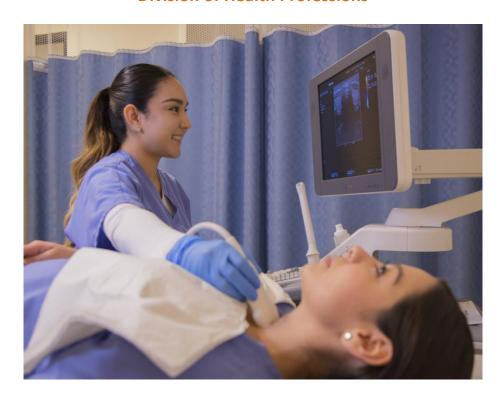


Division of Health Professions



Diagnostic Medical Sonography

Student Handbook 2021–2023

Diagnostic Medical Sonography

Student Handbook

Name	

TABLE OF CONTENTS

SECTION I INTRODUCTION	Pages
Message to the Student	7
Non-discrimination Statement	7
Technical Standards (Essential Functions)	8
Mission of the Institution	8
Role and Scope of TSC	8
Mission of the Program	9
Program Goals	9
Student Retention	10
Program Description	10
Qualifications for Applicants	10
Institutional Accreditation	11
Program Accreditation	11
CAAHEP Non-Compliance Policy	12
Certification Requirements	13
•	13
Student Records	13
Student Work Policy	_
Behavioral Conduct	14
Professional Ethics/Confidentiality	14
Health Data Form	14
Liability Insurance	14
Grievance Procedure	15
Probation Policy	15
SAP Policy	15
DMS Student Classroom	16
Laboratory and Tutoring	16
SECTION II CURRICULUM	
Sonography Course Requirements	18
Curriculum	19
Sonography Course Descriptions	20
General Academic Courses	24
Approximate Cost of the Sonography Program	25
Course Substitution	26
Transfer of Credit from other Institutions	26
Transfer Policy	26
SECTION III RESOURCES	
Counseling Services	28
Advising	28
1.00,10,115	20
Disability Services	28
Tutoring	28

Financial Aid	
Library	
Professional Organizations	
DMS Textbooks in the Library	
DMS Required Textbooks	
Dismissal/Withdrawal/Readmission	
SECTION IV PRACTICUM	
Sonography Practicum Affiliates	
Practicum Chain of Command	
Competency Based Practicum Education	
Practicum Grade Criteria	
Professional Qualities	
Comprehensive Practicum Objectives/Model Patients	
Professional Competency Evaluation Forms	
Professional Qualities Evaluation Form	
Practicum Performance Evaluation Protocol	
Practicum Professional Competency Evaluations	
Practicum Education Requirements Before Graduation	
Student Examination Record	
Practicum Grading Distribution	
Required Practicum Evaluation Schedule	
•	
SECTION V PROGRAM PRACTICUM POLICIES	
Absence Policy	
Time Sheet	
Tardy Policy	
Sonographic Repeat Policy	
Report of Sonographic Repeat Form	
AIDS/Infection Control/Standard Precautions/Safety Policies	
Immunization Policy	
Dress Code (Uniform Policy)	
Injury Policy	
Sonography Student Title IX Pregnancy Policy	
Student Record Book Policy	
Telephone Calls Policy	
Incident Report/Counseling Policies	
Criteria for Unsafe Practicum Performance	
Student Employment Policy	
CPR, Criminal Background Check and Drug Testing Policies	
,	

SECTION VI APPENDICES

Incident Report Form	73
Advisement/Counseling Form	74
Definition of Terms.	75

SECTION I INTRODUCTION

Message to the Students

Non-Discrimination Statement

Technical Standards (Essential Functions)

Mission of the Institution/Mission of the Program

Program Goals /Student Retention/Program Description

Qualifications for Applicants

Institutional Accreditation

Program Accreditation

CAAHEP Non-Compliance Policy

Certification Requirements

Student Records

Student Work Policy

Behavioral Conduct

Professional Ethics/Confidentiality

Health Data Form

Liability Insurance

Grievance Procedure

Probation Policy

SAP Policy

DMS Student Classroom

Laboratory and Tutoring

A Message to the Students

Welcome to Texas Southmost College - Diagnostic Medical Sonography Program.

This handbook has been compiled to help familiarize you with the policies utilized by this program as well as available student services.

The <u>Diagnostic Medical Sonography Program Student Handbook</u> pertains to students that have been admitted to that program and is a supplement to Texas Southmost College Student Handbook. The Vice President of Instruction is the chief administrator for academic policies and procedures, and the Vice President of Student Services is the chief administrator for non-academic policies and procedures.

It is through the spirit of cooperation and communication that students and faculty members share a common goal of learning. In this profession, competence is developed through diligence, determination and patience in the practicum environment as well as in the classroom.

The degree plan for sonography has been designed to provide the student with a well-rounded curriculum that incorporates general sonography as well as preparing the student academically to continue their education.

Please remember that you, the student, are the most important asset of this program. Your suggestions are welcomed, appreciated, and may be submitted at any time to the Advisory Committee of this program or directly to the Program Faculty.

Non-Discrimination Statement

Texas Southmost College Diagnostic Medical Sonography Program is non-discriminatory in regard to race, creed, color, sex, age, handicap, and national origin.

No otherwise qualified handicapped individual in the United States as defined shall, solely by reason of his handicap be excluded from participation in, be denied benefits of, or be subject to discrimination under any program or activity receiving federal assistance.

Technical Standards (Essential Functions)_

What is required of an individual to perform all the diagnostic medical sonography skills?

A sonography student must possess motor and visual skills that would enable him/her to meet program objectives and perform job duties required in the profession. Specifically, the students:

- 1. Have the ability to communicate effectively and sensitively in order to assess communication and be able to adequately transmit information to the patient and to members of the health care team
- 2. Possess all the skills necessary to safely and accurately perform all diagnostic procedures, manipulate instruments and equipment
- 3. Have the ability to lift and move immobile and physically challenged patients
- 4. Have the ability to sit or stand for long periods of time
- 5. Possess the emotional health required for full utilization of his or her intellectual abilities
- 6. Have the ability to recognize emergency situations and take appropriate action

Mission of the Institution_____

Transforming our communities through innovative learning opportunities.

Role and Scope of TSC_____

University transfer, career, and technical programs leading to an associate degree or certificate along with courses specializing in college preparatory and developmental education, workforce training, adult literacy, and continuing education to support the evolving needs of citizens, industry, and economic development initiatives within Cameron and Willacy Counties. High-quality instruction and learning opportunities in the classroom, online, and through other delivery methods; a supportive and innovative faculty and staff; appropriate technology, equipment, and learning resources; and advising and assessment services to promote transfer to a four-year baccalaureate institution, entry or advancement in the workforce, or lifelong learning. A learning-centered, service-oriented environment that celebrates diversity and inclusion; facilitates growth and development; fosters social responsibility, critical thinking, communication, and innovation; and empowers and engages students, faculty and staff to achieve personal and professional goals. Institutional effectiveness that embraces individual accountability, data-driven decision making, change, and an unending pursuit of excellence.

Mission of the Program_

Consistent with the mission of Texas Southmost College the faculty of the Medical Sonography Program is committed to serving the educational needs of the citizens of the Lower Rio Grande Valley. This mission will be accomplished by providing enthusiastic students a high quality instruction, preparing the graduate with employable skills as an entry level sonographer, preparing the graduate to be successful on the National Certification Examination. The program's mission is supported by a caring team of educational staff, sonographers, and physicians with expertise in various aspects of sonography and a commitment to education. An extensive array of didactic resources and a wide variety of advanced practicum experiences at various Lower Rio Grande affiliate sites will provide graduates with the skills and versatility needed to function in a variety of health care facilities. The program will be conscientious to healthcare needs and educational requirements.

Program Goals____

- **GOAL 1.** To prepare competent entry-level general sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.
- **GOAL 2.** Upon completion of the program, at least 70 percent of the graduates will be successful on the national certification examination.
- **GOAL 3**. Upon completion of the program, a minimum of 80 percent of the graduates will be employed within one year.
- **GOAL 4.** Upon completion of the program, the graduate will be proficient, competent, and knowledgeable in all related competencies, and have developed technical and critical thinking skills necessary to function in the clinical setting.

Student Retention

In alignment with the TSC Strategic Plan, it is the goal of the Diagnostic Medical Sonography Program to have 80% of the students entering the program graduate within 36 months (JRC-DMS requires 80% student retention).

The DMS Program addresses retention rates using the following steps:

- 1. All program faculty meet with prospective students to develop a plan of prerequisite completion as well as the academic courses within the POS. The prospective students are provided an information packet with the POS, program costs, scholarship information, website information, clinical site locations and are directed to seek financial aid from the College Financial Aid office.
- 2. An orientation is provided to all accepted students. A copy of the DMS Student Handbook is issued with thorough explanation of the didactic and practicum expectations. Students are informed of counseling services and tutoring services available on campus. They are introduced to the second year students for additional support. The students exchange e-mail addresses and telephone numbers during the orientation.
- 3. The Tom & Eloise Sweeney Endowment Scholarship is awarded to second year DMS students selected by the scholarship committee each year. This provides the second year students with financial support especially for the ARDMS examination fees.

Program Description

The Diagnostic Medical Sonography Program at Texas Southmost College consists of didactic and practicum education integrated into 18 months of extensive, full-time study beginning in August. Practicum training begins during the second semester of enrollment for a total of 768 contact hours after completion of four practicum semesters. The program utilizes practicum affiliate sites throughout the Lower Rio Grande Valley.

Qualifications for Applicants

The minimum criteria to be considered for admission in the Diagnostic Medical Sonography Program are:

- Admission to TSC Contact the enrollment office for college admission requirements (956)-295-3600.
- Submission of completed Application for Admission to the Diagnostic Medical Sonography Program.

- Submission of testing results that meet TSC testing requirements for admission.
- Documentation of any certifications currently held.
- Submission of two recommendation forms from physicians, employers, and/or instructors familiar with applicant's work (select a person that can best answer the recommendation form questions about you).
- A TSC DMS lab observation is required of all applicants (must schedule through the Allied Health Office 956-295-3731).
- Provide the DMS Program with a TSC unofficial transcript showing all accepted transferred courses.

Preprogram Courses:

BIOL 2301 Human Anatomy and Physiology I and
BIOL 2302 Human Anatomy and Physiology II and
ENGL 1301 Composition I
MATH 1314 College Algebra (with a grade of a C or better)
PHYS 1305 Elementary Physics (with a grade of C or better for PHYS 1305)

The applicant's grades in the following: BIOL 2301, 2302, ENGL 1301, PHYS 1305 and MATH 1314 and entrance exam test results are reviewed and recorded. Certain applicants may be selected for an interview by the Admissions Committee. The previously mentioned considerations, including an interview rating, are weighed and total point score is obtained. Applicants with the highest score ratings will be accepted in the Diagnostic Medical Sonography Program.

Institutional Accreditation

Texas Southmost College (TSC) is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

Program Accreditation_____

The TSC Diagnostic Medical Sonography Program has received accreditation by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763 Phone: (727) 210-2350 and the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS).

^{*}All grades must be posted on TSC transcript by application deadline.

CAAHEP non-compliance Policy

Texas Southmost College Diagnostic Medical Sonography Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). This agency sets the standards for the nation's colleges and universities. This program will promote quality and safety for all patients, quality education, on-going assessment of curricula, student services, and student learning outcomes.

If for some reason you feel that the program is not providing for academic excellence, health care quality or patient safety you may follow the guidelines below:

Guidelines:

- 1. Student shall provide in writing their complaints to the program director.
 - a. Clearly state areas of non-compliance
 - b. Date and sign the complaint document
- 2. The program director shall respond in writing within 7 working days to the allegation or complaints.
- 3. If the student is not satisfied, the complaint shall be forwarded to the Dean of the Division of Health Professions.
- 4. A complaint that is unresolved can be submitted to CAAHEP (Commission on Accreditation of Allied Health Education Programs). To receive formal consideration, all complaints shall be submitted in writing and signed. The complaint should demonstrate that reasonable efforts have been made to resolve the complaint, or alternatively that such efforts would be unavailing.

Certification Requirements_

Upon successful completion of all program requirements, the graduate becomes a candidate to sit for the Certification Examination administered by the American Registry of Diagnostic Medical Sonography (ARDMS). Graduates of the program qualify for certification exams in physics, abdomen and OB/GYN. It should be noted that in order for the sonographer to be an American Registered Diagnostic Medical Sonographer, the physics examination and at least one of the two other specialty area exams must be successfully passed. The ARDMS examinations are administered as computer-based testing as soon as the graduate student successfully completes the program. The American Registry of Diagnostic Medical Sonography certification is a requirement for employment in most health care facilities.

The ARDMS will screen for violations of Public Health or Safety. The application will ask the following:

Are you currently charged with or have you ever been convicted of, or pleaded guilty or nolo contendere, to any crime. If "yes," please provide a written detailed description of the charge or disposition and a copy of the official court documents. (Crimes involving public health and safety may include, but are not limited to, rape, sexual abuse, violence or threat of violence, driving while intoxicated, controlled substances, and fraudulent medical records, prescription blanks or health insurance claims.)

Student Records

The program maintains two sets of records on the Diagnostic Medical Sonography Program student in the program director's office. One is a personal file which contains admission documents, application, and transcripts. Another separate file contains practicum information such as the record of examinations completed, practicum attendance, and other practicum education data. These documents are secured and may be reviewed by making arrangements with the program director.

Student Work Policy_____

As in all the Health Science Programs at Texas Southmost College, working full-time while enrolled in a program is difficult and not recommended since work schedules generally conflict with class and/or practicum rotations. Should a student be employed in any ultrasound facility that is an affiliate of the program, they may do so only during times where it does not involve or conflict with program activities. Additionally, should a student be employed by a facility where practicum rotation is normally conducted, they may not use "employer time" to substitute for program practicum requirements.

