



ARKANSAS STATE UNIVERSITY

MEDICAL IMAGING AND RADIATION SCIENCES PROGRAMS



**DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM
STUDENT HANDBOOK**

2013-2014

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MISSION, PHILOSOPHY AND GOALS

1.0 University Mission

We pursue and share knowledge within a caring community that prepares students in challenging and diverse ways to become more productive global citizens.

1.1 College of Nursing & Health Professions Mission

The primary mission of the College of Nursing and Health Professions is to provide quality education to students and graduates, and health care providers in a variety of health disciplines. Recognizing its unique position in the lower Mississippi Delta region, the College provides educational programs that are designed to promote lifelong learning based on the expressed needs of its varied constituencies. The College assesses the attainment of this mission in terms of the contributions its graduates make to health care in the Delta region and beyond.

1.2 Program Mission

The mission of the Diagnostic Medical Sonography Program is to produce competent entry-level sonographers eligible for registration by the American Registry of Diagnostic Medical Sonographers in Abdomen, Obstetrics-Gynecology, and Vascular Technology.

1.3 Program Philosophy

The Diagnostic Medical Sonography Program is founded in the belief in the need for better educational opportunities in the changing health care profession of Diagnostic Medical Sonography. Our program is based on the concept that education is a continuing process whereby the learner determines goals, clarifies values, and develops such discipline and understanding as best meets individual needs for self actualization. Through specific general education courses, curriculum and clinical experiences, it is our goal to educate students for a professional career in which they can be successful.

1.4 Program Goals

The goals of the program include personal as well as professional development. The curriculum is designed to develop excellence in all aspects of Diagnostic Medical Sonography with the learning concentration to be: General (defined as: abdominal, obstetrical, gynecological, superficial parts and other appropriate areas) and Vascular and to provide appropriate health care service to the public and the medical community.

1.5 General Program Objectives

Graduates of the program in Diagnostic Medical Sonography should exhibit the following terminal behaviors:

- 1.5.1 Deliver the planned course of Diagnostic Medical Sonography.
- 1.5.2 Utilize oral and written communication with patients and colleagues.
- 1.5.3 Demonstrate knowledge and understanding of human gross and sectional anatomy.
- 1.5.4 Demonstrate knowledge of physiology, pathology, and pathophysiology.
- 1.5.5 Provide patient care and comfort.
- 1.5.6 Demonstrate knowledge and understanding of acoustical physics, Doppler ultrasound principles and ultrasound instrumentation.
- 1.5.7 Detect any equipment malfunctions and report them to the proper authority.
- 1.5.8 Recognize and identify the sonographic appearance of normal anatomic structures associated with each learning concentration.
- 1.5.9 Recognize and identify the sonographic appearance of abnormal anatomic structures associated with each learning concentration.

- 1.5.10 Provide patient educations related to medical ultrasound and/or other noninvasive diagnostic vascular techniques, and promote principles of good health.
- 1.5.11 Act in a professional and ethical manner.
- 1.5.12 Record, analyze, and process diagnostic data and other pertinent observations made during the procedure for presentation to the interpreting physician.
- 1.5.13 Obtain, review and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results.

1.6 GENERAL INTRODUCTION

This handbook has been compiled to acquaint students with the policies and procedures utilized by the professional program in Diagnostic Medical Sonography. **It is the responsibility of the student to read the entire handbook.**

Students enrolled in the Diagnostic Medical Sonography Program are responsible for observing all policies and procedures stated in this handbook, in addition to any rules and regulations which are contained in the ASU Undergraduate Bulletin and/or the ASU Student Handbook. **Failure to read this handbook does not excuse students from the requirements and regulations contained herein.**

Students are expected to adhere to the highest standards of medical ethics in all periods of attendance in the clinical education centers. All clinical education centers, while separately located, are considered to be an integral part of the University campus. Any infraction of medical ethics in the clinical education center will be dealt with under appropriate disciplinary policy of the University. It is the student's responsibility to know what the appropriate policies and procedures are at each of the clinical education centers. This is covered during the orientation session.

1.7 STUDENT POLICIES

1.7.1 ACADEMIC ADVISING

Each Diagnostic Medical Sonography student will be advised by the faculty member assigned to the DMS courses in which the student is enrolled. All clinical advising is conducted by the Clinical Coordinator. Each adviser will have regularly scheduled office hours which are posted and other hours by appointment.

If a student plans to seek employment in addition to carrying a full-time academic load, this should be discussed with his or her adviser. Under no circumstances should employment schedules interfere with academic or clinical responsibilities.

Regularly scheduled classroom and clinical activities may not exceed 40 hours per week in accordance with the Commission on Accreditation of Allied Health Education Programs and the Joint Review Commission for Diagnostic Medical Sonography.

1.8 ACADEMIC RESPONSIBILITIES AND STANDARDS

1.8.1 Textbooks

Each student is responsible for purchasing their copy of the required textbooks. Because the same textbook may be used again in later courses, it is strongly recommended that before selling books, a student consult the Diagnostic Medical Sonography faculty who will be teaching future courses.

1.8.2 Assignments

Each student is responsible for completing all reading, written, and oral assignments made by the faculty. If a student is absent from class for any reason, he or she is still responsible for the material disseminated in class.

- Quizzes: May be scheduled or unscheduled. No make-up quizzes will be given.
- Tests: Make-up exams are only given if the instructor is notified prior to class time, and the absence is excused (Policy 1.8.10). Make-up exams will only be given at the end of the semester on "Study Day". Study Day is generally the Tuesday preceding final examinations.
- Homework: Late assignments will be accepted for half credit unless the student is unable to attend class due to an excused absence (Policy 1.8.10). If a student misses class due to an excused absence, homework is due the day they return to class or the assignment is considered late and will be accepted for half credit.

1.8.3 Classroom Etiquette

Each student is responsible for learning the content of any course in which he or she is enrolled and for respecting the rights of fellow students in the classroom.

The instructor has the right to request any disruptive student to leave the classroom. Continued misbehavior in the classroom is cause for disciplinary action.

The use of any tobacco product is prohibited in the classroom and/or in the laboratory. Cellular telephones are prohibited in the classroom and/or laboratory settings. Violation of this policy will affect the student's participation grade for the course.

1.8.4 Course Syllabus

Within the first two class meetings of the semester the instructor is required to provide each student in the course with a syllabus. The syllabus will contain a description of the course, the goals and/or objectives of the course, and the method of evaluating and grading students.

The policies in the course syllabus supersede any policy in the Student Handbook. All policies not covered by the syllabus will remain in effect.

