ATI online. The exam taken during the application period is an online exam.

ATI TEAS PACKAGE - STUDY MANUAL AND ONLINE PRACTICE TEST

ATI offers comprehensive assessments designed specifically to measure academic preparedness of nursing and allied health program candidates.

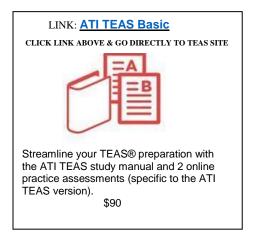
Resources:

1) AVAILABLE AT ATITESTING.COM WEBSITE: ATI TEAS Study Manual and online Practice Assessment. Check for occasional discounted prices.

Price: \$ 90.00 (<u>https://atitesting.com/teas/basic-package</u>) and \$249.00 (<u>https://atitesting.com/teas/comprehensive-study-package</u>)

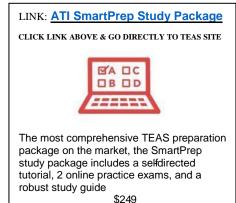
- 2) A 6 week study guide is available at this LINK
- 3) BRCC TEAS STUDY & TUTORING MEETING: The BRCC Center for Undergraduate Student Achievement (CUSA) will sponsor a TEAS study and tutoring week before the testing period. The TEAS exam has four parts: English Usage, Reading Comprehension, Mathematics and Science. This is a very strong conclusion to your study and preparation for the TEAS exam. Information will be provided to all applicants each year.

ATI TEAS study manual and online Practice Assessment specific to ATI TEAS works – students that use ATI TEAS prep materials and CUSA study sessions score higher on their exam



THE ATI TEAS BASIC PACKAGE is a self-guided study product and costs \$90.

THE ATI TEAS SMART PREP PACKAGE is a comprehensive study course with 65 lesson plans and additional practice questions and costs \$249



Watch the ATI website for discounts on TEAS study products

HUMANITIES - There are many classes which qualify as Humanities; however, for this AAS degree you must choose **ONLY** from this list.

NOTE: THE ENGL AND HUMN COURSES REQUIRE COMPLETION OF ENGL 1023 (& ENGL 1013) THE HIST AND PHIL COURSES REQUIRE COMPLETION OF ENGL 1013 ONLY

ENGL 2133, Literature and Ethnicity (3) (ENGL 210)

- ENGL 2303, Introduction to Fiction (3) (ENGL 211)
- ENGL 2313, Introduction to Poetry and Drama (3) (ENGL 215)

ENGL 2123, Major British Writers (3) (ENGL 220)

ENGL 2173, Major American Writers (3) (ENGL 221)

ENGL 2223, Major World Writers (3) (ENGL 222)

ENGL 2403, Introduction to African-American Literature (3) (ENGL 223)

ENGL 2323, Introduction to Literature (3) (ENGL 230)

ENGL 2503, Introduction to Folklore (3) (ENGL 240)

ENGL 2483, Shakespeare: The More Popular Plays (3) (ENGL 248)

HIST 1113, History of World Civilizations I (3) (HIST 101)

HIST 1123, History of World Civilizations II (3) (HIST 102)

HIST 2003, History of Roman Republic and Empire (3) (HIST 200)

HIST 2013, U.S. History {3) (HIST 201)

- HIST 2023, U.S. History 11 (3) (HIST 202)
- HIST 2213, Modern Europe 1500 1848 (3) (HIST 221)

HIST 2223, Modern Europe 1848 to Present (3) (HIST 222)

HUMN 2103, World Mythology (3) (HUMN 210)

HUMN 2013, Africa and the Middle East (3) (HUMN 250)

HUMN 2553, Asia and the Americas (3) (HUMN 255)

HUMN 2753, The Heroic Journey: From Classical to Contemporary (3) (HUMN 275)

PHIL 1013, Introduction to Philosophy (3) (PHIL 201)

PHIL 2013, Introduction to Ethics (3) (PHIL 205)

PHIL 2283, Philosophy of Religion (3) (PHIL 228)

NOTE: PHIL 2253, BIOMEDICAL ETHICS, CANNOT BE USED AS THE HUMANITIES REQUIREMENT SINCE IT IS AN INDIVIDUAL COURSE PREREQUISITE.

ESTIMATED COSTS

Students should take into consideration travel expenses (auto mileage to internship site) while enrolled in health care programs. This estimate is for the Sonography program only. Expense of finishing prerequisites or other miscellaneous is not included.

If you plan to use financial aid (grants, loans, scholarships) and you require clarification on application or restrictions, please contact the BRCC Office of Financial Aid and Scholarships at (225) 216 – 8640.