Behavioral Conduct

Diagnostic medical sonography students representing Texas Southmost College will be expected to conduct themselves in such a manner as to reflect favorably upon themselves and the program. Every effort is taken to provide for all students an academic environment that is conducive to academic endeavors, social growth, and individual self-discipline. The college assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct and that they will observe these rules as a matter of training and habit (See TSC Student Handbook - Discipline Code/Sanctions).

Professional Ethics/Confidentiality_

Students must remember at all times that the information in a practicum area is confidential. This means that all sonogram results are to be directed only to physicians for diagnosis and treatment. **Students shall not tell patients, parents, friends, relatives, or non-hospital employees the results of examinations or the nature of any illness**. The physician gives this information to the patient only. Failure to comply with the above rule will result in a disciplinary action to be decided by the program director, faculty, and clinical instructor. It is vital that the student complies with the Code of Ethics for the Diagnostic Ultrasound Professional as developed by the Society of Diagnostic Medical Sonographers (this is discussed in the didactic portion of the program extensively).

Health Data Form_____

All incoming students in Diagnostic Medical Sonography Program must be deemed in good health. A physical examination and up-to-date immunizations are required upon enrollment. Students will be responsible for obtaining their immunizations, CBC, and drug screening prior to their clinical rotations. [see the immunization policy in the practicum section of this handbook].

Liability Insurance_____

All students in the diagnostic medical sonography program are required to have professional liability insurance. This insurance is provided on a group basis and the cost for the professional liability insurance is included in the fees paid during the semester in which a practicum course is required.

Grievance Procedure

The intention of the student grievance procedure at TSC is to assure the aggrieved student of due process in the disposition of the grievance or complaint. While the procedure will not guarantee the student that the result will be totally satisfactory, the college intends for the procedure to provide sufficient options for resolution of the matter. The procedure for filing a grievance can be found on the official TSC website.

Probation Policy_____

Probation periods may be required of the Diagnostic Medical Sonography Program student. Probation is a trial period in which the student must improve or be withdrawn from the program. At the discretion of the Diagnostic Medical Sonography Program Officials, a student may be placed on probation in the Diagnostic Medical Sonography Program for any of the following reasons:

- 1. Unsatisfactory Film Analysis (Practicum Quizzes) Scores Below a 75%.
- 2. Unsatisfactory performance in the practicum
- 3. Unsatisfactory practicum attendance and punctuality
- 4. Inability to maintain physical and mental health necessary to function in the program

The time and terms of probation are to be determined by the Program Director and the Clinical Coordinator of the Diagnostic Medical Sonography Program.

SAP Policy _____

Satisfactory Academic Progress Requirements

TSC monitors academic progress every fall and spring semester to identify those students who are experiencing difficulty with their courses. Satisfactory Academic Progress (SAP) is based upon two components: 1) GPA; and 2) Course Completion.

All students must:

TSC monitors academic progress every fall and spring semester to identify those students who are experiencing difficulty with their courses.

Satisfactory Academic Progress (SAP) is based upon two components: GPA of 2.0 or higher and successful course completion of at least 67% of course work attempted. Students remain in good standing with the College and Financial Aid when both criteria are met. Students who do not maintain these required minimum standards will be placed on probation or suspension as appropriate.

The complete Satisfactory Academic Progress policy and the Undergraduate Satisfactory Academic Progress for Financial Aid policy can be found in the current Undergraduate Catalog.

*For additional information on SAP, visit http://tsc.edu/index.php/component/content/article/240-catalog/2326-financial-aid.html

DMS Student Classroom _____

Diagnostic Medical Sonography Program lecture courses are taught at the ITECC. The specific location and times are published in the TSC course schedule.

Laboratory and Tutoring

DMS enrolled students may utilize the laboratory to practice the assigned sonographic examinations. A student can do this by scheduling time with faculty or program director on a need basis. Students may request tutoring services.

SECTION II CURRICULUM

Sonography Course Requirement

Curriculum

Sonography Course Descriptions

General Academic Courses

Approximate Cost of the Program

Course Substitutions

Transfer of Credit from other Institutions

Transfer Policy

Sonography Course Requirements

All Sonography courses must be completed successfully before entering the more advanced course(s) the following semester. Due to the structure and chronological order of these classes, if a student should be unsuccessful he/she would be unable to continue in consecutive courses until the failed course is completed the following year. Under these circumstances, the student will be required to submit an additional application. Re-admission to a sonography course is not guaranteed but offered only on a space available basis.

It is expected that each student will successfully demonstrate competency in the classroom, laboratory and practicum areas. Since this is a competency-based program, each instructor will give the student a course syllabus and/or unit objectives to be mastered. Grading distribution for all DMSO courses will be assigned according to the following scale:

```
A = 92 - 100%
B = 82 - 91%
C = 75 - 81%
D = 65 - 74% (Failing, must repeat course)
F = 64 and below
```

* For any DMSO course, a grade of at least a "C" must be earned. <u>Any DMSO course of a "D" or lower is not considered passing and must be repeated.</u> A student will not be allowed to test out of a course.

NOTE: If re-admission is granted, the student will re-enter on a probationary status for at least one semester. At the end of this probationary period, the student will be required to meet with the sonography program staff to discuss his/her progress.

Please note that if the student violates the stipulations of probation, the student will be dismissed again. If a student fails or is dismissed twice during the program, the student will not be readmitted for a third attempt (see re-admission policy).

Diagnostic Medical Sonography Associate of Applied Science

Texas Southmost College Division of Health Professions

Diagnostic Medical Sonographers will be versatile in general sonography, which includes abdominal, small parts, and OB-GYN studies. You will be marketable as you may fully and independently function in both hospitals and private clinic settings. Additionally, with your cursory understanding of ultrasound physics, you may continue to specialize in the other modality areas in sonography, such as nuchal translucency, fetal and adult echocardiography, and vascular.

PREREQUISITES	CREDIT HOURS
BIOL 2301 Anatomy & Physiology I	3
BIOL 2302 Anatomy & Physiology II	
MATH 1314+ College Algebra	3
PHYS 1305+ Elementary Physics	3
ENGL 1301+ Composition I	3
FIRST YEAR - FALL SEMESTER	
DMSO 1302+ Basic Ultrasound Physics	
DMSO 2253+ Sonography of Superficial Structures	
DMSO 1441+ Abdominopelvic Sonography	
DMSO 2405+ Sonography of Obstetrics/Gynecology	4
FIRST YEAR - SPRING SEMESTER	
DMSO 1360+ Clinical I - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	
DMSO 2441+ Sonography of Abdominopelvic Pathology	
DMSO 2342+ Sonography of High Risk Obstetrics	
DMSO 1342+ Intermediate Ultrasound Physics	3
SUMMER I SEMESTER	
DMSO 1161+ Clinical II - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	
PSYC 2301 General Psychology	3
SUMMER II SEMESTER	
DMSO 2160+ Clinical III - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	1
SECOND YEAR - FALL SEMESTER	
DMSO 2361+ Clinical IV - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	
DMSO 2451+ Doppler Physics	4
SECOND YEAR - SPRING SEMESTER	
DMSO 2245+ Advanced Sonography Practices	
DMSO 2343+ Advanced Ultrasound Principles and Instrumentation	
XXXX X3XX1 Language, Philosophy & Culture/Creative Arts Elective	3

TOTAL CREDIT HOURS FOR GRADUATION - 61

1Language, Philosophy & Culture/Creative Arts Electives: Any General Education Core course that meets these categories.

Source: TSC Instruction Program Rev Date: 10/22/19
Catalog Date: 09/01/2021

⁺ Grade of "C" or better is required for graduation.

Sonography Courses_

DMSO 1441-Abdominopelvic Sonography

Course Level: Introductory

Course Description: Normal anatomy and physiology of the abdominal and pelvic cavities as related to scanning techniques, transducer selection, and scanning protocols.

Learning Outcomes: Identify the sonographic appearances of normal abdominal and pelvic structures; explain physiology of abdominal and pelvic organs; and describe the appropriate scanning techniques according to standard protocol guidelines.

Lab Recommended

DMSO 2253-Sonography of Superficial Structures

Course Level: Intermediate

Course Description: Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.

Learning Outcomes: Identify sonographic appearance of normal and abnormal superficial structures; identify appropriate scanning technique using standard protocol guidelines; and evaluate patient history and laboratory data as it relates to sonography.

Lab Recommended

DMSO 1360-Clinical I

Course Level: Introductory

Course Description: A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

Learning Outcomes: As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry

DMSO 2441-Sonography of Abdominopelvic Pathology

Course Level: Intermediate

Course Description: Pathologies and disease states of the abdomen and pelvis as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Emphasizes endocavitary sonographic anatomy and procedures including pregnancy.

Learning Outcomes: Identify abnormal abdominal and pelvic structures; demonstrate appropriate scanning techniques using standard protocol guidelines; and evaluate patient history and laboratory data as it relates to sonography.

Lab Recommended

DMSO 1342-Intermediate Ultrasound Physics

Course Level: Intermediate

Course Description: Continuation of Basic Ultrasound Physics. Includes interaction of ultrasound with tissues, mechanics of ultrasound production and display, various transducer designs and construction, quality assurance, bioeffects, and image artifacts. May introduce methods of Doppler flow analysis.

Learning Outcomes: Describe pulse-echo principles and actions; identify instrument options and transducer selection; recognize common image artifacts; and describe potential bioeffects.

Lab Recommended

DMSO 1161-Clinical II

Course Level: Introductory

Course Description: A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

Learning Outcomes: As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

DMSO 2160-Clinical III

Course Level: Intermediate

Course Description: A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

Learning Outcomes: As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

DMSO 2361-Clinical IV

Course Level: Advanced

Course Description: A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

Learning Outcomes: As outlined in the learning plan, apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

DMSO 2451-Doppler Physics

Course Level: Intermediate

Course Description: Doppler and hemodynamic principles relating to arterial and venous imaging and testing.

Learning Outcomes: Describe Doppler and hemodynamic principles and actions; identify instrument options and transducer selection; interpret methods of Doppler flow analysis; differentiate common image artifacts; and describe potential bioeffects.

Lab Recommended

DMSO 2245-Advanced Sonography Practices

Course Level: Advanced

Course Description: Exploration of advanced sonographic procedures and emerging ultrasound applications.

Learning Outcomes: Describe selected advanced sonographic practices and procedures and apply these to case study interpretation and review; and compare and contrast various sonographic and other imaging modalities.

DMSO 2343-Advanced Ultrasound Principles and Instrumentation

Course Level: Advanced

Course Description: Theory and application of ultrasound principles. Includes advances in ultrasound technology.

Learning Outcomes: Describe and discuss ultrasound principles and instrumentation including modes of operation, techniques for recording sonographic images, and advances in ultrasound technology.

Lab Recommended

General Academic Courses

PSYC 2301 Introduction to Psychology

A survey of the scope and methods of psychology; cultivation of a scientific attitude toward behavior. Lec. 3, Cr. 3

ENGL 1301 Composition I

Expository writing with emphasis on thinking and composing skills required to write full-length essays on topics of personal experience, current issues, and material in published essays. Students will practice some research skills and produce a documented paper employing in-text citations. Prerequisite: A grade of A in ENGL 0320, grade of A, B, or C in ENGL 0321, or placement based on assessment scores. Lec. 3 Cr. 3

MATH 1314 College Algebra

This course is in-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

Approximate Cost of Medical Sonography Program

	Pre-Requisites	Pre-Requisites						
DMS Program	(semester 1)	(semester 2)	1st Semester	2nd Semester	3rd Semester	4th Semester	5th Semester	6th Semester
	10 Credit Hours	7 Credit Hours	10 Credit Hours	13 Credit	1 Credit	1 Credit	7 Credit	5 Credit Hours
	4 Lab Hours	3 Lab Hours	7 Lab Hours	Hours	Hours Co-	Hours	Hours	Co-Reqs 3
				4 Lab Hours	Reqs 3 Credit		3 Lab Hours	Credit Hours
					Hours			
Tuition (DMS courses only)								
\$50/Credit Hour (in-district)	\$0	\$150	\$500	\$650	\$50	\$50	\$350	\$250
Co-Requisites	\$500	\$200	\$0	\$0	\$150	\$0	\$0	\$150
Building Usage and General								
Use Fee	\$670	\$469	\$670	\$871	\$268	\$67	\$469	\$536
\$67/Credit Hour								
Institutional, Student Services,								
Student Recreation Fee	\$170	\$170	\$170	\$170	\$170	\$170	\$170	\$170
\$170/Semester	\$170	3170	3170	3170	\$170	\$170	3170	\$170
Lab Hour Fee	4	4==	41.55	400	4.0	40	4==	4.0
\$24/Lab Hour	\$96	\$72	\$168	\$96	\$0	\$0	\$72	\$0
DMS College Program Fee			\$400	\$520	\$40	\$40	\$280	\$200
\$40/Credit Hour	\$0	\$120	\$400	\$520	\$40	\$40	\$280	\$200
Liability Insurance (each Fall)								
\$13.00/Semester			\$13.00				\$13.00	
Testing Fees \$84/Semester			\$84.00	\$84.00	\$84.00	\$84.00	\$84.00	\$84.00
Total	\$1,436	\$1,181	\$2,005	\$2,391	\$762	\$411	\$1,438	\$1,390

Two of three exams are required to be eligible for employment. Each exam costs \$250. Total exam cost is \$500.

http://tsc.edu/index.php/new-students/tuition-and-fee-schedule.html

Course Substitution

Course substitutions may be carried out only if the course to be substituted is equal or superior in content to the course that is required by the sonography program curriculum.

Transfer Credits from Other Institutions

Previous course work satisfactorily completed at accredited institutions will be evaluated for transfer and may be applied toward a degree program at Texas Southmost College.