1.8.5 Evaluation and Grading

The program follows the University's grading policy as follows:

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = 0-59

Each instructor is responsible for determining academic achievement for each student in the course.

1.8.6 Standards of Academic Achievement

When the cumulative, semester, or session grade point average falls below 2.00, the student in Diagnostic Medical Sonography will be placed on probation. At the end of the next semester or session of enrollment the cumulative grade point average must be at least 2.00 for the student to remain in the Diagnostic Medical Sonography program.

A student who receives a grade below "C" in any of the Diagnostic Medical Sonography didactic courses may not continue in the Diagnostic Medical Sonography Program. A student who receives a grade below a "C" in any of the Diagnostic Medical Sonography clinical courses may not continue in the program. The policy and procedure for readmission into the Diagnostic Medical Sonography Program is clearly outlined in the ASU Undergraduate Bulletin. This handbook also has a readmission policy (Student Policies, 2.6).

Clinical evaluations and self-evaluations will be filled out each semester and may be used to set goals for future clinical assignments. Unsatisfactory progress in meeting set goals can result in a failed clinical grade for that course. Poor clinical evaluations may also result in dismissal from the DMS program.

1.8.8 Academic Remediation

If a student's grade is below a "C" at mid-term, the student is required to meet with the course instructor to be counseled.

1.8.7 Academic Integrity Policy

Arkansas State University enthusiastically promotes academic integrity and professional ethics among all members of the ASU academic community. Violations of this policy are considered as serious misconduct and may result in disciplinary action and severe penalties.

The complete policy is located in the University Student Handbook.

1.8.9 Copyright Violation

It is illegal to copy any copyrighted material unless permission has been obtained from the copyright owner. A student guilty of copyright violation may face sanctions by the Diagnostic Medical Sonography Program, University, State and Federal authorities.

1.8.10 Attendance

Students are responsible for all announcements, subject matter, and assignments for each class, whether or not he/she is present. Students are expected to attend each class session, take tests and the final exam on the scheduled dates unless an excused absence is obtained.

Excused absences are:

- (1) Extreme illness involving student or his/her immediate family (spouse, child, parent, grandparent or sibling), accompanied by a written doctor's excuse;
- (2) Death in the student's immediate family.

Any absence other than listed above is considered unexcused.

Tardiness is defined as being late for the scheduled class time. It is disruptive to the class. Tardiness results in a reduction in participation points for that class period.

If a student wishes to retain make-up privileges the instructor must be informed prior to the start of class. If a message is not received prior to class the student may lose make-up privileges for activities held during that day. All make-up work is due the day the student returns to class. Late make-up work will be accepted for half credit. Make-up exams will only be given on "Study Day". Historically, study day is the Tuesday immediately preceding finals week.

1.9 EXPENSES

In addition to the normal university tuition, fees, and book costs, a student in the Diagnostic Medical Sonography Program will incur additional expenses. These expenses include, but are not limited to, the following:

1.9.1 Transportation

Each student is responsible for transportation to his/her assigned clinical education center. Transportation and all costs incurred for travel to the clinical education centers is the sole responsibility of the student.

1.9.2 Uniforms

Each student is responsible for providing his/her own uniforms, including lab coats, name tag and shoes.

1.9.3 Liability Insurance

Proof of professional liability insurance is required before a student can begin clinical education. Forms /information regarding liability insurance may be picked up in the office of the Program Coordinator or Clinical Coordinator.

1.9.4 Background check

All students are required to request a background check. Cost of the background check is the sole responsibility of the student. The information concerning the required background check is found on the Medical Imaging and Radiation Sciences website at <http://www2.astate.edu/conhp/radsci/> .

1.9.5 Liability Release

The student must sign a liability release form before participating in live ultrasound scanning on themselves or other volunteer ultrasound students.

2.0 CHANGE OF ADDRESS

The Department of Health Professions, Medical Imaging and Radiation Sciences Programs and University registrar's office should be notified promptly of changes in name or address. Correct phone numbers should be filed with the Department of Health Professions and Diagnostic Medical Sonography Program so that students can be reached in case of an emergency.

2.1 HEALTH

2.1.1 Health Examination

Students are required to submit a completed health form and to have a physical examination prior to entering the clinical education center. The required health form is to be completed by a physician and turned in to the Clinical Coordinator. A health form is mailed to the student with the acceptance letter into the Diagnostic Medical Sonography program if, however, the student does not receive one in the mail, there is a health form located in the appendix.

2.1.2 Health Care

The Student Health Center is open Monday through Friday for the benefit of students. A description of services and the hours of availability are listed in the Undergraduate Bulletin. Except for the services of the Student Health Center, the University assumes no responsibility for health care costs.

2.1.3 Illness

If the student is ill and unable to attend the clinical education center the Diagnostic Medical Sonography clinical supervisor **and** Clinical coordinator must be notified as soon as possible **prior** to the scheduled starting time. A student is expected to use good judgment in determining whether or not to attend the clinical education center because of illness. The student's time sheet must indicate the person notified and the time the call was made.

If the student is ill and unable to attend class the instructor of the course should be notified.

A student who has a communicable disease may be restricted from working with high risk patients. Examples of common communicable diseases include herpes simplex, strep, hepatitis, colds, and flu. If a student has a suspected communicable disease he/she should:

Contact the clinical instructor as well as the Clinical Coordinator before the scheduled arrival time for clinical education.

2.1.3 Illness, Continued

Communicable diseases may require that one or more of the following protective measures be taken. The student may be:

Required to use reverse isolation techniques while working with non-high risk patients.

Reassigned to a non-patient care area.

Relieved from clinical duty until he or she is no longer contagious.

2.1.4 Required Immunizations:

Rubella
Mumps and varicella vaccination or Titer
TB
Hepatitis -B Vaccine

2.1.4.1 Hepatitis-B Vaccine

Beginning in the Fall Semester 1992, all students in the College of Nursing and Health Professions must provide documented evidence of vaccination for Hepatitis-B. Vaccination consists of three separate doses of the vaccine, given at time zero, 1 month and 6 months. Optimal protection is not conferred until after the third dose. The student must **start** this series prior to entering the Clinical Education Center.

2.1.5 Injury

Should a student become injured or acutely ill during the course of assigned clinical duties, the clinical education center to which that student is assigned will provide treatment and emergency care, with any charges for treatment being the sole responsibility of the student.

Any injury, however minor, occurring while on duty at the clinical education center must be reported to the clinical supervisor and the appropriate incident form completed with copies to the Program Coordinator at ASU.