SONOGRAPHY PROGRAM COSTS				
Pre-Admission	COLLEGE ADMISSION APPLICATION DECLARE YOUR SONO MAJOR !!	No Fee		
	COST OF PREREQUISITE COURSES NOT INCLUDED			
Background Screening Service	Nationwide Background Check, Drug Screen & Document Portal	\$80.00		
	PHYSICAL EXAM, IMMUNIZATIONS & TITERS –Some vaccinations may be required.	Prices dependent on your situation		
	LOUISIANA STATE POLICE BACKGROUND CHECK: Programs with a hospital based internship program MUST require a LA State Police Background check in addition to the general one.	\$37.00		
	PROFESSIONAL LIABILITY INSURANCE Healthcare Providers Service Organization	\$50.00 / year		
CPR Certification American Heart Association CPR for Health Care Providers – Spring course will be offered for a fee at BRCC		\$50.00		
Textbooks	Textbooks (See list below)	\$600		
Uniforms Uniforms – purchased in January		\$120.00		
SDMS Membership	Student Membership - Society of Diagnostic Medical Sonography	\$45.00		
First Semester (Spring)Tuition and Fees 8 credit hours of Sonography courses (or 9@ \$1583.0		\$1,407.12 **		
Second Semester (Summer) Tuition and Fees - 6 credit hours of Sonography courses		\$1,055.34 **		
Third Semester (Fall)	Tuition and Fees - 10 credit hours of Sonography courses	\$1,758.90 **		
	ARDMS SPI examination fee (at Christmas break) *	\$ 225.00		
Fourth Semester (Spring)	Tuition and Fees - 8 credit hours of Sonography courses	\$1,407.12 **		
	ob, off specially chammaton fee	\$ 250.00 \$ 250.00		

TEXTBOOK LIST			
<i>Pocket Protocols for Ultrasound Scanning, 2nd Edition</i> . Betty Bates Tempkin, BA, RT(R) & RDMS. ISBN: 9781416031017. Copyright 2007	\$ 69.00		
<i>Workbook for Textbook of Diagnostic Ultrasonography, 8th Edition</i> . Sandra L. Hagen-Ansert, MS, RDMS, RDCS. ISBN: 978-0-323-44183-4. Copyright 2018	\$ 100.00		
<i>Textbook of Diagnostic Ultrasonography, 8th Edition</i> . 2-Volume Set. Sandra L. Hagen-Ansert, MS, RDMS, RDCS. ISBN: 978-0-323-35375-5. Copyright 2018	\$ 415.00		
<i>Understanding Ultrasound Physics, 4th Edition.</i> Sidney Edelman, PhD ISBN: 0-9626444-5-5 ©2012 – We will lend you this book from our library or you may purchase your own if you wish. If you wish to purchase this text, you may find it on Amazon or other book vendor. BRCC may have also.	Free Use from Sonography Library		

BRCC Bookstore prices as of December, 2021 Be certain to purchase proper editions & ISBN#.

TOTAL = \$ 585.00

Miscellaneous Issues:

Have a back-up plan

If you are not selected for the Sonography program, what plan do you have? Schedule electives which interest you or may support a career and lead to a degree other than Sonography: Surgical Technology, Nursing, EMS, Healthcare Information Technology, Pharmacy Tech and others. You may apply to the Sonography program more than once. Each application is competitive.

Interested in Surgical Technology?

If you are interested in Surgical Technology, you should consider scheduling SURT 1023 (lecture) and SURT 1021 (lab) which are introductory classes and required for entry to the program. You will learn the atmosphere of the Operating Room and skills needed to pursue a career in the Surgical Department. For more information use the following link>> https://www.mybrcc.edu/academics/nursing_and_allied_health/assurgicaltech.php

Louisiana Transfer Associate Degree

The Louisiana Transfer Associate Degree is a two-year portable academic credential that awards junior standing in any Louisiana public university. Advising and planning are key to your success. It is your responsibility to choose the courses that will best prepare you for a specific college and major, and to complete your baccalaureate in a timely manner. Curricula approved for the Transfer Degree are listed in the BRCC Catalog.

BRCC is retake-and-replace

You may retake a class for which you wish to make a better grade.

The latest grade is the grade of record, whether it is a better grade or worse.

Be aware, however, that scheduling the same class more than twice may incur some financial aid restrictions. Ask a financial aid counselor if you are uncertain about the rules which apply.

Pre-Application: Criminal Issues (from ARDMS website)

If you have legal issues on your record, you may not be allowed to work in certain health care settings (hospitals, clinics) or you may not be allowed to challenge the ARDMS registry exams.