Upon the student's request, a transcript will be evaluated after a student has registered for Texas Southmost College credit classes. An official transcript is required from each college attended. When the evaluation is complete, the number of transferred hours will be recorded on the TSC transcript.

NOTE: Previous DMSO courses are evaluated by the sonography program director to determine content. A student may receive full or partial credit for a course that has been completed; a challenge exam and laboratory skill competency will be required.

Graduation candidates are responsible for complying with the section in the catalog stating criteria for graduation: specifically, the grade points average required for graduation.

Transfer Policy_

PURPOSE:

To provide a mechanism, in which students from other Diagnostic Medical Sonography programs may enter the TSC Medical Sonography program at an appropriate level.

POLICY:

A student from an accredited Diagnostic Medical Sonography program may receive transfer credit and enter the TSC Diagnostic Medical Sonography program at the appropriate level. The program must meet approval of the Joint Review Committee of Education in Diagnostic Medical Sonography.

GUIDELINES:

- 1. The transfer student must meet all general requirements for the Associate in Applied Science Degree, as outlined in the TSC catalog.
- 2. The office of Admissions evaluates all student transcripts and will apply appropriate credit.
- 3. Any previous DMSO course will be evaluated by the medical sonography program director to determine the nature, content and level of the course. A student may receive full or partial credit for a course they have completed; a test(s) to assess laboratory skill competencies and knowledge of content area(s) will be required.

SECTION III RESOURCES

Counseling Services

Advising

Disability Services

Tutoring

Financial Aid

Library

Professional Organizations

DMS Textbooks in the Library

DMS Required Textbooks

Dismissal/Withdrawal/Readmission

Counseling Services_

Many students face life challenges that can make accomplishing their academic goals difficult. The Counseling Center is available to assist with those challenges by encouraging personal and academic growth to help each student successfully meet life's challenges.

Enrolled students are eligible for personal counseling services, and there is no fee. The counselor respects the confidential nature of discussions to the limits provided by law. No record of a student's visit is made on any academic file.

Advising

The program director will be the advisor for each student upon admission to provide information about the academic program and to assist in making informed decisions. The program director may be consulted during pre-registration, for adding/dropping a course and withdrawing from the Diagnostic Medical Sonography Program. All advising sessions will be documented.

Disability Services

Texas Southmost College would like to help students with disabilities achieve their highest potential in college.

Disability Support Services support services provided to qualified students with learning, physical, developmental, mental and emotional disabilities who are attending Texas Southmost College. Under the Americans with Disabilities Act (ADA) of 1990, a person has a disability if he or she has a physical or mental impairment that substantially limits one or more of the major life activities. Reasonable accommodations are provided by the College to ensure access to all courses, programs, services, jobs, activities and facilities.

Tutoring ___

Volunteer second year students may serve as tutors for both first and second year students. All tutoring is provided in the DMS classroom.

Student Financial Aid Services_____

TSC provides financial aid to assist students. The financial assistance for eligible students is available in the form of grants, loans, college work-study, veterans' benefits, and scholarships. The college catalog contains the financial aid information made available to all students. Students enrolled in the sonography program are encouraged to visit the financial aid department and obtain information on financial resources available.

Library Facility_

The TSC Campus library is located on 1 West University Blvd.

Monday - Thursday Friday Saturday Sunday

Phone: 956-882-8221

7:30 am - 10:00 pm 7:30 am - 5:00 pm 8:00 am - 5:00 pm 12:00 pm - 9:00 pm

Online library at Texas Southmost College. This library provides many online services for you. The most important of these are the Internet sites and databases which index professional journals, other periodicals, newspapers, other electronic information sources, etc. Some databases and sites provide the full texts of periodical articles and essays from a variety of print and electronic media in addition to their periodical indexing capabilities. Moreover, through the use of the hypertext links that you will find throughout this online library, you may reach out to the world of information available to you via the Internet.

You can readily retrieve this information by selecting the appropriate search engine, database, or Internet site and following the instructions for conducting a search of its resources. We are confident that you will find that this online library's resources will meet your information needs. We have made every effort to make this collection as user friendly as possible. If you experience any difficulties, please let us know and we will make every effort to resolve them.

Professional Organization

The **Society of Diagnostic Medical Sonography** is the <u>national organization</u> of the profession. The SDMS holds an annual meeting each summer in one of the major cities of the United States of America. Student membership is approximately \$35.00 a year.

DMSO Textbooks and Instructional Aids (type,content,publication/production date)	Location
Pocket Atlas Normal Ultrasound Anatomy, Rifkin	Library
Lippincott 0881678457	
Abdomen and Superficial Structures, Kawamaura	Library
Lippincott 0397552637	
Handbook of Pathophysiology, Corwin	Library
Lippincott 0397552130	

Exercises in U/S-An Intro. to Normal	Library
Structures, Curry/TempkinSaunders 0721649629	
Essentials of Human Diseases and Conditions,Frazier/Drzy/Do Saunders 0721652794	Library
Intro. to Ultrasonography and Patient Care, Craig Saunders 0721642292	Library
The Ultrasound Handbook ,Hall Lippincott 0397550294	Library
Ultrasound Scanning: Principles and Protocols, Tempkin	Library
Saunders 072163706X	J. J. J.
Ultrasound Teaching Manual, Hofer Thieme 086577725X	Library
Understanding Ultrasound Physics Fundamentals, Edelman D. Armstrong Co. 0962644439	Library
Clinical Sonography – A Practical Guide, Sanders Lippincott 0781715563	Library
A Manual of Laboratory and Diagnostic Tests,Fischback Lippincott 039755186X	Library
U/S Review of the Abdomen,Male Pelvis&Sm Pts Hickey/Goldberg Lippincott 0397516916	Library
Ultrasonography in Obstetrics and Gynecology, Callen	Library
Saunders 0721667120	
Manual of Ob/Gyn Ultrasound,Jaffe	Library
Lippincott 0397515952	,
Abdominal Ultrasound How Why and When,	Library
Bates,Saunders 044306007X	
Diagnostic Ultrasound,Bushong McGraw-Hill 007012017X	Library
Interventional Sonography, Weiner Parthenon 1850709238	Library
Breast Ultrasound ,Sohn/Christ of Thieme 0865777225	Library
Three Dimensional Ultrasound, Nelson Lippincott 781719976	Library
Ultrasound and Multifetal Pregnancy, Montegagudo,	Library
Parthenon 1850709866	
Paediatric Ultrasound, Carly, Greenwich Med. 1900151170	Library
Which Tests for My Unborn Baby, Decrespigny	Library
Oxford Univ.Press0195539540	
Ultrasound and the Fetal Brain ,Chervenak Parthenon 1850706123	Library
Intro. to Vascular Ultrasonography, Zwiebel, Saunders 0721669492	Library
Safety of Diagnostic Ultrasound, Barnett, Parthenon 1850706468	Library
Guidelines and Gamuts in Musculoskeletal U/S, Wiley-Liss Wiley, John & Sons 0471197556	Library
Medical Physicists and Malpractice,	Library
Shalek/Gooden Medical Physics 0944838650	Library
Textbook of Neonatal Ultrasound, HallerParthenon 1850709025	Library
Ultrasound of the Infant Brain, Levene/Williams	Library
Cambridge Univ. 0521412129	
DMSO Textbooks and Instructional Aids	Location
(type,content,publication/production date)	
Assistant Radiologist, Rudman, Nat'l Learning Cor0837311128	Library
Baby Faces: Your Ultrasound Experience, Bunner, Bunner	Library
Publ.0965654990	Liviuij
Doppler Ultrasound: physics, instrumentation, and clinical	Library
applications, Evans, Wiley 471078263	Library
Ultrasound Exam Review: sonographer's self-assessment guide,	