2.1.6 Pregnancy

If a student is or becomes pregnant during the program, she should notify the Program Director. The program will work with the student to plan successful completion of the program.

2.1.7 Cardiopulmonary Resuscitation

Each student is required to have a valid basic CPR card throughout the program. The student is required to provide the Clinical Coordinator with a copy of current CPR card prior to RSU 4513 Ultrasound Clinical I.

2.1.8 Health Insurance

Students are strongly encouraged to obtain individual health insurance coverage. Information on [Student Health Insurance](#) is available through the Office of Student Affairs, Student Union Building. Professional liability insurance should not be misconstrued as including health insurance coverage.

2.1.9 POLICY/PROCEDURE GUIDELINES FOR INFECTION CONTROL

Introduction

The policy guidelines herein are of a general nature and deal with HIV-related infections as well as other blood borne pathogens. They apply to all students/faculty in the College of Nursing and Health Professions (CNHP). Due to differences in the various programs, individual CNHP programs may have specific rules and/or guidelines that are modifications of those in the general policy; however, the specific policies of the various programs will be consistent in their intent with the guidelines noted herein. This policy shall be reviewed annually and modified as necessary based on the current information from the CDC and OSHA.

2.1.10 ADMISSIONS

The HIV/HBV (Human Immunodeficiency Virus/ Hepatitis B Virus) status of an applicant should not enter into the application process. Applicants applying for healthcare programs should, however, be informed that certain diseases may necessitate either a modification of their program, or in the extreme may necessitate their dismissal from a program if they cannot perform procedures and/or tasks that are considered essential to their educational experience.

2.1.11 RETENTION

If it is determined that a student is sero-positive for HIV/HBV or is clinically manifesting symptoms of either disease process, that student should receive counseling about personal health care concerns and about interaction with others, especially clients. The student should be counseled by a designated faculty member in his/her respective program. The function of the designated faculty member is to counsel the student as to whether the program of education should be modified, another educational program considered, or in the extreme, whether the student should be dismissed from a program because of the inability to perform procedures and/or tasks crucial to the educational program. When considering the possibility of modifying clinical experiences or whether to dismiss, the designated faculty member will request that the Infection Control Committee convene to consider the specific student situation.

2.1.11 INFECTION CONTROL COMMITTEE

The Infection Control Committee will be comprised of one representative from each of the programs in the College of Nursing and Health Professions. The dean will be charged with appointing faculty to serve on this committee after consultation with chairs or directors of the various programs. Once the committee is established, a chair shall be elected by the members. In addition, a community member who is an expert in infectious disease will be designated as a consultant to the committee.

The committee shall function to consider the specific student/faculty situations outlined in the HIV/HBV Guidelines. In addition, this committee will function to review the HIV/HBV Guidelines on an annual basis. The committee will coordinate annual instruction on Standard Precautions for the faculty. This committee will also serve the programs by making recommendations for infection control policy that may impact both the student and faculty populations. Information regarding such policy will be included in the various programs' *Student Handbook* and the *CNHP Faculty/Staff Handbook*.

2.1.11 INFECTION CONTROL COMMITTEE, continued.

When the Infection Control Committee convenes to consider specific student/faculty situations, a timely response is in order. Individuals will be provided a letter outlining the committee recommendations within a one-week period after convening. During this time period the student/faculty person shall not engage in direct client contact. Should an individual wish to appeal the decision of the committee, the established University Grievance process should be followed (See *ASU Student/Faculty Handbooks*).

2.1.12 COUNSELING

It is the responsibility of the programs to provide counseling to a student/faculty member who is determined to be sero-positive for HIV/HBV or who manifests symptoms of either disease process. The counselor interaction with the student/faculty member should be reported to the Infection Control Committee only when the person's health status necessitates a modification in the clinical program or dismissal. It will be the responsibility of the counselor to verify that the student is aware of options for testing, counseling and health care. In addition, the counselor will verify that the student has been provided with specific information that relates to client contact.

The following information is provided in order to refer students when necessary to outside agencies for assistance and follow-up. This information should be reviewed and updated annually.

HIV Infection Services provided by ASU Student Health Center:

Students at Arkansas State University who desire HIV testing may obtain this service free at the Student Health Center. The Center encourages appointments but will accept students on a walk-in basis. Pre / post-test counseling are provided by certified CDC counselors. Specimens are sent to the Craighead County Public Health Department for testing.

The Student Health Center has developed a media library (videos, pamphlets) for persons coming in with questions about HIV infection. The Center is located directly across from the College of Nursing and Health Professions and can be reached at ext. 2054.

Services offered by the Public Health Department

The Craighead County Public Health Department is open from 8:00 a.m. until 3:30 p.m. for testing. The department offers pre- and post-test counseling as well as HIV testing. The cost of the service is \$5.00 which pays the record maintenance fee. The Public Health Department can be contacted by calling 933-4585. Offices are located at 611 E Washington Suite B in Jonesboro.

An individual who desires testing should allow about one hour for the procedure because pre-counseling is extensive.

Services offered by Northeast Arkansas Regional AIDS Network (NARAN)

This organization offers free confidential testing. Pre- and post-counseling is provided by certified counselors. They also provide direct care services to those persons who need them, including financial counseling. NARAN is also a network agency for persons living with AIDS. A referral can be made by contacting the office at 931-4HIV (4448). The office is located at 2604 E Matthews in Jonesboro.

Services offered by Regional Aids Interfaith Network (RAIN)

Chapters of this organization do exist here in Northeast Arkansas. The program coordinator is Rev. Ed Pruitt, chaplain at Methodist Hospital in Jonesboro. This group provides spiritual and social support for the person with HIV infection and family members.

Other

The American Red Cross office now advertises the Arkansas HIV/AIDS Network. The office can be reached at 268-1990 and is located at 1904 Grant in Jonesboro. The group is funded by the C.D.C. whose primary goal is to provide HIV education to Arkansans. However, the Red Cross will provide information to those who call.

The counselor should not neglect to refer the student/faculty member to his/her private physician for guidance.

Students and faculty outside of Craighead County should seek specific Referral information from the Chair of the Infection Control Committee or from a faculty member designated as counselor at the distant sites.

2.1.13 GUIDELINES FOR HIV/HBV STUDENTS/FACULTY IN THE LABORATORY/CLINICAL SETTING

Note: This policy assumes that the HIV/HBV infected student/faculty member has been identified and is currently a member of a program.