If you are presently charged with, or have been convicted or found guilty of or plead *nolo contendere* to any crime (felony and/or misdemeanor), other than a speeding or parking violation, you may have questions concerning this rule and may wish to obtain clarification as to how it pertains to your circumstances. ARDMS conducts a "pre-application review", for a \$125 non-refundable fee, for individuals who wish to determine the impact of a previous criminal matter on their eligibility to apply for ARDMS certification. The pre-application review process is recommended for individuals who have not yet applied for examination and are contemplating employment in the field of sonography and/or enrollment in a sonography program.

You should visit the ARDMS website link:

http://www.ardms.org/ARDMS%20Documents/Compliance%20Documents/Preapplication%20C riminal%20ARDMS.pdf#search=criminal%20history

Ultrasound & Career Information Sources

Society of Diagnostic Medical Sonography (SDMS)

- http://www.sdms.org/career/career.asp
- This is our Sonography profession webs available

American Registry for Diagnostic Medical Sonography (ARDMS)

- http://www.ardms.org/
- https://www.ardms.org/wp-content/uploads/pdf/Preapplication-Criminal-ARDMS.pdf
- This is a Sonography registry website good public information is available

American Registry of Radiologic Technologists (ARRT)

- http://arrt.org
- This is a Sonography registry website good public • information is available

Commission on Accreditation of Allied Health Education

Programs (CAAHEP)

- http://caahep.org
- This is our Sonography Accreditation website good public information is available

ATI TEAS Exam

- Study guide & electronic test is available for \$90.00 and is strongly recommended to improve your test score
- ATI TEAS Basic Package or ATI SmartPrep Study Package

O*NET Online

http://online.onetcenter.org/link/summary/29-2032.00 ٠



O*NET OnLine







onet



ite - good public information is

RDMS

WHAT IS DIAGNOSTIC MEDICAL SONOGRAPHY (ULTRASOUND)?

DIAGNOSTIC MEDICAL ULTRASOUND is a noninvasive imaging technology such as an OB scan, employed in a radiology department or imaging clinic and is used to examine soft tissue and blood flow.



PERFORMING AN OB ULTRASOUND NO INJECTIONS, NO MEDICATIONS

Noninvasive means that nothing is inserted into the body through the skin (no puncture) and uses no medicines. Additionally no radiation is employed, unlike X-ray and CT imaging. A water washable gel is applied to the body and a probe is placed on the skin and moved around to view the baby. A similar technique is used to image the other body parts.

Soft tissue includes most of the soft organs of the head, neck, torso and extremities, excluding hard organs like bone and skull. OB imaging examines the developing baby and provides images and measurements your doctor will use to determine the health of your pregnancy, baby's developmental age, weight and delivery date. Ultrasound is also used to examine the Uterus and Ovaries, Abdomen and Gallbladder, Heart and Blood Vessels and other organs.

Sonographers work in hospital Radiology Departments, outpatient Imaging Centers and physicians' offices. Some sonographers with experience and expertise in multiple specialties operate independent scanning services.

BRCC's Diagnostic Medical Sonography program requires 29 hours of prerequisites in General Education: Math, Biology, Physics, English, Psychology, Medical Terminology, Medical Ethics, and Humanities. The Sonography curriculum is 33 hours over 4 consecutive full time semesters. After completion of the DMS program one must pass registry examinations in various specialized areas of ultrasound determined by one's area of employment: Abdomen, OB/Gyn, Vascular, Adult Cardiac, Pediatric Cardiac, Pediatric Neurosonology, Musculoskeletal and Breast. Salary for a new sonographer begins around \$40K (\$20/Hr). With experience and multiple registries pay may be significantly higher.

Technical Standards for Sonographers: Sonography can be physically and emotionally demanding. Sonographers are expected to work with machines which may weigh a few hundred pounds, and wheel the instruments through a hospital to the patient's bedside. You may also be required to assist with patient transfer from bed to wheelchair to exam table and back. Sonographers must be able to communicate effectively with distraught patients and family and with other health care givers. You must assess, with your primary health provider, if you can meet the physical and emotional demands of a sonography career. If you are pregnant or plan to become pregnant during the DMS program, you must meet these same requirements. If you cannot, your ability to complete the program in the allotted time may be affected.

Sonographers must be able to meet the following minimum standards:

- 1. Communicate, read & write in English with proficiency to communicate with patients and other care givers and physicians
- 2. Assist patients in moving, turning, & transferring from transportation devices to exam tables
- 3. Be able to push, pull and lift 50 pounds and push ultrasound equipment on wheels
- 4. Maintain prolonged arm positions necessary for scanning
- 5. Be physically able to administer emergency patient care, including performing CPR
- 6. Be able to stand for long periods, and walk long distances (2 miles +/-) in a working day

Samples of images:



Scrutinizing the fetal face is don at around 18-20 weeks



Detecting heartbeat with doppler





Breast Mass

Gallstones