Textbook of Diagnostic Ultrasound Congraphy, Hagen-Ansert, Mosby 801679486 Recent Advances in Ultrasound Diagnosis, Kurjak, Excerpta 444900225 Library	Graig, Lippincott 397550219	
Recent Advances in Ultrasound Diagnosis, Kurjak, Excerpta 444900225 Doppler Ultrasound: physics and instruments, Kremkau, Saunders 721643086 Diagnostic Ultrasound: principles and instruments, Kremkau, Saunders 721643086 Diagnostic Ultrasound: principles, instruments, Aremkau, Saunders 721643086 Diagnostic Ultrasound: principles, instruments, and exercises, Kremkau, Saunders 721628230 Ultrasound Altas of Disease Processes, Krebs, Appleton & Lange 838592457 Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523 Abdominal Ultrasound Study Guide and Exam Review, Hagen- Ansert, Mosby 815141769 Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Library Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD- ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397554738 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397554738 Beard Teaching Model DMSO Lab Pancreax-Spleen, GB Teaching Model DMSO Lab DMSO Lab DMSO Lab DMSO Lab DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab		T there are
Recent Advances in Ultrasound Diagnosis, Kurjak, Excerpta 444900225 Doppler Ultrasound: physics and instruments, Kremkau, Saunders 072164869X Diagnostic Ultrasound: principles and instruments, Kremkau, Saunders 721643086 Diagnostic Ultrasound: principles, instruments, and exercises, Kremkau, Saunders 72163230 Ultrasound Atlas of Disease Processes, Krebs, Appleton & Lange 838592457 Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523 Abdominal Ultrasound Study Guide and Exam Review, Hagen- Ansert, Mosby 815141769 Appleton & Lange's Review for the Ultrasonography Examination, Odwin, Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound Kurtz, Mosby 801680964 Library Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Diagnostic Ultrasound Scanning, Tempkin, Saunders 072166881X Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasound (computer file): a logical approach, on CD- ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound (computer file): a logical approach, on CD- ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, University Torres, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, University Torres, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, University Torres, Lippincott 3975840 Heart Teaching Model DMSO Lab		Library
Doppler Ultrasound: physics and instruments, Kremkau, Saunders O72164869X Diagnostic Ultrasound: principles and instruments, Kremkau, Saunders O721643086 Diagnostic Ultrasound: principles, instruments, and exercises, Kremkau, Saunders 721628230 Ultrasound Atlas of Disease Processes, Krebs, Appleton & Lange 838592457 Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523 Essentials of Ultrasound Study Guide and Exam Review, Hagen-Ansert, Mosby 815141769 Appleton & Lange's Review for the Ultrasongraphy Examination, Odwin, Appleton & Lange's Review for the Ultrasongtraphy Examination, Odwin, Appleton & Lange's Review for the Ultrasongtraphy Examination, Odwin, Appleton & Lange's Review for the Ultrasound Physics, Zagzebski, Mosby 815198523 The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Ultrasound, Kurtz, Mosby 801680964 Ultrasound: A logical approach, Goldberg, Lippincott 397516481X Clinical Sonography: A practical guide, Miner, Lippincott Ultrary Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Disascit Holicular and Patient Care in Imaging Technology, Torres, Lippincott 39753986 Heart Teaching Model DMSO Lab DMSO Lab Stomach with Ulcers Teaching Model DMSO Lab		T 21
Doppler Ultrasound: physics and instruments, Kremkau, Saunders 072164869X Library		Library
Diagnostic Ultrasound: principles and instruments, Kremkau, Saunders 721643086 Diagnostic Ultrasound: principles, instruments, and exercises, Kremkau, Saunders 721628230 Ultrasound Atlas of Disease Processes, Krebs, Appleton & Lange 838592457 Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523 Abdominal Ultrasound Study Guide and Exam Review, Hagen-Ansert, Mosby 815141769 Appleton & Lange 8 Review for the Ultrasonography Examination, Odwin, Appleton & Lange 983859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Ultrasound, Kurtz, Mosby 801680964 Ultrasound Study Guide and Exam Review, Hagen-Ansert, Mosby 810680964 Ultrasound, Kurtz, Mosby 801680964 Ultrasound Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound Grouputer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Library Diagnostic Ultrasound Graching Model DMSO Lab		
Diagnostic Ultrasound: principles and instruments, Kremkau, Saunders 721643086 Diagnostic Ultrasound: principles, instruments, and exercises, Kremkau, Saunders 721628230 Ultrasound Atas of Disease Processes, Krebs, Appleton & Lange 838592457 Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523 Abdominal Ultrasound Study Guide and Exam Review, Hagen- Ansert, Mosby 815141769 Appleton & Lange 983859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound Kurtz, Mosby 801680964 Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Theme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD- ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound (computer file): a logical approach, on CD- ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound (computer file): a logical approach, on CD- ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound (computer file): a logical approach, on CD- ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound (bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Tores, Lippincott 397553986 Peart Teaching Model Pancreas, Spleen, GB Teaching Model DMSO Lab		Library
Saunders 721643086 Diagnostic Ultrasound: principles, instruments, and exercises, Kremkau, Saunders 721628230 Ultrasound Atlas of Disease Processes, Krebs, Appleton & Lange 838592457 Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523 Abdominal Ultrasound Study Guide and Exam Review, Hagen-Ansert, Mosby 815141769 Appleton & Lange's Review for the Ultrasonography Examination, Odwin, Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound Rushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model DMSO Lab Pancreas, Spleen, GB Teaching Model Pancreas, Spleen, GB Teaching Model Pancreas, Spleen, GB Teaching Model DMSO Lab DMSO Lab Tollon Teaching Model DMSO Lab		
Diagnostic Ultrasound: principles, instruments, and exercises, Kremkau, Saunders 721628230 Ultrasound Atlas of Disease Processes, Krebs, Appleton & Lange 838592457 Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523 Abdominal Ultrasound Study Guide and Exam Review, Hagen-Ansert, Mosby 815141769 Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Library Library Library Library Library Clinical Sonography: A practical guide, Miner, Lippincott 78171716 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397884733 Diagnostic Ultrasound 39753986 Heart Teaching Model Pancreas, Spleen, GB Teaching Model Pancreas, Spleen, GB Teaching Model DMSO Lab DMSO Lab Breast Cancer Teaching Model DMSO Lab Breast Cancer Teaching Model DMSO Lab		Library
Kremkau, Saunders 721628230		
Ultrasound Atlas of Disease Processes, Krebs, Appleton & Lange 838592457 Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523 Abdominal Ultrasound Study Guide and Exam Review, Hagen- Ansert, Mosby 815141769 Appleton & Lange's Review for the Ultrasonography Examination, Odwin, Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Library Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasound scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD- ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas,Spleen, GB Teaching Model DMSO Lab Stomach with Ulcers Teaching Model DMSO Lab DMSO Lab DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab		Library
Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523 Library Abdominal Ultrasound Study Guide and Exam Review, Hagen- Ansert, Mosby 815141769 Appleton & Lange 's Review for the Ultrasonography Examination, Odwin, Appleton & Lange 083889073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD- ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas,Spleen, GB Teaching Model DMSO Lab DMSO Lab Breast Cancer Teaching Model DMSO Lab DMSO Lab DPMSO Lab DPMSO Lab DPMSO Lab DPMSO Lab DPMSO Lab DMSO Lab DPMSO Lab DMSO Lab		
Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523 Abdominal Ultrasound Study Guide and Exam Review, Hagen-Ansert, Mosby 815141769 Appleton & Lange's Review for the Ultrasonography Examination, Odwin, Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Library Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott Library Clinical Sonography: A practical guide, Miner, Lippincott Library Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Library Library Library Library Library Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Library Library Library Library Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Library Library Library Library Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Library Library Diagnostic Ultrasound, Bushong Model DMSO Lab Bracter Teaching Model DMSO Lab DMSO Lab Temale Genital Organs Teaching Model DMSO Lab Colon Teaching Model DMSO Lab DMSO Lab DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab	Ultrasound Atlas of Disease Processes, Krebs, Appleton & Lange	Library
Abdominal Ultrasound Study Guide and Exam Review, Hagen- Ansert, Mosby 815141769 Appleton & Lange's Review for the Ultrasonography Examination, Odwin, Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Library Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Docket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD- ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model DMSO Lab Pancreas, Spleen, GB Teaching Model DMSO Lab Stomach with Ulcers Teaching Model DMSO Lab Breast Cancer Teaching Model Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Uterus/Ovaries Teaching Model DMSO Lab Uterus/Ovaries Teaching Model DMSO Lab	838592457	
Ansert, Mosby 815141769 Appleton & Lange's Review for the Ultrasonography Examination, Odwin, Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Litrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott Library Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Library Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas, Spleen, GB Teaching Model Pancreas, Spleen, GB Teaching Model DMSO Lab Premale Genital Organs Teaching Model DMSO Lab Breast Cancer Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Uctrus/Ovaries Teaching Model DMSO Lab Uctrus/Ovaries Teaching Model DMSO Lab Uctrus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab	Essentials of Ultrasound Physics, Zagzebski, Mosby 815198523	Library
Ansert, Mosby 815141769 Appleton & Lange's Review for the Ultrasonography Examination, Odwin, Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Ditrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders Or2166881X Clinical Sonography: A practical guide, Miner, Lippincott Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasound scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Distance Lippincott 397553986 Heart Teaching Model Pancreas, Spleen, GB Teaching Model Pancreas, Spleen, GB Teaching Model DMSO Lab Presat Cancer Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab DMSO Lab DMSO Lab	Abdominal Ultrasound Study Guide and Exam Review, Hagen-	Library
Ddwin, Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 313110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model DMSO Lab Pancreas,Spleen, GB Teaching Model Bound of Teaching Model Female Genital Organs Teaching Model DMSO Lab Breast Cancer Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab	Ansert, Mosby 815141769	
Ddwin, Appleton & Lange 083859073X The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 313110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model DMSO Lab Pancreas,Spleen, GB Teaching Model Bound of Teaching Model Female Genital Organs Teaching Model DMSO Lab Breast Cancer Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab		Library
The Ultrasound Handbook: clinical, etiologic, pathologic implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Library Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Library Library Library Library Library DMSO Lab DMSO Lab Pancreas,Spleen, GB Teaching Model DMSO Lab DMSO Lab Female Genital Organs Teaching Model DMSO Lab DRSO Lab DMSO Lab		
implications of sonographic findings, Hall, Lippincott 781717116 Ultrasound, Kurtz, Mosby 801680964 Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Library Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas,Spleen, GB Teaching Model Pancreas,Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Pemale Genital Organs Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab	11 0	Library
Ultrasound, Kurtz, Mosby 801680964 Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Library Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 39753986 Heart Teaching Model Pancreas,Spleen, GB Teaching Model Pancreas,Spleen, GB Teaching Model Pancreas,Spleen, GB Teaching Model DMSO Lab Breast Cancer Teaching Model Deluxe Pregnancy Pelvis Teaching Model Deluxe Pregnancy Pelvis Teaching Model Deluxe Pregnancy Pelvis Teaching Model Durso Lab Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab		
Diagnostic Ultrasound: A logical approach, Goldberg, Lippincott 397516142 Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas, Spleen, GB Teaching Model Pancreas, Spleen, GB Teaching Model Pemale Genital Organs Teaching Model Breast Cancer Teaching Model Colon Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Delvaries Teaching Model DMSO Lab Uterus/Ovaries Teaching Model DMSO Lab Uterus/Ovaries Teaching Model DMSO Lab Budget Brain with Arteries Teaching Model DMSO Lab		Library
Suppose the Protocols for Ultrasound Scanning, Tempkin, Saunders Clinical Sonography: A practical guide, Miner, Lippincott Ribrary		
Pocket Protocols for Ultrasound Scanning, Tempkin, Saunders 072166881X Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas,Spleen, GB Teaching Model Pancreas,Spleen, GB Teaching Model Pemale Genital Organs Teaching Model DMSO Lab Breast Cancer Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab		Library
Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas,Spleen, GB Teaching Model DMSO Lab Stomach with Ulcers Teaching Model DMSO Lab Breast Cancer Teaching Model DMSO Lab Breast Cancer Teaching Model Colon Teaching Model DMSO Lab		Lihrary
Clinical Sonography: A practical guide, Miner, Lippincott 781715563 Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas,Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Pemale Genital Organs Teaching Model DMSO Lab Breast Cancer Teaching Model Colon Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab		Library
Table Tabl		Library
Ultrasound Teaching Manuel: the basics of performing an interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas, Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Pemale Genital Organs Teaching Model Breast Cancer Teaching Model DMSO Lab Breast Cancer Teaching Model Doluxe Pregnancy Pelvis Teaching Model Doluxe Pregnancy Pelvis Teaching Model Doluxe Pregnancy Pelvis Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab Dobsettrics Phantom DMSO Lab		Library
interpreting ultrasounds scans, Hofer, Thieme 3131110414 Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas, Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Pemale Genital Organs Teaching Model Breast Cancer Teaching Model DMSO Lab Breast Cancer Teaching Model Colon Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab Budget Brain with Arteries Teaching Model DMSO Lab		Library
Diagnostic Ultrasound (computer file): a logical approach, on CD-ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas, Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Pemale Genital Organs Teaching Model DMSO Lab Breast Cancer Teaching Model DMSO Lab DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab		Library
ROM, Goldberg, Lippincott 397584733 Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas, Spleen, GB Teaching Model Pancreas, Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Pemale Genital Organs Teaching Model DMSO Lab Breast Cancer Teaching Model DMSO Lab Colon Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab		I thuowy
Diagnostic Ultrasound, Bushong, McGraw-Hill 007012017X Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas, Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Pemale Genital Organs Teaching Model Breast Cancer Teaching Model Colon Teaching Model DMSO Lab DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Female Pelvic Section Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab		Library
Basic Medical Techniques and Patient Care in Imaging Technology, Torres, Lippincott 397553986 Heart Teaching Model Pancreas,Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Pemale Genital Organs Teaching Model Breast Cancer Teaching Model DMSO Lab Breast Cancer Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Uterus/Ovaries Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab Full Body Scanning Model Abdomen DMSO Lab DMSO Lab	<u> </u>	T :h
Torres, Lippincott 397553986 Heart Teaching Model Pancreas, Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Pemale Genital Organs Teaching Model Breast Cancer Teaching Model Colon Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model Deluxe Pregnancy Pelvis Teaching Model Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Temale Pelvic Section Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab Budget Brain with Arteries Teaching Model DMSO Lab		
Heart Teaching Model Pancreas, Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Pemale Genital Organs Teaching Model Breast Cancer Teaching Model DMSO Lab Breast Cancer Teaching Model DMSO Lab Colon Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model DMSO Lab Female Pelvic Section Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model DMSO Lab Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab Full Body Scanning Model Abdomen DMSO Lab		Library
Pancreas,Spleen, GB Teaching Model Stomach with Ulcers Teaching Model Female Genital Organs Teaching Model Breast Cancer Teaching Model Colon Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model Deluxe Pregnancy Pelvis Teaching Model Deluxe Pregnancy Pelvis Teaching Model Temale Pelvic Section Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab		DMGO I I
Stomach with Ulcers Teaching Model Female Genital Organs Teaching Model Breast Cancer Teaching Model Colon Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model Deluxe Pregnancy Pelvis Teaching Model Female Pelvic Section Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab Full Body Scanning Model Abdomen DMSO Lab DMSO Lab		
Female Genital Organs Teaching Model Breast Cancer Teaching Model Colon Teaching Model DMSO Lab Deluxe Pregnancy Pelvis Teaching Model Female Pelvic Section Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab Full Body Scanning Model Abdomen DMSO Lab DMSO Lab		
Breast Cancer Teaching Model Colon Teaching Model Deluxe Pregnancy Pelvis Teaching Model Female Pelvic Section Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab Full Body Scanning Model Abdomen DMSO Lab DMSO Lab DMSO Lab DMSO Lab DMSO Lab DMSO Lab		
Colon Teaching Model Deluxe Pregnancy Pelvis Teaching Model Female Pelvic Section Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab		
Deluxe Pregnancy Pelvis Teaching Model Female Pelvic Section Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab DMSO Lab		
Female Pelvic Section Teaching Model Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab DMSO Lab DMSO Lab DMSO Lab DMSO Lab DMSO Lab Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab DMSO Lab DMSO Lab	<u> </u>	DMSO Lab
Uterus/Ovaries Teaching Model with Pathologies Median Section of Head & Neck Teaching Model Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab DMSO Lab DMSO Lab DMSO Lab DMSO Lab Location Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab		DMSO Lab
Median Section of Head & Neck Teaching Model Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab DMSO Lab DMSO Lab Location Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab		DMSO Lab
Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab DMSO Lab DMSO Textbooks and Instructional Aids (type,content,publication/production date) Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab	Uterus/Ovaries Teaching Model with Pathologies	DMSO Lab
Budget Brain with Arteries Teaching Model Obstetrics Phantom DMSO Lab DMSO Lab DMSO Textbooks and Instructional Aids (type,content,publication/production date) Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab	Median Section of Head & Neck Teaching Model	DMSO Lab
Obstetrics Phantom DMSO Lab DMSO Textbooks and Instructional Aids (type,content,publication/production date) Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab		
DMSO Textbooks and Instructional Aids (type,content,publication/production date) Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab		
(type,content,publication/production date) Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab		
(type,content,publication/production date) Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab	DMSO Toythooks and Instructional Aids	Location
Full Body Scanning Model Abdomen Full Body Scanning Model Cardiac/Vascular DMSO Lab DMSO Lab		
Full Body Scanning Model Cardiac/Vascular DMSO Lab		77.500.5
Rreact Model DMSO Lab		
	Breast Model	DMSO Lab
3 Dell Desktop computers DMSO Lab		DMSO Lab
	Understanding Ultrasound Physics	Professor's Office
	Understanding Ultrasound Physics	Professor's Office

Fundamentals and Exam Review Latest Edition ISBN# 0-9626444-3-9 Author(s) Edelman, Sidney K. Publisher Tops Printing, Inc.	DMSO 1342 Intermediate Ultrasound Physics
National Certification Examination Review - Ultrasound Physics and Instrumentation ISBN# none published and sold by SDMS - Society of Diagnostic Medical Sonography (\$70.00 non-member)	Professor's Office DMSO 1342 Intermediate Ultrasound Physics
Diagnostic Medical Sonography: A Guide to Clinical Practice Abdomen and Superficial Structures Edition 2nd 1997 ISBN# 0-397-55263-7 author(s) Kawamura, Diane M. publisher Lippincott	Professor's Office DMSO 1355 Sonographic Pathophysiology
National Certification Examination Review - Abdomen ISBN# none published and sold by SDMS – Society of Diagnostic Medical Sonography (\$70.00 non-member)	Professor's Office DMSO 1355 Sonographic Pathophysiology
National Certification Examination Review - Obstetrics and Gynecology ISBN# none published and sold by SDMS – Society of Diagnostic Medical Sonography (\$65.00 non-member)	Professor's Office DMSO 1355 Sonographic Pathophysiology
Exam Preparation for Diagnostic Ultrasound Abdomen and OB/GYN Edition – 2002 ISBN# 0-7817-1778-7 Author(s) Sander, Roger C., Dolk, Jann D. and Miner, Nancy Smith Publisher Lippincott Williams and Wilkins	Professor's Office DMSO 2245 Advanced Sonographic Practices
National Certification Examination Review – Ultrasound Physics and Instrumentation ISBN# none published and sold by SDMS – Society of Diagnostic Medical Sonography (\$70.00 non-member)	Professor's Office DMSO 2343 Advanced Ultrasound Physics

DMSO Required Textbooks

Abdominal Ultrasound How, Why, and When

Edition – Latest ISBN# 0443-06007X Author(s) Bates, Jane A. Publisher Churchill Livingstone

Ultrasound Scanning Principles and Protocols

Edition - Latest ISBN# 0-7216-6879-8 Author(s) Tempkin, Betty Bates Publisher W.B.Saunders Company

Pocket Protocols Ultrasound Scanning

Edition - Latest ISBN# 0-7216-6881-X Author(s) Tempkin, Betty Bates Publisher W.B.Saunders Company

Obstetric Ultrasound Made Easy

Edition - Latest ISBN# 0443-07013X Author(s) Smith, Norman C. and Smith, Pat M. Publisher Harcourt

Comprehensive Review

General Sonography Examinations

Edition - Latest ISBN# 978-0-323-05282-5 Author(s) Susanna Ovel Publisher Mosby

Understanding Ultrasound Physics Fundamentals and Exam Review

Edition - Latest ISBN# 0-9626444-3-9 Author(s) Edelman, Sidney K. Publisher Tops Printing, Inc.