In accordance with sections 503 and 504 of the Rehabilitation Act of 1973, schools must provide equal treatment to persons who have contracted the HIV/HBV virus. Furthermore, schools may not discriminate against any individual based on the perception that he/she is infected.

2.1.14 TRANSMISSION INFORMATION

All CNHP students and faculty will employ Standard Precautions while in the clinical setting. CNHP students will receive instruction and annual evaluation regarding transmission of blood-borne pathogens and the use of Standard Precautions. The Infection Control Committee will coordinate instruction on Standard Precautions for faculty on an annual basis. It will be the responsibility of faculty members to document annual instruction through the Infection Control Committee.

2.1.15 POLICY

Students, faculty, and staff with HIV/HBV should be allowed equal access, as long as their medical condition permits, to university facilities or campus activities, including participation in clinical experiences or other academic and social activities offered by the university.

All confidential medical information is protected by statute and any unauthorized disclosure may create legal liability. The duty of the health care providers to protect this confidentiality is superseded by the necessity to protect others in very specific circumstances.

2.1.15 POLICY, Continued

An infected student/faculty who is symptomatic may be excluded from providing direct client care, determined on a **CASE-BY-CASE** basis by the Infection Control Committee. In addition, should an individual sero-convert and express concern regarding clinical practice, the committee will convene to review the case.

Any student who has a positive history of HIV/HBV probably should not participate as a source partner in on-campus laboratories for procedures involving needle sticks or other forms of vascular access. For criteria related to laboratory participation, see the specific program handbook.

2.1.16 EXPOSURE (Laboratory and Clinical)

Students and faculty in the College of Nursing and Health Professions (CNHP) may be exposed to blood borne pathogens such as HIV and HBV. In the clinical and classroom laboratory settings, students/faculty are expected to utilize Standard Precautions, hand washing and protective clothing/gear to prevent contact with blood and other potentially infectious materials.

2.1.17 EXPOSURE INCIDENT

Exposure incident means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious material that result from one's duties as a CNHP student or faculty member. An exposure incident involving a student/faculty member in the CNHP, while in a clinical facility or campus laboratory, is treated in a similar manner to any type of accident occurring within the agency.

2.1.18 LABORATORY POST-HIV/HBV EXPOSURE PROTOCOL

Should a student or faculty member be exposed to HIV/HBV in an on-campus laboratory setting, the following post-exposure protocol is recommended:

The student will notify the faculty member supervising the learning experience. If the exposed individual is a faculty member, he/she will notify the chairperson of the specific program in the CNHP.

As soon as possible following the exposure, the college incident form will be completed by the faculty member/student.

The exposed individual will be referred to the Student Health Center for evaluation if the event occurs during operating hours. If the exposure occurs when the Health Center is closed, the faculty member will determine the individual's primary care options and refer the person to those resources.

It is recommended that both individual and source be tested for HIV and HBV when an exposure occurs. Testing will be conducted at the individual's expense.

It is recommended that post-exposure prophylaxis of those involved be directed by the individual's primary care providers at the individual's expense.

If there is a delay in reporting an exposure incident, it is recommended that the same protocol be followed.

2.1.19 CLINICAL POST HIV/HBV EXPOSURE PROTOCOL

If a student/faculty member is exposed to blood or other potentially infectious materials in the clinical environment, this protocol is to be followed:

The student will notify the clinical faculty. If the exposed individual is a faculty member, s/he will notify the chairperson of the specific program at the CNHP.

The student, clinical faculty or chairperson will notify the supervisor of the area where the exposure occurred. Thereafter, post-exposure protocols for the clinical institution will be followed.

The infection control staff member/epidemiologist of the clinical facility will be notified of the exposure immediately by the student or if possible by the clinical faculty member. If a faculty member has been exposed, this individual will notify the infection control staff/epidemiologist.

As soon as possible following a report of an exposure incident the clinical faculty and infection control staff/epidemiologist should provide the student with counseling about an immediate confidential medical evaluation and follow-up at the student's expense. In some instances the clinical facility may cover costs of treatment and testing as would be done for an employee. In the case of a faculty member's exposure, the individual is expected to communicate directly with the infection control staff/epidemiologist. The medical evaluation and follow-up should include, at a minimum, the following requirements:

Documentation of the route(s) of exposure and the circumstances under which the exposure incident occurred.

Identification and documentation of the source individual unless the clinical facility staff establishes that the identification is infeasible or prohibited by state or local law.

The source individual's blood shall be tested as soon as possible after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the clinical facility shall establish that the source individual's consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood shall be tested and the results documented.

When the source individual is already known to be infected with HIV or HBV, testing for the source individual's HIV or HBV status need not be repeated.

Results of the source individual's testing shall be made available to the exposed individual who should also be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

The exposed student/faculty member's blood should be tested as soon as possible after consent is obtained. Agencies which provide testing for HIV include:

Northeast Arkansas Regional AIDS Network (NARAN) (931-4HIV), the Craighead County Public Health Department (933-4585), and the Student Health Center (972-2054).

2.1.19 CLINICAL POST HIV/HBV EXPOSURE PROTOCOL, Continued

Additionally, the exposed individual has the option of utilizing their private physician for confidential testing.

It is suggested that post-exposure prophylaxis be managed by the student/faculty member's personal healthcare provider.

A copy of the OSHA Bloodborne Pathogens Standard (29 CFR 1910-1030) is accessible in this document (Appendix 2).

2.1.20 SUBSTANCE ABUSE POLICY & PROCEDURES Policy

The College of Nursing and Health Professions recognizes its responsibility to provide a healthy environment within which students may learn and prepare themselves to become members of a health occupation. Within each profession there are codes and standards for conduct by which all members of the profession are expected to function. Thus, when engaged in educational activities whether on campus or in the clinical setting health professionals are expected to be free from the abusive influence of chemical substances/drugs¹. When students are under the influence of drugs and alcohol, they present a threat to patients, other students and the employees and visitors of clinical facilities. It is the responsibility of the student to report any medication/s taken which would adversely affect their ability to perform safely in class or clinic. Written documentation will be required for verification of medications taken and will be placed in the student's file. As a condition of admittance and retention in any professional program in the Arkansas State University College of Nursing and Health Professions all students must sign a SUBSTANCE ABUSE COMPLIANCE CONTRACT agreeing to adhere to the *Substance Abuse Policy & Procedures* when conducting any activity associated with their educational program. As the contract notes, it is inclusive of testing for substances and appropriate release of that information.

PROCEDURES

1. If a faculty member or supervisor observes a student demonstrating behavioral changes giving probable cause to believe the student is under the influence of drugs or alcohol while performing course activities the student will immediately be asked to submit body fluid testing for substances at a lab designated by the College of Nursing and Health Professions who have identified procedures for collection (see attached). The cost of the test will be borne by the student. Refusal to submit for testing warrants immediate program dismissal.

¹The generic meaning of the term "drug" is broadly defined as any chemical substance which affects living systems. For the purposes of this policy, substance and/or drug abuse are used interchangeably and defined as socially unacceptable use of drugs or other chemical substances for non-therapeutic purposes. The substance alcohol, (ethanol) by its properties and actions, is a drug and is used as such in this policy. Drugs prescribed by a physician licensed to practice medicine and surgery, as long as the drug is taken in accordance with the provider's instructions and do not impair the student's ability to perform his/her duties, are exempted from this policy.

Reference:

Reiss, B. & Melick M. (1987). *Pharmacological Aspects of Nursing Care* (2nd Ed.). Albany, NY: Delmar Publishers, pp. 2, 627, 631-633.

PROCEDURES, Continued

1. At the time the specimen is released to the testing lab, the student will sign a release statement requesting that the test results be sent to the Dean's Office, College of Nursing and Health Professions, and to the student. If the results are negative, no further action will be taken and the student will only be allowed to make up work missed. If the results are positive (and substantiated by a second or confirmation test), the student will be dismissed from the professional program. Laboratory results will be disclosed to individuals whose duties necessitate review of the test results and confidentiality will be adhered to as stringently as possible.
2. This policy applies only to a student exhibiting behavior creating probable cause to believe drug alcohol abuse is present. A student may be removed from the clinical environment or educational program for any prohibited behaviors as set out in the university or program handbooks, rules regulations, whether or not related to substance abuse.
3. Readmission of the student to the program is contingent upon the following conditions:
 - a. Formal application for readmission to the program
 - b. Meeting the specific program criteria as noted in the Undergraduate/ Graduate Bulletin
 - c. Clinical space available
 - d. Documentation that a prescribed treatment program has been completed by the student related to the drug/alcohol condition.
 - e. Follow-up program as suggested by the treatment facility which may include, but not limited to, one or more relapse prevention procedures. The follow-up program will be individual specific and written as part of a contractual agreement with the student.
4. Arkansas State University may be required by state or national regulatory boards to submit information regarding a student's substance abuse history when he/she applies to take the examination for licensure. There is no guarantee that these boards will allow individuals with a substance abuse history to take the examination. Each case is judged individually by each board.
5. Students will be required to abide by individual institutional policies relating to substance abuse in clinical facilities to which they are assigned.

2.1.21 BEHAVIORAL CHANGES ASSOCIATED WITH DRUG ABUSE

The College of Nursing and Health Professions has developed the following list of behaviors that are not all inclusive but, when observed, can be used as indices to identify an individual who at the moment of observation could be under the influence of a "drug" (see the *Substance Abuse Policy* for definition of the term "drug" and for the mechanisms to operationalize the policy). The College of Nursing and Health Professions is guided by behavioral descriptors that are stated in the latest edition of Diagnostic & Statistical Manual of Mental Disorders.

2.1.21 BEHAVIORAL CHANGES ASSOCIATED WITH DRUG ABUSE, Continued.

* Observation of any of these behaviors will result in dismissal from the learning environment (clinical or classroom).

Attention Deficit/Cognitive Impairment

Ataxia

tremors, especially of the hands

- * slowed response time in a familiar skill
- * diminished from the usual in coordination/dexterity

Social Impairment

* Inappropriate verbal remarks (subjects/words/expletives)

* Inappropriate behaviors or those beyond the societal norm such as:

Angry outbursts/unrestrained agitation

Crying that cannot be explained

Euphoria

Paranoia

Hallucinations

- * Behaviors that are markedly changed from that individual such as
 - Introversion
 - Extroversion
 - Sullen/irritable
 - Giddy
 - Defensiveness

Somatic Manifestations/Discomforts

- * Odor of alcohol on breath
- Nausea/vomiting/thirst
- Frequent trips to bathroom/complaint of urinary frequency or diarrhea
- Hiccoughs
- Reddened sclera (bloodshot eyes)
- Pupil changes/drooping eyelids
- Complain of blurred vision or inability to focus

Speech/Communication Impairment

- * slurred (thick tongue)
- * Rapid/choppy communication pattern
- * Incoherent speech

2.1.22 BEHAVIORAL PATTERNS ASSOCIATED WITH SUBSTANCE ABUSE

The following is a list of behavioral patterns that may surface when drugs have been abused. While these patterns have many causes, thorough assessment and detailed documentation is needed over a period of time to determine if there is any relationship to drug abuse. Patterns of behavior to observe and validate are:

Repeated tardiness

Frequent absenteeism

Numerous and chronic somatic complaints (colds/GI problems/lack of sleep/weight loss/sluggishness/low energy)

Untidy personal appearance or deterioration in quality of grooming

Lack of attention to hygiene (hair, nails, skin, oral)

Multiple crises in personal life

Avoidance/lack of eye contact

2.1.22 BEHAVIORAL PATTERNS ASSOCIATED WITH SUBSTANCE ABUSE, Continued

- Isolation/lack of peer support
- Repeated excuses for below standard performance
- Forgetfulness with appointments/assignments
- Slowed response time in familiar activities
- Behavior shifts/mood swings
- Lack of trust and suspicious of the motives of others
- Needle tracks on body surface
- Behaviors surrounding the administration of narcotics:
 - Frequent need to waste "unused" medications
 - Recording the administration of larger doses than ordered
 - Unauthorized possession of the narcotic key
 - Unsupervised entry into narcotic cabinet
 - Volunteering to be in situations to gain greater access to narcotics
 - Taking frequent breaks/numerous occasions when whereabouts unknown

2.1.23 CRITERIA FOR URINE DRUG SCREENS

**ANY DRUG SCREENS SUBMITTED TO ARKANSAS STATE UNIVERSITY,
COLLEGE OF NURSING AND HEALTH PROFESSIONS SHALL HAVE MET THE
FOLLOWING CRITERIA:**

1. Specimen collection is witnessed.
2. BASIC 10-PANEL* DRUG SCREEN INCLUDING ALCOHOL, MEPERIDINE AND DRUG OF CHOICE (SEE #7).
3. Laboratory must be CLIA¹ approved.
4. Confirmation of positive results is done by GCMS². If specimen must be sent to another laboratory for confirmation, the chain of custody is maintained.
5. Report, in addition to results, will include:
 - a. Chain of custody;
 - b. Drug history;
 - c. List of drugs screened;
 - d. Confirmation of method used; and
 - e. Specific gravity.
6. The laboratory will retain negative specimens for a minimum of two (2) weeks and positive specimens for a minimum of one (1) year.