Diagnostic Medical Sonography: A Guide to Clinical Practice Abdomen and Superficial Structures

Edition - Latest
ISBN# 0-397-55263-7
Author(s) Kawamura, Diane M.
Publisher Lippincott

Ultrasound Review of Obstetrics and Gynecology

Edition - Latest ISBN# 0-397-51654-1 Author(s) Hickey, Janice and Goldberg, Franklin Publisher Lippincott Williams and Wilkins

National Certification Examination Review

- Ultrasound Physics and Instrumentation

ISBN# none published and sold by SDMS – Society of Diagnostic Medical Sonography (\$70.00 non-member)

Diagnostic Medical Sonography: A Guide to Clinical Practice Abdomen and Superficial Structures

Edition - Latest ISBN# 0-397-55263-7 author(s) Kawamura, Diane M. publisher Lippincott

National Certification Examination Review

- Abdomen

ISBN# none published and sold by SDMS – Society of Diagnostic Medical Sonography (\$70.00 non-member)

National Certification Examination Review

- Obstetrics and Gynecology

ISBN# none published and sold by SDMS – Society of Diagnostic Medical Sonography (\$65.00 non-member)

Exam Preparation for Diagnostic Ultrasound Abdomen and OB/GYN

Edition - Latest ISBN# 0-7817-1778-7 Author(s) Sander, Roger C., Dolk, Jann D. and Miner, Nancy Smith Publisher Lippincott Williams and Wilkins

National Certification Examination Review

- Ultrasound Physics and Instrumentation

ISBN# none published and sold by SDMS – Society of Diagnostic Medical Sonography (\$70.00 non-member)

Note: No additional books are required at this time but may be subject to change

Dismissal/Withdrawal/Readmission Policy_

Dismissal

A student may be dismissed from the program for the following reason:

- 1. Failure to achieve a grade of a 75 or higher in any DMSO course
- 2. Failure to complete practicum competencies during any DMSO course
- 3. Reestablish didactic comprehension by obtaining a minimum of an 80 per course examination taken. The readmission committee chair will schedule the didactic examinations per specialty depending on the semester the student exited the program. For example, if the student exited the program the second semester and returns a year later, the abdominal/small parts specialty examination will include information from courses completed prior to the exit. Each specialty examination will contain 40 questions or less. The specialty examinations include physics, abdominal/small parts, and OB-GYN. If the student is unsuccessful in any examination, the student will not be allowed to advance to the next examination. Reestablish competency in lab skills using the pass/fail method. If the student fails any lab skill simulation, the student will not be allowed to advance to the next lab skill.
- 4. **NOTE**: If re-admission is granted, the student will re-enter on a probationary status for at least one semester. At the end of this probationary period, the student will be required to meet with the sonography program staff to discuss his/her progress. Please note that if the student violates the stipulations of probation, the student will be dismissed again. If a student fails or is dismissed twice during the program, the student will not be re-admitted for a third attempt (see re-admission policy).
- 5. Unprofessional appearance or unsafe conduct in the practicum area, including but not limited to unsafe practicum performance (refer to "Criteria for Unsafe Practicum Performance)
- 6. Failure to comply with rules and regulations of the Program, TSC, or any affiliating agency

The final decision for dismissal will be made by the Program Director after consultation with the faculty, student, and the Dean of Health Professions.

Withdrawal

A student who wishes to withdraw from the Program after registration must meet with the Diagnostic Medical Sonography Program Director, notify the registrar and the office of the Vice President of Student Services, return all borrowed books and equipment, and clear all accounts. An exit interview will be conducted by the Program Director to assure proper advisement, documentation of student records and plans for readmission as appropriate.

Readmission

Students may be readmitted to the Diagnostic Medical Sonography Program once after withdrawal or failure of a course. Students who have been dismissed for unsafe practicum practice are not eligible for readmission. Readmission is based on **SPACE AVAILABILITY** and on the student's compliance with conditions/requirements established by the Director and Admissions Committee. Requests for readmission are reviewed by the Diagnostic Medical Sonography Admissions Committee. Students applying for readmission must:

- 1. Apply, in writing to the Diagnostic Medical Sonography Admissions Committee, at least 90 days prior to the semester they wish to reenter.
- 2. Complete all courses in the Diagnostic Medical Sonography Program curriculum within five years from the date the student registered in the first course identified with DMSO prefix.
- 3. Reestablish competency in Lab Skills by obtaining a minimum score of 75% per sonographic procedure simulated.
- 4. Reestablish didactic comprehension by obtaining a minimum score of 75% per course final taken.
- 5. Demonstrate compliance with recommendations made at the time of withdrawal from the program. Examples of recommendations may include audit or remediation in academic course work; audit or repeat of DMSO course(s) previously taken.
- 6. A student who has been dismissed due to unsafe practices will NOT be considered for readmission to the program.

SECTION IV PRACTICUM

Sonography Practicum Affiliates

Practicum Chain of Command

Competency Based Practicum Education

Practicum Grade Criteria

Professional Qualities

Comprehensive Practicum Objectives

Professional Competency Evaluation Forms

Professional Qualities Evaluation Form

Practicum Performance Evaluation Protocol

Practicum Education Requirements before Graduation

Student Record Book

Practicum Grading Distribution

Required Practicum Evaluation Schedule

Sonography Practicum Affiliates_

Throughout the eighteen month didactic component, the student is expected to complete four practicum semesters. The list below identifies the current practicum sites in good standing with TSC Diagnostic Medical Sonography Program. It is the student's responsibility to commute to and from each site as scheduled. The practicum rotation schedule will be provided to the students by the CC at least 2 weeks prior to the beginning of each semester. The schedule will be provided by the CC and students are expected to comply. In the event that new sites are acquired, the student is expected to commute to those sites as well.

Harlingen Medical Center

5501 S Expressway 77 Harlingen, Texas 78550 **Phone:** (956) 365-1080 **Fax:** (956) 365-1000

Knapp Medical Center

1401 E. Eighth St. Weslaco, Texas 78596 **Phone:** (956) 969-5564 **Fax:** (956) 969-5461

Rio Grande Regional Hospital

101 East Ridge Rd. McAllen, Texas 78503 **Phone:** (956) 632-6503 **Fax:** (956) 630-6560

Valley Baptist Medical Center Brownsville

1040 W. Jefferson St. Brownsville, TX 78520 **Phone:** (956) 698-5823 **Fax:** (956) 698-5821

Valley Baptist Medical Center Harlingen

2101 Pease St..

Harlingen, Texas 78550 **Phone:** (956) 389-6887 **Fax:** (956) 389-6838

Treasure Hills Imaging Center

1717 Treasure Hills Blvd. Harlingen, TX 78550 **Phone:** (956) 389-3300 **Fax:** (956)389-3309

Valley Regional Medical Center

100-A Alton Gloor Blvd. Brownsville, Texas 78520 **Phone:** (956) 350-7539

Fax: (956) 350-7526

San Benito Imaging Center

200 N. Sam Houston Blvd. San Benito, TX 78586 **Phone:** (956) 399-2666

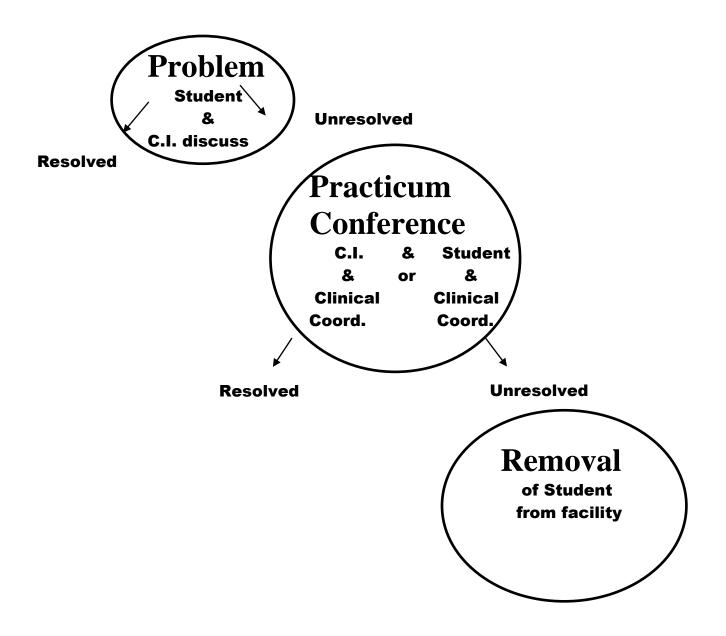
Fax: (956) 399-2638

Texas Health Care Imaging Brownsville

1460 N. Expressway 77/83 Brownsville, Texas 78520 **Phone:** (956) 546-7888

Practicum Site Problem Resolution

Chain of Command



Competency-Based Practicum Education

The purpose of this document is to identify the criteria essential to the successful completion of practicum education in the Diagnostic Medical Sonography Program.

All students must register for practicum courses **before** reporting to the practicum sites. There are a total of four (4) practicum semesters during which the student is expected to master basic, intermediate, and advanced skills in sonography scanning procedures.

Each practicum semester will require a certain number and type of examinations that must be completed and graded before the end of the semester. Please note that **if a student does not meet the required categories, points will be deducted** (see grading criteria).

Practicum Grade Criteria_

A practicum grade will be determined based on the following components:

Professional Competencies 45% Image Analysis/Sim.Registries 35% Professional Qualities 20%

Point deductions from the average given (above) will occur in the following way (one verbal reprimand and then all subsequent violations are written):

1. tardy One point deducted from overall practicum grade for each tardy

(3 tardies = 8 hr. absence).

2. written reprimand Five points deducted from overall practicum grade for each

write-up.

3. incomplete work Grand total of proc. eval. grades divided by the total

expected proc. eval. (point deduction already factored).

Example:

Ms. Montgomery received the following grades:

```
professional Competencies
film analysis/sim. registeries
professional Qualities
X .45 = 42.7
X .35 = 29.7
professional Qualities
X .20 = 19.0
91.4 (average of 3 components)
```

Ms. Montgomery was tardy 3 times and written up for 1 offense.

```
91.4 (average grade obtained from Professional Competencies, PQE, F/A)
-3 points for tardies (= one absence)
88.4
-10 points for excessive absences (the absence constituted from the 3 tardies brought the total absences over the allowed amount for the semester)
78.4
-5 points for 1 written offense
73.4 final practicum grade earned (below 75% = failing grade)
```

A student who fails to comply with practicum policies is subject to a written reprimand. For example: failure to adhere to the Dress Code or the Attendance Policy.

Professional Qualities

The program faculty and clinical instructors will assess the students' professional qualities twice each long semester and once in the summer session. Professional Qualities assessed will include: program compliance, professional interaction with patient and sonographers, professional growth and development, self-reliance/confidence, motivation, image acquisition/analysis, skill performance, equipment analysis, and patient management.

Comprehensive Practicum Objectives____

The practicum experience is planned to provide the student the opportunity to develop sonographic skills and become proficient in the medical diagnostic Sonography profession. Students are expected to achieve the practicum objectives within the allotted time. Students are expected to attend every practicum session to its entirety.

In order for the diagnostic medical sonography student to be successful in the practicum education component of the program, they must demonstrate competency in performing those sonographic procedures that are common in all sonographic settings. Both the clinical instructors and the clinical faculty will be engaged in the evaluation process. Anytime a student earns a grade less than a "C" on a professional competency, he/she must see the clinical faculty for counseling. The following identifies the professional competencies of basic, intermediate, and advanced sonographic procedures that the sonography students are expected to master.

Abdomen, Superficial Structures and Breast

Obstetrics and Gynecology: Non-Gravid Female Pelvis

Obstetrics and Gynecology: OB/1st Trimester Examination

Obstetrics and Gynecology: OB/2nd and 3rd Trimester Examination

Obstetrics and Gynecology: OB/Biophysical Profile

Obstetrics and Gynecology: Invasive Procedure

If the student is unable to meet the required comprehensive practicum competencies satisfactorily, the clinical coordinator/faculty will consult with the student and begin a remediation plan. Due to the structure and chronological order of the competencies, if a student should be unsuccessful he/she would be unable to continue in consecutive practicum education courses.

Model Patients

Students use model patients to improve their scanning skills. The community is invited to participate and help them achieve their goals. All sonograms are available by appointment for anyone over 18 years of age and must have a physician in the United States.