*10-PANEL INCLUDES:

Amphetamines	Benzodiazepines
Cannabinoids	Cocaine
Opiates	PCP
Barbiturates	Methadone
Methaqualone	Propoxyphene

2.1.23 CRITERIA FOR URINE DRUG SCREENS, Continued

7. THE DRUG SCREEN SHALL TEST FOR THE FOLLOWING:
- | | |
|-----------------|----------------------------|
| Amphetamines | Methaqualone |
| Barbiturates | Phencyclidine |
| Benzodiazepines | Propoxyphene |
| Cannabinoids | Alcohol |
| Cocaine | Meperidine |
| Opiates | Drug of Choice: _Methadone |

DRUG SCREENS WHICH DO NOT TEST FOR THE ABOVE WILL BE CONSIDERED NON-COMPLIANT WITH THE ORDER.

¹Clinical Laboratory Improvement Act: Set of Federal Regulations which clinical labs must meet for certification.

²Gas Chromatography Mass Spectrometry
Adopted from Arkansas State Board of Nursing, January 1997.

2.2 STUDENT RECORDS

The registrar's office maintains records of all didactic and related courses attempted and/or completed by all students. The following records are kept in the Department of Health Professions and the Diagnostic Medical Sonography Program for a period of six years post graduation except were noted:

- Attendance and clinical rotation records(maintained for 1 year post graduation)
- Clinical competency records
- Pre-admission high school and/or college transcripts
- Advising documents
- CPR card (maintained for 1 year post graduation)
- Proof of liability insurance (maintained for 1 year post graduation)
- Copy of health exam (maintained for 1 year post graduation)
- All tests taken throughout the program (maintained for 1 year post graduation)
- Signature documents (Student code of honor, Substance abuse compliance contract, Liability release, Confidentiality statement, Notice of physical requirements & standards for Sonography, Statement of understanding/agreement, Waiver of release of medical information)

2.2.1 Right to Inspect Records

Under the Federal Family Educational Rights & Privacy Act of 1974 (Buckley Amendment), students have the right to inspect and review any and all official records, files and data pertaining to them.

2.3 STUDENT COUNSELING

The purpose of student counseling is to promote, assist, and maintain superior student performance. Feedback given in counseling persons may be used to identify areas of strength and weakness in student performance or behavior. All counseling sessions are documented and filed in the student's permanent folder.

2.4 WITHDRAWAL FROM THE PROGRAM

The following steps are necessary when withdrawing from the program.

1. The student should meet with the Program Director to discuss the withdrawal process.
2. The student should write a formal letter of resignation stating the reason for withdrawal. This letter will remain in his/her permanent file and will be considered in the event the student seeks readmission to the program at a later date.
3. The student will return any material that may be on loan.
4. The student will follow University guidelines for completing the withdrawal process, securing the appropriate signatures when necessary.

If a student withdraws from a professional course, the student must withdraw from the program because the student will be out of program sequence.

2.5 DISMISSAL FROM THE PROGRAM

There are conditions that will necessitate consideration for dismissal from the Diagnostic Medical Sonography Program. These include, but are not limited to:

1. Failure to meet academic standards.
2. Failure to demonstrate suitable progress in clinical practice.
3. Patterns of behavior jeopardizing patient safety, individual or group progress, and/or contract agreement with the clinical affiliate.
4. Patterns of behavior indicating an attitude of irresponsibility to self, patient, profession, or University.
5. Violation of the Academic Integrity Policy (Student Policy 1.8.7)
6. Physical or emotional conditions affecting ability to attain curricular objectives.
7. Falsification of any records or knowledge of such (i.e., time sheets, competency evaluations, etc.) related to the Diagnostic Medical Sonography program.
8. Dismissal by a clinical education center.

2.5.1 Dismissal will follow in this order:

- f. Written documentation describing the offense and/or offenses.
- b. Review of the student's performance records by the ASU faculty, and the Diagnostic Medical Sonography Program Director.
- c. A recommendation will be made in writing and discussed with the student and will become part of the student's permanent record. Any student wishing to appeal must follow the appeal process stated in the ASU Student Handbook.

2.6 READMISSION TO THE PROGRAM

A student wishing to be readmitted to the program must make formal application to the program and to the University, if not currently enrolled. Readmission is granted on an individual basis, based on the student's previous records and the availability of space.

2.6.1 Readmission will be denied if:

1. The cumulative grade point average is lower than 2.00.
2. Upon 2nd admission, if the student earns a final grade of below a "C" in the DMS course previously failed or violates any other circumstance outlines by section 2.5 concerning the dismissal from the program
3. If the student earns a final grade of below a "C" in any 2 or more DMS courses.
4. If the student is dismissed by the clinical education center.

2.7 APPLICATION FOR REGISTRY EXAMINATION

The American Registry of Diagnostic Medical Sonographers (ARDMS) examination information, content outline and application process will be discussed by the Program Director prior to the completion of the program. The SPI exam is discussed at the beginning of the spring semester and the specialty exams are discussed at the beginning and end of the second fall semester. More information concerning the ARDMS can be located at the following website:

<http://ardms.org/>

2.8 STUDENT PARTICIPATION IN COLLEGE AND PROGRAM ORGANIZATIONS

A student may be asked to serve on college and department committees. Participation is voluntary and will in no way affect the student's grades.

2.9 PROGRAM NON-COMPLIANCE

If, during the course of your professional education, you feel the ASU Diagnostic Medical Sonography Program does not comply with the Joint Review Committee on Education in Diagnostic Medical Sonography (see Appendix, Standards for an Accredited Educational Program in Diagnostic Medical Sonography) you have the right to notify the JRC-DMS. Their address is: Joint Review Committee on Education in Diagnostic Medical Sonography, 6021 University Blvd. Suite 500, Ellicott City, MD 21043 phone number 443-973-3251.

CLINICAL POLICIES AND PROCEDURES

3.0 GENERAL INTRODUCTION

During each semester of the professional program in Diagnostic Medical Sonography at Arkansas State University the student will be enrolled in a clinical course that requires attendance in the clinical education center in order to:

Acquire expertise and proficiency in a variety of Diagnostic Medical Sonography clinical examinations and procedures that are related to the General Learning Concentration.

Develop and practice work habits and appropriate interpersonal relationships with patients and other members of the health care team.