Abdomen, Superficial Structures and Breas	t Professiona	al Competencie	es		
Examination			A	TD	P
			clini	cal rot	ation
				of	4
RATING RANGES: Please evaluate the student	in the followin	g categories by v	vriting	one	
number per item. The rating ranges from 1 through Performance Objectives	5, with 5 bein	g the excellent ra	ting.		
Demonstrates patient management appropriately					
Uses and applies knobology correctly					
Demonstrates, identifies and evaluates anatomy in	multiple plane	S			
Identifies and utilizes anatomical landmarks to ima pathology	ge anatomy an	nd related			
Uses appropriate patient positions to demonstrate a		d pathology and			
demonstrates critical thinking as pertinent to this pr	roficiency				
Demonstrates scanning skills improvement					
Demonstrates good judgment in obtaining diagnost	tic images incl	uding			
nonstandard views					
Identifies and evaluates age-related changes, developmental, gender variations and					
obtains and evaluates patient history (medical char	t or patient que	estioning)			
The images evaluate anatomy in all image planes v					
The examination was performed in a timely manne	r according to	level			
Please note areas of suggested improvement below	:				
DMS student		Supervising sono	graphe	r	
Date		Affiliate site			
Grading Scale (point range)					
		MBERS OF PO			
50-40 points = A		ADE BASED OF			
39-26 points = B	PTS GR	PTS GR	PTS	GR	
25-16 points = C	50-48100	39-3792	25-24		
	47-4698	36-3490	23-22		
	45-4496	33-3188	21-20		
	43-4295	30-2887		379	
	41-4093	27-2685	17-16	575	
	*Below 16 =	Failing			

Obstetrics and Gynecology Professional Competencies TD Examination Non-Gravid Female Pelvis clinical rotation of **RATING RANGES:** Please evaluate the student in the following categories by writing one number per item. The rating ranges from 1 through 5, with 5 being the excellent rating. Performance Objectives Demonstrates patient management appropriately Uses and applies knobology correctly Demonstrates, identifies and evaluates anatomy in multiple planes Identifies and utilizes anatomical landmarks to image anatomy and related

Uses appropriate patient positions to demonstrate anatomy, related pathology and

demonstrates critical thinking as pertinent to this profici	ency			
Demonstrates scanning skills improvement				
Demonstrates good judgment in obtaining diagnostic im nonstandard views	ages including			
Identifies and evaluates age-related changes, developme and evaluates patient history (medical chart or patient qu	*			
The images evaluate anatomy in all image planes with p	roper measurements			
The examination was performed in a timely manner according to the examination was performed in a timely manner according to the examination was performed in a timely manner according to the examination was performed in a timely manner according to the examination was performed in a timely manner according to the examination was performed in a timely manner according to the examination was performed in a timely manner according to the examination was performed in a timely manner according to the examination was performed in a timely manner according to the examination was performed in a timely manner according to the examination of the example	ording to level			
Please note areas of suggested improvement below:				
DMS student	Supervising sonogra	pher		
Date Affiliate site				
Grading Scale (point range): TO	TAL NUMBER OF POIN	ΓS:		

Grading Scale (point range):

TOTAL NUMBER OF POINTS:

50 - 40 points = A

pathology

FINAL GRADE BASED ON PTS.:

Obstetrics and Gynecology Professional Competencies Examination

			A	TD	P
OB/1 st Trimester Examination					
			clinica	l rotati	on
				of	4
RATING RANGES: Please evaluate the stude	nt in the following c	ategories by writing	one numb	er per	
item.The rating ranges from 1 through 5, with	5 being the excellen	t rating.			
Performance Objectives					
Demonstrates patient management and history app	propriately				
Uses and applies knobology correctly					
Demonstrates, identifies and evaluates anatomy in					
Appropriately performs transabdominal or endova	ginal imaging				
Identifies and utilizes anatomical landmarks to im	age anatomy and relate	ed pathology			
Demonstrates scanning skills improvement					
Utilizes obstetrical package appropriately to evaluate ALARA standard		•	ith the		
Applies knowledge of 1 st trimester anatomy and reconclusion	elated pathology to arri	ive at a preliminary			
The images evaluate fetal anatomy in all image pl	anes with proper meas	urements			
The examination was performed in a timely mann	er according to level				
Please note areas of suggested improvement below	v:				
DMS student		Supervising s	onographer	•	
Date		Affiliate	site		
Grading Scale (point range):	TOTAL	L NUMBER OF F	POINTS:		
50 - 40 points = A	FINAL	GRADE BASED	ON PTS	5.:	
39 - 26 points = B	PTS. GR.	PTS. GR.	PTS.	GR	-
1	50-48100	39-3792	25-24		-
25 - 16 points = C	47-4698		23-22		
	45-4496		21-20		
	43-4295		19-18		
	41-4093		17-16	75	
	Below 16 = Fai	lling			

Obstetrics and Gynecology Professional Competencies

Examination

\mathbf{A}	TD	P

OB/2nd and 3rd Trimester Examination

Clinical rotation

our rotution						
	of	4				

RATING RANGES: Please evaluate the student in the following categories by writing one number per item. The rating ranges from 1 through 5, with 5 being the excellent rating.

nem. The family family from through 3, with 3 being the execution family.	
Performance Objectives	
Obtains patient history and evaluates signs, symptoms and risk factors related to	
second or third trimester obstetrical pathology	
Demonstrates, identifies and evaluates fetal anatomy appropriately	
Identifies landmarks, obtains images and accurately measures the parameters (i.e.	
BPD, HC, AC, FL) and demonstrates critical thinking	
Demonstrates, evaluates and utilizes different patient positions and windows to	
optimally visualize fetus and pelvic structures	_
Demonstrates, identifies and evaluates fetal lie, heart rate and four chamber view	
Demonstrates, identifies and evaluates placenta location and grading	
Demonstrates, identifies and evaluates umbilical cord, number of vessels and	
umbilical cord Doppler if required	
Utilizes obstetrical package appropriately to evaluate measurements obtained and	
complies with the ALARA standard	
Demonstrates, identifies, evaluates and accurately measures when appropriate the	
fetal structures (i.e. kidneys, spine, cerebellum, etc.)	
The examination was performed in a timely manner according to level	
Please note areas of suggested improvement below:	

DMS student	Supervising sonographer			
Date	Affiliate site			
Grading Scale (point range):	TOTAL NUMBER OF POINTS:			
50 - 40 points = A	FINAL GRADE BASED ON PTS.:			
39 - 26 points = B	<u>PTS. GR. PTS. GR. PTS. GR.</u> 50-48100 39-3792 25-2484			
25 - 16 points = C	47-4698 36-3490 23-2283 45-4496 33-3188 21-2082			
	43-4295 30-2887 19-1879			
	41-4093 27-2685 17-1675 Below 16 = Failing			

Obstetrics and Gynecology Professional Competencies Examination TD OB/Biophysical Profile Examination Clinical rotation of RATING RANGES: Please evaluate the student in the following categories by writing on number per item. The rating ranges from 1 through 5, with 5 being the excellent rating. Performance Objectives Obtains patient history and evaluates signs, symptoms and risk factors related to second or third trimester obstetrical pathology Utilizes obstetrical package and complies with ALARA standards Identifies related fetal anatomy appropriately Evaluates fetal breathing movements appropriately Evaluates gross body movements appropriately Evaluates fetal tone appropriately Evaluates reactive fetal heart rate appropriately Measures qualitative amniotic fluid volume appropriately Demonstrates knowledge and improvement in OB scanning skills The examination was performed in a timely manner according to level Please note areas of suggested improvement below: DMS student Supervising sonographer Date Affiliate site Grading Scale (point range): **TOTAL NUMBER OF POINTS:** 50 - 40 points = A FINAL GRADE BASED ON PTS.: 39 - 26 points = BPTS. PTS. GR. PTS. GR. GR. 50-48.....100 39-37.....92 25-24...84 23-22...83 25 - 16 points = C47-46.....98 36-34.....90 33-31.....88

45-44.....96

43-42.....95

41-40.....93

Below 16 = Failing

30-28.....87

27-26.....85

21-20...82

19-18...79

17-16...75

Obstetrics and Gynecology Professional Competencies					
Examination		A	TD	P	
					_
Invasive Procedure	i				

Invasive Procedure

clinical rotation

of 4

RATING RANGES: Please evaluate the student in the following categories by writing one number per item. The rating ranges from 1 through 5, with 5 being the excellent rating.

Performance Objectives	
Obtains patient history appropriately and evaluates for risk factors related to the procedure	
Sets-up and prepares room as indicated for requested procedure and establishes and maintains sterile fields and/or sterile transducer as indicated	
Effectively communicates with patient and monitors patient after procedure if requested	
Demonstrates, evaluates and localizes appropriate amniotic fluid pocket for Amniocentesis	
Monitors and verbally guides procedure (Amniocentesis) as required	
Evaluates the fetus after amniocentesis appropriately	
Demonstrates, localizes and evaluates path, monitors and provides verbal guidance as requested and assists with instrumentation during PUBS, CVS or Sonohysterography if applicable	
Utilizes OB package appropriately and complies with ALARA standard	
Demonstrates knowledge according to the current procedure	
The examination was performed in a timely manner according to level	

DMS student	Supervising sonographer			
Date Grading Scale (point range):	Affiliate site TOTAL NUMBER OF POINTS:			
50 - 40 points = A	FINAL GRADE BASED ON PTS.:			
39 - 26 points = B	<u>PTS. GR. PTS. GR. PTS. GR.</u> 50-48100 39-3792 25-2484			
25 – 16 points = C	47-4698 36-3490 23-2283 45-4496 33-3188 21-2082 43-4295 30-2887 19-1879 41-4093 27-2685 17-1675 Below 16 = Failing			

Texas Southmost College

Diagnostic Medical Sonography Program

Rating Scale for Evaluation of Professional Qualities

READ BEFORE BEGINNING: DO NOT write your name on this evaluation sheet. This scale gives the clinical instructor or sonographer the opportunity to express their feelings about the student's value system, emotions, and attitude towards this profession. Therefore, as you rate the student please mark your ratings as fairly and honestly as possible. Marking all the items with the same number is a sure sign of little thought on your part. The Clinical Coordinator will collect these forms from each clinical site. Thank you.

NOTICE TO INSTRUCTOR: Any rating of less than 2 will require comments.

BACKGROUND INFORMATION O NAME OF STUDENT BEING I O Name of hospital or clinic:		TED: Date:			
○ The evaluator is a: (place a check☐ Clinical Instructor		ographer		Other	
RATING RANGES: Please evaluation number per item. The rating ranges					ne
A.) Compliance: Appearance	1	2	3	4	5
Comments:					
B.) Professional Interaction (patient/sonographers)	1	2	3	4	5
Comments:					
C.) Professional Growth/Development	1	2	3	4	5
Comments:					
D.) Self-Reliance/Confidence	1	2	3	4	5
Comments:					
E.) Motivation	1	2	3	4	5
Comments:					
	OVE	R PLEASE			

F.) Image Acquisition/Analysis	1	2	3	4	5
Comments:					
G.) Skill performance	1	2	3	4	5
Comments:					
H.) Equipment Analysis	1	2	3	4	5
Comments:					
I.) Patient Management	1	2	3	4	5
Comments:					
J.) Compliance: Follows Rules/Regulations/Instru Comments:	1 ection	2	3	4	5
NOTICE TO STUDENT: Any rate coordinator.	ing of les	s than 2 will requ	iire counseling	g by the clinical	

coordinator.

Grading Scale (point range):

TOTAL NUMBER OF POINTS:

$$50 - 40 \text{ points} = A$$

FINAL GRADE BASED ON PTS.:

39 - 26 points = B	PTS. GR.	PTS. GR.	PTS. GR.
	50-48100	39-3792	25-2484
25 - 16 points = C	47-4698	36-3490	23-2283
-	45-4496	33-3188	21-2082
	43-4295	30-2887	19-1879
	41-4093	27-2685	17-1675
	Below 16 = Failing		

Please Add Comments: -

Practicum Performance Evaluation Protocol

The student is reminded that the performance of sonographic examinations is a process which is characterized by the sonographer demonstrating increased proficient and competency as experience is required. For this reason, the program has developed practicum evaluation guidelines for the sonography student and the practicum instruction. The protocol is indicated in the following sequence.

Didactic Instruction and Laboratory Activities: These activities will address anatomy, physics and instrumentation. Scanning techniques are introduced in the laboratory under instructor supervision. Case studies will aid in the identification of normal anatomy.

Practicum Observation: The student is assigned to a practicum rotation at one of the Rio Grande Valley practicum affiliates. During the early stage of the practicum, the student is limited to an observation phase.

Directly Supervised Performance: After the student observes the sonographer perform an examination a sufficient number of times, understands the function of the equipment and examination protocol, the student is allowed to begin transducer work on the patient. The rate of progress is dependent upon the students' ability to perform the tasks assigned by the clinical instructor. The student is under direct supervision until the clinical instructor determines that the procedures(s) performed by the student are consistent with diagnostic requirements for that examination.

Practicum Performance Evaluation: When the student and the instructor agree that a procedure(s) may be performed independently, a practicum performance evaluation is conducted. If the student is not successful with the examination attempted, remedial instruction and directly supervised performance is required until the clinical instructor determines that the deficiencies have been properly addressed.

Performance Under Limited Supervision: Upon successful completion of a practicum evaluation, the student is permitted to perform the examination with a clinical instructor in the area but not necessarily in the same room. The clinical instructor will be immediately available if needed. The student will be required to get the clinical instructor's approval of the study prior to discussing it with the interpreting physician.



Periodic and Continued Education: To ensure that a student maintains competency and continues to improve, any procedure previously evaluated will be reassessed periodically at random. If a student is not successful with a re-evaluation, the student will be required to return to directly supervised performance until the instructor determines that the deficiency has been corrected.

Note: In support of professional responsibility for provision of quality patient care, **unsatisfactory sonograms shall be repeated only in the presence of a qualified sonographer**, regardless of the student's level of competency. The staff sonographer must sign the student's repeat form to indicate direct repeat supervision.

Practicum Professional Competency Evaluations

As indicated previously, these evaluations will be conducted at such time that the instructor and student determine that the examination can be conducted independently. The student is expected to complete the examinations that are required for each practicum course. Once the student reviews the completed evaluation, it shall remain confidential and kept on the designated location. This grading component represents 45% of the course grade.

Practicum Education Requirements Before Graduation

The student must be able to demonstrate competency in all of the procedures identified in the graduation competency sheet. It should be noted that proficiency in sonographic examinations is a continuous process.