In the Clinical Education Center the student will be representing Arkansas State University, the College of Nursing and Health Professions, and the Diagnostic Medical Sonography Program. The student is expected to conduct himself/herself in a professional manner at all times. Failure to conduct one's self in a professional manner may result in dismissal from the DMS program.

3.0.1 Clinical Assignments

Each student is assigned to a specific area in the Diagnostic Medical Sonography department at the Clinical Education Center (CEC). Assignments are arranged by the Program Coordinator and the assigned schedule must be followed closely by each student.

Students will be assigned to a variety of clinical centers throughout their program experience, so that they may have an equal opportunity to perform and actively participate in a variety of clinical settings such as:

- Ambulatory care facilities
- Emergence/trauma
- Intensive/critical care centers.

A composite of all clinical assignments is maintained on each student to verify the equity of the assignments.

Clinical assignments:

RSU 4513 Fall	Wednesday, Thursday, Friday
RSU 4523 Spring	Wednesday, Thursday, Friday
RSU 4534 Summer I	Monday – Thursday
RSU 4544 Summer II	Monday – Thursday
RSU 4552 2 nd Fall	Monday, Tuesday

It is logistically impossible to assign all students to the same clinical activities at the same time throughout the program. Thus, it is the students' responsibility to coordinate clinical course competencies with clinical assignments. In this manner, students progress at their own rate and engage in procedures related to their specific clinical assignment.

3.0.2 Staff Replacement

Students may perform work service while enrolled in the program as part of their clinical experience; they may not take the responsibility or the place of qualified staff. However, after demonstrating competency, students may be permitted to perform certain defined activities under appropriate supervision and direction without monetary compensation.

3.0.3 Employment

Student may be employed in a clinical setting outside regular educational hours. The work must be non-compulsory, paid, and subject to standard employee policies. These hours will not count as clinical education hours.

3.0.4 Dress Code

All students:

1. Khaki scrub shirts, along with khaki colored scrub pants will be the required uniform with the ASU DMS logo embroidered on the shirt. A plain white short sleeve t-shirt may be worn under the scrub shirt if the student so desires.
2. White lab coats are required. Students may select any style they prefer. The student is required to wear their lab coat during all laboratory exams.
3. Shoes must be mostly white leather. Canvas on any part of the shoe is NOT acceptable.
4. Name badges obtained at the ASU ID center must be worn on the lab coats while the students are attending their clinical rotation and while in the laboratory.

3.0.5 General Appearance

1. The College of Nursing and Health Professions' name badges are to be worn in the clinical area at all times.
2. The College of Nursing and Health Professions' name badge **IS NOT TO BE WORN** when employed by a health care facility.
3. Hair should be neat/clean. Long hair should be pulled back, away from the face.
4. Personal hygiene is to be maintained at all times.
5. Plain wedding bands and watches (with a second hand) are the only recommended jewelry to be worn. If ears are pierced, posts may be worn. Excessive body piercing is not allowed.
6. Uniforms must be kept clean and neat at all times. Shoes and laces should be kept clean and white.
7. Fingernails should be kept trimmed and neat, with no colored nail polish.
8. Regulations regarding appearance are intended to foster professionalism. Faculty reserves the right to regulate student appearance.

3.0.6 Attendance

A typical day in the clinical site is eight hours. Each affiliate has established departmental hours. Students are expected to be punctual and attend all planned learning experiences, both classroom and clinical. The student has professional accountability for meeting this standard. The student is expected to attend during the assigned hours (8am to 4pm or 7am to 3pm) of which are not to exceed eight hours per day and are determined by the clinical site. Any clinical hours other than the assigned

hours must be approved by the clinical coordinator.

If a student will be absent from a clinical day they are required to notify the clinical instructor at the clinical site and the clinical coordinator prior to their assigned time.

The student will be allowed one (1) day **each semester** from their clinical assignment if they choose to utilize as a “professional/personal” day. This can be used for attending job interviews, orientations, doctors/dentists appointments etc. Any additional days missed will have to be made up **before** grades are due for that semester. The day missed should be made up at the clinical education center at which it was missed. It is the responsibility of the student to check with the clinical supervisor at that clinical education center to make sure the day they will make up is acceptable to that Clinical Education Center (CEC). Absence from the clinical site will make it difficult to complete the required competencies and proficiencies, which could affect their clinical grade. If a student misses more than 15% of clinic, the student will receive a failing grade for the semester. The student will have to repeat the semester the following year during the same semester. Continuation in didactic courses will be allowed. Any exceptions must be approved by the clinical coordinator and will be handled on a case-by-case basis.

Failure to make up missed days by the end of the semester will result in an **incomplete** for the semester until the missed days are completed.

Extenuating circumstances will be at the discretion of the clinical coordinator.

3.07 Time Sheets

It is the responsibility of each student to have a *sonographer* record their time at their clinical site in ink. The student must be signed in within 5 minutes of arrival to and departure from the clinical site. The sonographer has the right to refuse signature if it is not acquired in the stated time period. Any variation from what is expected must be recorded. Time sheets will be provided with the dates and clinical rotation. **Only those time sheets are approved for use.**

Scheduled clinical experience time **MUST** be documented **times**. Clinical attendance verification time sheets must be signed by the student and sonographer upon completion of the clinical rotation.

Any student found guilty of falsifying time sheets will be subject to immediate dismissal from the program. The accuracy of the information documented on the time sheet is the responsibility of the student. **Time sheets must be turned in on the scheduled day in the semester as noted on each syllabus and clinical attendance sheet unless previous arrangements have been made with the clinical coordinator.**

3.08 Daily Clinical Activity Sheets/Log Sheets

It is the student’s responsibility to complete daily clinical activity sheets/log sheets. The information will be recorded as follows:

- Date of exam
- Patient reference number
- Type of exam: S – scanned by student w/ or w/o assistance; O – observed exam; C – student performed a competency (Defined in Policy 3.1.1) on patient; P – student performed a proficiency (Defined in Policy 3.1.1) on patient

This provides information to the student and the clinical coordinator as to the types of cases and quantity that are performed on a daily basis. These sheets are located in the handbook.

3.09 Cell Phones

All cell phones are to be **turned off** while the student is in the clinical site. Phones may be used during breaks **away from patient care areas**.

3.1 CLINICAL COURSE REQUIREMENTS

RSU 4513, 4523, 4534, 4544, 4552

Miscellaneous Policy Concerns and Proposals

The Clinical grade will be comprised of, goals (determined by the student and instructor) and proficiency objectives.