Student Examination Record

The students will be required to record any and all exams that they have participated in or performed. It is vital that the students record all examinations in this record book since it will be used to document the total number of examinations completed while enrolled in the program.

Practicum Grading Distribution_____

The following distribution is in effect for each practicum course:

DMSO 1360:	Clinical I	
	Professional Competencies	45%
	Film Analysis/Sim./Registries	
	Professional Qualities	
DMSO 1161:	Clinical II	
	Professional Competencies	45%
	Film Analysis/Sim./Registries	
	Professional Qualities	
DMSO 2160:	Clinical III	
	Professional Competencies	45%
	Film Analysis/Sim./Registries	
	Professional Qualities	

DMSO 2361: Clinical IV

Professional Competencies	45%
Film Analysis/Sim./Registries	
Professional Qualities	

Required Practicum Evaluation Schedule_

DMSO 1360: Clinical I

Abdominal Portion

- Hepatic 1.
- Gallbladder 2.
- 3. **Pancreas**
- Kidneys 4.
- 5. Spleen
- 6. **Aorta**
- Major Upper abdominal vasculature 7.

Obstetrics and Gynecology Portion

- Non-pregnant uterus 1.
- 2. **Ovaries**
- Pelvic vessels 3.
- Urinary Bladder
- 5.
- 1st Trimester Pregnancy 2nd and 3rd Trimester Pregnancies

Superficial Structures Portion

1. Small parts (thyroid, testicular, prostate)

DMSO 1161: Clinical II

Superficial Structures Portion

1. Small parts (thyroid, testicular, prostate)

Abdominal Portion

All those examinations identified above 2.

Obstetrics and Gynecology Portion

3. All those examinations identified above

DMSO 2160: Clinical III

Abdominopelvic Pathology Portion

1. All pathology associated with the abdominal portion above

High Risk Obstetrics

- 1. Transvaginal Pelvis
- 2. Extensive Obstetrics

Abdominal Portion

1. All those examinations identified in Practicum DMSO 1260

Obstetrics and Gynecology Portion

1. All those examinations identified above in Practicum DMSO 1260

DMSO 2361: Clinical IV

Pathophysiology Portion

- 1. Abdominal Category
- 2. OB-GYN Category

Abdominal Portion

1. All those examinations identified in Practicum DMSO 1260

Obstetrics and Gynecology Portion

1. All those examinations identified above in Practicum DMSO 1260

SECTION V PROGRAM PRACTICUM POLICIES

Absence Policy

Time Sheet Policy

Tardy Policy

Sonographic Repeat Policy

Report of Sonographic Repeats

AIDS/Infection Control/Standard Precautions/Safety Policies

Student Health and Immunization Policies

Uniform Policy

Injury Policy

Sonography Student Title IX Pregnancy Policy

Student Record Book Policy

Telephone Calls Policy

Incident Report/Counseling Policies

Criteria for Unsafe Practicum Performance

Student Employment Policy

CPR, Criminal Background Check and Drug Testing Policies

Absence Policy for Practicum

The practicum components comprise a major portion of the students learning activities; therefore, we want to stress that any absences should be taken only in the event of illness or family emergency. Notify the practicum site of your absence by calling at least 15 minutes prior to normal reporting time. If an emergency arises and the student must leave the practicum site, the exit time must be documented. This time will be deducted from the maximum allotment allowed, and the time must be made up in accordance with the program policies.

Punctuality, consistent attendance, and the student's diligence in participating 100% with patient care and examinations are key factors to the successful completion of this program as well as securing employment. Each student must be registered in the practicum course at TSC *prior* to attending the practicum site.

Students are involved in didactic and practicum rotations not to exceed 40 hours per week. Some practicum courses contain class time and/or a lecture component. Your attendance is required for both of these components. The following is a breakdown of the semesters involved, and the total number of absences that are allowed. If a student is absent more than the allotted hours designated below, the practicum grade will be affected. For each absence beyond the maximum allowed, ten points will be deducted from the overall practicum course grade. Any time missed will be replaced during the make-up schedule the last week of the semester (this includes tardies and absences).

Example: A student is enrolled in a first year course that allows a 21 hr absence. If 21 hrs have been taken, and the student has another absence, the result would be a ten point deduction from the overall practicum grade: had a 97 A = after the ten point deduction the grade is 87 B, or had a 91 B = after the ten point deduction the grade is 81 C.

If a fourth day is missed, another ten points will be deducted from the overall practicum grade: had an 87 B =after the ten point deduction the grade is 77 C.

**Anytime a student is absent (late: minutes, hours, etc.), he/she MUST see the clinical faculty for counseling. This is done to ensure maximum practicum attendance. Any infraction of this policy will result in a written reprimand.

EXAMPLE: **FOR EMERGENCIES**

SEMESTER	COURSE #	HRS/WKS/DYS	MAX.# Hrs
Spring 1st yr.	DMSO 1360	18 hrs. a week X 16 weeks	21
Summer, 1st yr.	DMSO 1161	19 hrs. a week X 5.5 weeks	7&30mins
SummerII, 1st yr.	DMSO 2160	19 hrs. a week X 5.5 weeks	7&30mins
Fall, 2nd yr.	DMSO 2361	18 hrs. a week X 16 weeks	21

Time Sheet Policy_

Each student will fill out his or her time sheet accordingly:

- 1. **ONLY** the student whose name appears on the time sheet should write on that time sheet.
- 2. sign in immediately before beginning practicum duties; take care of personal items **BEFORE** you clock in
- 3. sign out for lunch and sign in upon returning from lunch (student must complete a minimum of 7 to 7 1/2 hours of practicum per assigned day)
- 4. sign out at the end of your practicum shift with a **DAILY** clinical instructor signature
- 5. time sheets are to remain in the practicum settings at **all times**
- 6. students must transfer the time sheet to CAMPUS **only when instructed by program faculty**
- 7. make sure the clinical instructor signs the bottom of the time sheet (on both sides) upon semester completion

**Please arrive at the practicum site at least ten minutes before designated practicum time.

Tardy Policy_____

A student who is late less than 3 hrs or leaves the clinical site less than 3 hrs before the end of the practicum day will be assessed a tardy* (beyond 3 hrs, either tardy or leaving early, the student will be assessed an absence). One point will be deducted from the overall practicum course grade for each tardy. Only two tardies will be allowed in any practicum semester. If a third tardy is accrued, an 7-hour absence will be deducted in addition to the one point deduction for the third tardy. If a student anticipates being late more than 15 minutes, the student needs to inform the clinical instructor at the assigned site as well as call the Clinical Coordinator.

Sonographic Repeat Policy_____

In support of professional responsibility for provision of quality patient care, <u>unsatisfactory</u> <u>sonograms shall be repeated only in the presence of a qualified sonographer</u>, regardless of the student's level of competency. The staff sonographer must sign the student's repeat form upon completion of the supervised repeated image. *Please DO NOT write outside the designated table boundaries!

Name

RECORD OF SONOGRAPHIC REPEATS

Texas Southmost College Diagnostic Medical Sonography Program "SAMPLE"

Date	Room	Sonographic Exam Repeated	Sonographers Initials

POLICY: EVERY REPEAT MADE BY A STUDENT MUST BE SUPERVISED BY A SONOGRAPHER

AIDS\Infection Control\Standard Precautions\Safety Policy

NOTE: Students will have an in-service on universal precautions, infection control, communicable diseases, and safety held on online during Hospital Wide Orientation (HWO) and as provided by the practicum affiliations.

Communicable Diseases Policy

Students in the Diagnostic Medical Sonogram Program will be given an orientation on communicable diseases during HWO. The students will follow the guidelines set forth by TSC, the practicum sites, the Centers for Disease Control, Occupational Safety and Health Administration (OSHA), and any other regulatory agency affiliated with both TSC and the practicum affiliates.

GUIDELINES:

- 1. Students are required to have a complete physical examination and current immunization (see physical examination forms) records on file. These records must be submitted prior to the first practicum rotation.
- 2. If a student is unable to meet practicum objectives due to the presence of a communicable disease, a passing practicum grade cannot be obtained.
- 3. In the event that a student becomes exposed to a communicable disease, the following procedures are recommended: (Hepatitis, Tuberculosis, Mumps, Measles, etc.)
 - a. report exposure to clinical instructor, authorities in health care agencies, and educational institution.
 - b. assess the clinical status of the source-client.
 - c. test the exposed individual soon after possible exposure.
 - d. retest in 6 weeks, 3, 6, and 12 month intervals with a private physician
 - e. seek counseling and adhere to the recommendations for the prevention of transmission of infections or communicable diseases.
 - f. confidentiality of medical records is protected and information is shared only on a strictest "need to know" basis.
 - g. confidential screening for various communicable diseases can be obtained through the Cameron County Health Department.

Standard Precautions Policy

Students in the Diagnostic Medical Sonography Program will receive orientation on Standard Precautions as set forth by the Centers for Disease Control (CDC), Occupational Safety and Health Administration (OSHA), and any other regulatory agency affiliated with both TSC and the practicum affiliates during HWO.

GUIDELINES:

- 1. Students will be required to view the following videotapes:
 - a. AIDS precautions / universal precautions
 - b. using protective barriers
 - c. washing hands
 - d. current infection control guidelines for healthcare professionals
- 2. Students will be evaluated on the following skills:
 - a. handwashing
 - b. proper disposal of needles/sharps
 - c. proper disposal of contaminated linens or objects
 - d. appropriate wear of mask, gown, gloves, etc.

Safety Policy

Students will receive orientation on safety during HWO. Students are advised that as part of the standard routine of performing practicum examinations on patients in medical facilities, exposure to contagious and pathogenic organisms may occur. Students will be required to abide by the safety/regulations that govern the practicum facilities. Safety requirements may include the following:

- 1. Covering of all cuts.
- 2. Wearing of gloves when conducting any examination.
- 3. Washing hands after each patient or when leaving the ultrasound lab.

GUIDELINES:

- 1. Students will view the videotapes addressing:
 - a. Using Correct Body Mechanics
 - b. Sonographic Safety
- 2. Students will have an overview lecture on general safety tips that include but not limited to:
 - a. wheelchairs
 - b. gurney
 - c. electrical components of sonographic units
 - d. other equipment used at the practicum facilities.

Immunization Policy

Students must obtain a physical exam and submit it to the Diagnostic Medical Sonography Program office before beginning the Spring semester. Students are required to maintain current immunizations. This includes yearly TB testing, Flu shot, Hep. B vaccine series, tetanus (every 10 yrs.), and other routine childhood immunizations. Students must be current on appropriate immunizations to be allowed in the practicum sites. Students are financially responsible for their personal health care/hospitalization costs incurred while participating in the Diagnostic Medical Sonography Program.

Dress Code (Uniform Policy)

General Information

- 1. The appearance of all students must generate confidence and respect from patients, families, and other visitors from the community in all practicum agencies.
- 2. Students' grooming practices shall make up ample provision for sanitation, safety, and comfort. The student must wear the practicum uniform at all times while at the practicum site. TSC uniforms are **NOT** to be worn when the student is working as an **EMPLOYEE OR VOLUNTEER.**
- 3. All students shall be required to present a clean and neat appearance. All students shall dress in a manner appropriate for a professional health care environment.

What is appropriate?

- 1. Uniform must be designated color scrub pants and top; neat, clean, well-fitting and without tears. Uniform must be properly hemmed; not pegged or rolled-up.
- 2. TSC uniform patches must be permanently affixed to the left upper sleeve of the uniform scrub top.
- 3. **IF REQUIRED**, a white lab coat must have TSC uniform arm patch affixed to left upper sleeve with name embroidered on left front. The lab coat may be worn over uniform when student is in practicum site.
- 4. No sweaters are to be worn as uniform tops during labs or practicum rotations.
- 5. A student's name <u>must</u> be embroidered to the scrub top any time the student is in a practicum area—either in hospital, clinic, or other community site.
- 6. Uniform shoes must be all white, leather, uniform types, with closed toes and heels, soft-soled, clean, polished, and with clean white shoelaces. No clogs will be allowed.
- 7. Hospital scrubs will be worn only in designated areas. Students must wear student uniform to hospital on practicum days even if scrubs will be worn during practicum assignment.
- 8. Hair must be neat, clean, and up off collar or secured in a ponytail, bun, or braid. Hair ornaments must be small and white, navy blue, or neutral in color. Beards and mustaches must be kept trimmed and clean.
- 9. Nails, whether natural or applied, must be clean, neat, and not excessively long (fingertip length only). Clear, unchipped polish may be worn (no reds, hot pinks, blues, blacks, greens or purples allowed).

- 10. Student may wear wedding band, simple necklace inside uniform, and stud-type earrings which are ½ inch or smaller in size. Only one pair of earrings is allowed. Loop earrings are not acceptable. No other jewelry is allowed.
- 11. Ear piercing is the <u>only</u> body piercing that is allowed in the practicum area. If one has other obvious piercing (e.g. eyebrow, lip, nose, tongue, etc.); the ring, bar or other ornament must be removed or the area must be covered with a clean bandage.
- 12. Socks will be worn with uniform shoes: white socks for men and women or skin-colored hose for women.
- 13. A **white** thermal undershirt may be worn underneath the scrub top during winter or in departmental areas where temperature is very low.
- 14. Students may wear a wrist watch. Students cannot wear any bracelets on wrist.

What is **NOT** appropriate?

- 1. Oversized uniform which may make you look sloppy.
- 2. Pant legs stuck into socks.
- 3. Uniform without appropriate patch and nametag.
- 4. Lab coat without appropriate patch and nametag (practicum site lab coats).
- 5. Hair hanging in front of face or below collar.
- 6. Untrimmed beards or mustaches.
- 7. Long fingernails that exceed the required length (fingertip length).
- 8. Inappropriate jewelry: dangling or earrings too large, heavy and long chains with large pendants or medallions.
- 9. Canvas shoes, sandals, colored tennis shoes, no street tennis shoes.
- 10. Wearing any other badges, belts, bows, etc. other than the prescribed accessories.
- 11. Colored socks (other than white) worn with uniforms.
- 12. No **cellular telephones** are allowed at the practicum site (not even on vibrate or off mode).
- 13. Chewing gum, eating food, or drinking beverages while on duty at the practicum site.
- 14. Reading ANY material NOT related to sonography school studies; i.e., magazines, internet computer sites, etc.
- 15. Napping while on duty at the clinical site.
- 16. Communication or gossip among students, sonographers, or clinical instructors between different practicum sites.

Lab coats must be worn upon leaving the Diagnostic Imaging Department, for instance, when going to lunch, break, portables, distribution of reports, and to and from hospital or clinic.

Caution: If the practicum site has specific regulations concerning the lab coats, the students shall adhere to the specified regulations.

SURGICAL SCRUBS

Surgical scrubs that belong to the hospital will only be worn by the student who is scheduled to be in a surgical rotation.

If the need arises to leave the surgical suite the individual must put on a lab coat or other means of cover before stepping out to another department. Upon return to the surgical suit, remove the labcoat or cover before re-entering the sterile area.

DO NOT leave the hospital premises with hospital scrubs! Hospital security may charge you with theft of hospital property.

Non-Compliance will result in dismissal from practicum and you will be charged with an 8 – hour practicum absence.

Injury Policy (at Practicum Site)_____

It is the intent of the TSC Diagnostic Medical Sonography Program to promote quality care and safety for clients, students, staff, and faculty.

Needle/Sharps Injury:

1. If a student is stuck or cut by a needle or sharp object, the guidelines set forth by that particular practicum site will be followed.

For example:

- a. bleed the sight, wash thoroughly with soap and water
- b. report to the emergency room or other designated area and report incident <u>that</u> same day
- c. fill out necessary paperwork for the needle puncture or cut you received, and inform Imaging Director, Clinical Instructor, and Clinical Coordinator of the incident

Other Physical Injury to Body:

- 1. If a student sustains a physical injury, the guidelines set forth by that particular practicum site will be followed.
 - a. if a student becomes injured or ill at the practicum site, care will be provided by the facility
 - b. this does not mean care will be provided free of charge; students are responsible for all medical expenses accrued
 - c. inform the Imaging Director, Clinical Instructor, Clinical Coordinator and document the incident by completing an incident report

Follow-up Procedure after Exposure to blood or bodily fluids:

In the event that a student or faulty member becomes exposed to blood or bodily fluids, the following procedures are recommended:

- 1. Report exposure to the clinical instructor, program coordinator and program director, authorities in health care agency and document the event
- 2. Assess the clinical status of the source-client
- 3. Test the exposed individual and client for evidence of HIV of Hepatitis B as soon as possible after the exposure
- 4. Retest if negative in 6 weeks, then at 3, 6, and 12-month intervals with a private physician
- 5. Seek counseling throughout the experience
- 6. Adhere to the recommendations for the prevention of transmission of any infectious disease during the testing period (90 days)
- **Confidentiality of medical records is protected, and information is shared only on the strictest "need to know" basis. Any breaches of confidentiality will be grounds for disciplinary action.
- **Confidential screening for various communicable diseases can be obtained through the Cameron County Health Department.

Sonography Student Title IX Pregnancy Policy_____

Texas Southmost College does not discriminate against any student on the basis of pregnancy or related conditions. Pregnant students have rights under both Title IX and the Americans with Disabilities Act.

A female student is given the option of whether or not to inform program officials of her pregnancy. If the student chooses to voluntarily inform officials of her pregnancy, it must be in writing. In the absence of this voluntary written disclosure, a student cannot be considered pregnant. However, due to the sensitivity of the unborn child to radiation, it is necessary to inform female applicants of the possible health risks involved as a result of occupational exposure during pregnancy.

The following shall be followed:

 Pregnant students are encouraged to notify the Program Director as soon as pregnancy is suspected/determined so that appropriate radiation safety measures can be implemented. As soon as pregnancy is determined, a physician's statement verifying the pregnancy will be submitted by the student. This statement must include a medical release, which allows the student to continue the program without interruption. If, for medical or personal reasons, the student is unable to complete the clinical assignments, she may:

- a. Work with the Program Director to develop a plan on how she will make up the work; or
- b. Initiate a request for authorization of an "I" (incomplete) or "W" (withdrawal) grade. The student must subsequently remove the "I" grade following the regulations of the College. However, impediments to completing course requirements in any of the clinical practicums may be attributable to the lack of clinical space for the student to complete such requirements of removing an "I" grade from the student's records. Should the student choose to withdraw from a clinical course, the "W" guidelines in the College's policies and procedures must be met. Please contact Diagnostic Medical Sonography Program at (956) 295-3550 for further information regarding withdrawal and incompletion.
- 2. If pregnancy occurs during the first semester of the program and the student is unable to fulfill the required clinical objectives, the student may withdraw from the program, if so desired. As in all withdrawal scenarios, the student will be subject to reapplication of the DMS program.

Other Rights and Responsibilities:

- Absences due to medical conditions relating to pregnancy will be excused for as long as deemed medically necessary by a student's medical provider and students will be given the opportunity to make up missed work.
- Medically necessary absences for pregnancy, childbirth, false pregnancy, abortion, or recovery must be excused regardless of a standard absence policy.
- Students may not be penalized for leave and the student must be allowed to return in the same status.
- Students are not required to complete academic work while on leave.

Students needing assistance can seek accommodations from the Office of Counseling and Student Accessibility Resources or may contact Human Resources at (956) 295-3771.

Student Record Book Policy_____

Upon the first day of practicum, the student will be required to record every exam participated in or performed. It is very important that the student records all examinations in this book since each student is required to have adequate exposure and participation in a broad variety of sonograms. The student must abbreviate for observed, limited supervision, and evaluation on each exam. The student must record the date of exam; the types of exam performed and have it signed by the sonographer or clinical instructor who is credentialed in the specialty of exam. All incomplete record books will be returned to the student for corrections and will be considered late. A late penalty of 5 points will be assessed to the overall clinical grade. Please make all corrections by drawing a line through the error and write your initials (do not white-out) as they are permanent practicum records and must be legible at all times. Record Books are to remain in the practicum settings in the designated area at all times.

Practicum Site Telephone Calls Policy

NO PERSONAL TELEPHONE calls will be **MADE** or **RECEIVED** unless:

- 1. it is a verifiable emergency (family emergency)
- 2. it is a verifiable call from the Program Director/ Clinical Coordinator/ TSC Faculty

Incident Report / Counseling Policy

The intent of this incident form is to provide reporting of a student's personal, professional, or behavioral conduct occurrences within the practicum setting. (See incident report/counseling form)

GUIDELINES:

- 1. Faculty, clinical instructor(s) or sonographer(s) will fill out an incident report form.
- 2. When filling out the form, the following information must be included in the description of the incident:
 - a. date/time of incident
 - b. names of individual(s) involved
 - c. short summary describing the incident
- 3. The appropriate channels of reporting are:
 - a. Clinical Instructor \rightarrow Faculty \rightarrow Clinical Coordinator \rightarrow Program Director
- 4. This form will be filed in the student's practicum file.

5. The student will be asked to provide comments concerning the incident.

Note: The following are a few examples of the types of offenses documented:

- a. malicious treatment/harassment
- b. threatening or intimidating another individual
- c. assault/sexual assault
- d. unauthorized use of drugs, alcoholic beverages, weapons, or explosives
- e. theft or falsification of records or information
- f. disruptive activities

IV infusions

- g. negligence in regard to the patient's safety and welfare
- h. negligence in regard to the use and operation of sonographic equipment
- i. breaching of confidentiality (patients records, diagnosis, etc...)
- j. not following practicum policies/guidelines
- k. **napping** while on practicum duty

Criteria For Unsafe Practicum Performance

Since sonography students are legally responsible for their own acts, commission and/or omission, and the sonography instructors are responsible for any acts of their students in the practicum sites, it is necessary to define unsafe behavior.

<u>Unsafe practicum performance</u> is demonstrated when the student:

Safe	ety_	Examples
A.	Violates or threatens <u>physical</u> safety of the patient	Fails to properly position patient, carry out medical sonographic orders, appropriately utilize side rails/restraints
B.	Violates or threatens the <u>psychosocial</u> safety of the patient	Attacks/degrades the individual's beliefs or values
C.	Violates or threatens <u>micro-biological</u> safety of the patient	Fails to recognize and correct violations of aseptic technique
D.	Violates or threatens <u>chemical</u> safety of the ent	Violates the "6 Rights" in administering contrast media, fails to accurately monitor

^{*} Depending on the severity of the offense, the college will take the necessary disciplinary action against a student for an offense with a minimum penalty of suspension to a more serious penalty of dismissal from the Diagnostic Medical Sonography Program.

Diagnostic Medical Sonography Process

- A. Inadequately and/or inaccurately <u>assesses</u> the patient
- B. Inadequately or inaccurately <u>plans</u> care of the patient
- C. Inadequately or inaccurately <u>implements</u> patient care
- D. Inadequately or inaccurately <u>evaluates</u> patient care

Unable to identify basic human need through assessment; makes repeated faulty judgement/decisions resulting in ineffective patient care; fails to observe/report critical patient data; comes to the practicum unprepared

Skills

A. Violates previously mastered principles/ objectives in carrying out sonographic examinations and/or delegated medical functions

Examples

sophomore students unable to perform learning examinations with indirect supervision, freshman student fails to perform examinations previously covered in lab and/or class

Student Employment Policy ___

It is not the policy or the intent of the Diagnostic Medical Sonography Program to act as an employment agency or to participate in any facet of employment. The program will remain a separate entity from the employment status of the sonography student.

CPR, Criminal Background Check and Drug Testing Policy

CPR: A valid American Heart Association BLS Course C CPR card is required to register for Clinical Practicum. You will be asked to produce such a card each semester you are in the Diagnostic Medical Sonography Program. The student has the option of taking the American Heart Association BLS Course C through TSC for academic credit, through TSC for continuing education or from another source of the student's choice. Red Cross CPR will not be honored.

CBGC and DT: A criminal background check and drug testing for Allied Health students and faculty was initiated in the Fall of 2005 in response to the new requirements of clinical facilities. At the time of application, all students are provided information that, if selected, they will be admitted only upon completion of a criminal background check and drug testing through a TSC approved vendor. The applicant is responsible for the fees which are currently approximately \$92.00 (includes immunization tracker, criminal background check, and drug testing).

*Positive criminal histories will be reviewed anonymously by the Consortium for Health Professional Education (CHPE). CHPE is made up of high-ranking personnel from TSC and area hospitals. The CHPE reviews each case individually and determines whether that applicant will be allowed to attend clinical practicum. Students may not complete the program without attending clinical practicum.

*Students should be advised that application for state licensure will again involve a review of criminal history by the state licensure board, which may or may not be approved independently of the CHPE finding.

SECTION VI APPENDICES

Incident Report/Counseling Form

Advisement Referral Form

Definitions

Texas Southmost College Diagnostic Medical Sonography Program

Incident Report Form

Name:	Location:	
Date:	Type of Record: Verbal or Written:_	
DESCRIPTION OF INCI	DENT:	
RECOMMENDATIONS:		
1		
2		
3		
STUDENT COMMENTS:	:	
Student Signature	Clinical Coordina	ıtor
Program Director	Clinical Instructor	•

Texas Southmost College Diagnostic Medical Sonography Program Advisement /Counseling Form

Name:	ID Number:		
Date:	Instructor:		
Type of Advisement:			
☐ Academic	Financial		
☐ Behavioral	Practicum		
Identify type of referral if necess	sary:		
Academic, referral to			
☐ Behavioral, referral to			
Practicum, referral to			
DESCRIPTION OF ADVISEMI	ENT/REFERRAL:		
RECOMMENDATIONS:			
1.			
2			
STUDENT COMMENTS:			

DEFINITION OF TERMS:

SONOGRAM - A medical examination of internal structure by using sound waves.

SONOGRAPHY SUPERVISOR- The person directly responsible to the hospital administration and who supervises sonographers, clerical staff, and other support personnel of the imaging department.

CLINICAL INSTRUCTOR - The qualified sonographer designated at each practicum facility responsible for the supervision of the practicum education of assigned students.

ARDMS - (American Registry of Diagnostic Medical Sonography) - The American Registry of Diagnostic Medical Sonographers® (ARDMS®), incorporated in June 1975, is an independent, nonprofit organization that administers examinations and awards credentials in the areas of diagnostic medical sonography, diagnostic cardiac sonography, vascular technology, and ophthalmic biometry. Upon completion of all program requirements, the student may write the ARDMS examination to obtain appropriate credentials. It is vital that the student

SDMS - The Society of Diagnostic Medical Sonography was founded in 1970 to promote, advance, and educate its members and the medical community in the science of Diagnostic Medical Sonography. The Society achieves its purpose by: seeking the cooperation of similar organizations; initiating and overseeing educational programs; stimulating and encouraging research; encouraging presentation and publication of scientific papers; collecting and disseminating information pertinent to the membership; publishing a scientific journal and a newsletter; and reviewing and establishing policies regarding the professional status, legislative activity, and welfare of its members.

RADIOLOGY - The branch of medicine concerned with radioactive substances and, using various techniques of visualization, with the diagnosis and treatment of disease using any of the various sources of radiant energy.

DIAGNOSTIC IMAGING - The area of radiology that concerns all subspecialty areas with or without the use of radiation.

RADIOLOGIST - A physician who had a three to four year residency in the specialty of Radiology.

RADIOLOGIC TECHNOLOGIST - A person who, under the supervision of a physician radiologist, operates radiologic equipment and assists radiologists and other health professionals, and whose competence has been tested and approved by the American Registry of Radiologic Technologists.