Clinical grade evaluation:

Clinical Proficiencies & Competencies	50%
Clinical Portfolio	10%
Clinical Evaluations	20%
Goals	10%
Discussion Board	10%

Evaluation criteria for Clinical Competency Objectives as well as Student Clinical Evaluations are clearly stated on the forms included in this handbook and will be discussed during orientation by the Clinical Coordinator.

The policies in the course syllabus supersede any policy in the Student Handbook. All policies not covered by the syllabus will remain in effect.

3.1.1 CLINICAL OBJECTIVES

- The student is required to keep a personal clinical portfolio.
- The content will include:
 - Competencies: Exams completed with **NO** assistance from registered Sonographer.
 - Proficiencies: Exams in which a competency has successfully been completed
 - Goals: Set by instructor and student at the beginning of clinical rotation RSU 4523, 4534, 4544, and 4552
 - Clinical Journal (RSU 4513 and RSU 4552 **ONLY**)
 - Clinical Logs from each semester
 - Clinical Tally sheets from each semester
 - Evaluations completed by sonographers of students
 - Evaluations of sonographers by students
 - Self evaluations each clinical rotation
- **All** competencies listed below must be completed prior to graduation.

ABDOMEN, SUPERFICIAL STRUCTURES AND BREAST

Abdominal Complete	Pancreas
Abdominal Vasculature	Scrotum
Breast	Soft Tissue
Gallbladder/ Biliary System	Spleen
Great Vessels	Thyroid/Parathyroid
Liver	Urinary Tract

3.1.1 CLINICAL OBJECTIVES, Continued

OBSTETRICS/GYNECOLOGY

Gyn/Transabdominal

Gyn/Transvaginal

OB - 1st Trimester

OB - 2nd Trimester

OB - 3rd Trimester

VASCULAR

Arterial: Upper extremities

Lower extremities

Venous: Upper extremities

Lower extremities

Cerebrovascular: Intracranial

Extracranial

The following are **OPTIONAL** competencies:

Transplants

Adrenals

Appendix

Prostate

Rotator Cuff

Twin Gestation

Biophysical Profile

Retroperitoneum/Peritoneum

In addition to the transvaginal, Obstetrical and Scrotal competencies required for graduation, students are required to document direct scanning of 10 additional transvaginal and obstetrical examinations along with an additional 5 scrotal examinations. These examinations must be documented by the student and signed-off by an appropriately credentialed sonographer.

Course grades are determined according to the following standards:

- 3.1.2 RSU 4513 Ultrasound Clinical Ed I
5 competencies
- 3.1.3 RSU 4523 Ultrasound Clinical Ed II
6 competencies
4 proficiencies
- 3.1.4 RSU 4534 Ultrasound Clinical Ed III
4 competencies
5 proficiencies
- 3.1.5 RSU 4544 Ultrasound Clinical Ed IV
3 competencies
6 proficiencies
- 3.1.6 RSU 4552 Ultrasound Clinical Ed V
3 competencies
7 proficiencies

- 3.1.7 It is the responsibility of the student to have all components of the portfolio completed and turned in to the instructor by the end of each semester. Failure could result in an incomplete for the course or a failing grade. A failing grade could result in dismissal from the program or late graduation.

3.2 CLINICAL ADVISING PROGRAM

All students enrolled in diagnostic medical sonography clinical education are evaluated and advised regarding their ability to care for patients in a professional and ethical manner. The advising program is conducted via several documents:

- a. **Significant Incident Record** forms are to be utilized by anyone to document any positive or negative educational experiences of the student. In most cases students are expected to assist in obtaining positive records while negative experiences are usually documented by clinical education center staff or university faculty. (Appendix)
- b. **Clinical Evaluation** forms are used by registered sonographers to give students and faculty an opinion of the students' trends in professional attitudes and behavior. Students may not see these actual forms but are supplied with a composite each semester. (Appendix)
- c. **Self Evaluation/Goal** Students complete the form prior to a scheduled advising session at the beginning of the next clinical course. The form requires students to assess their current skills in various procedures, professional abilities, overall ability, and recent progress. Students must establish **at least one clinical goal** to be discussed during the advising session. Only 1 goal is required per semester and only 1 goal is required per summer (Summer I and II semesters are combined into 10 weeks). The Clinical Coordinator will conduct the advising session, which is designed to ascertain that both student and faculty have similar perceptions of the ability of the student. Differences in these perceptions must be resolved. (Appendix)

3.3 CLINICAL SUPERVISION

Each clinical affiliate has at least one designated clinical instructor. This individual is a qualified sonographer (American Registry Diagnostic Medical Sonography- ARDMS) who has agreed to be responsible for providing instruction to and evaluation of the student at the clinical site.

3.4 CLINICAL EDUCATION CENTERS and CLINICAL INSTRUCTORS

Arkansas Methodist Hospital

900 W. Kingshighway, Paragould AR, 72450 (870) 239-7820
Clinical Instructor: Carol Harrelson RDMS(Ab)(Ob)

Baxter County Regional Medical Center

624 Hospital Dr, Mountain Home, AR 72653 (870) 508-1000
Clinical Instructor: Paige Fenske RDMS(Ab) Ext 1166

Cardiology Associates of NEA

201 E Oak Street, Jonesboro, AR 72401 (870)935-6729
Clinical Instructor: Kristen Culbreath RDMS(Ob), RVT

Crittenden Memorial Hospital

200 Tyler Ave., West Memphis, AR 72301 (870) 735-1500
Clinical Instructor: Michael (Mike) Miller RDMS(Ab)(Ob), RVT Ext. 1139

NEA Baptist

3024 Stadium Blvd. Jonesboro, AR 72401 (870) 972-7260
Clinical Instructor: Becky Brewer RDMS(Ab), Katie Grissom, RDMS(Ab)(Ob), RVT

NEA Clinical Affiliates - Cardiology

311 E. Matthews Ave. Jonesboro, AR 72401 (870) 935-4150
Clinical Instructor: Lisa Lane RDCS(AE), RVT Ext. 5482

NEA Clinic Imaging Center

3100 Apache Dr., Ste. C1 Jonesboro, AR 72401 (870)934-3533
Clinical Instructor: Kerry Hogland RDMS(Ab)(Ob)

Poplar Bluff Medical Partners

221 Physicians Park Drive Poplar Bluff, MO 63901 (573) 727-9080
Clinical Instructor: James (Cody) Cody RDMS(Ab), RDCS(AE)
Jan Bone, RDMS(Ab)(Ob)(NE), RVT, RDCS(AE)

Poplar Bluff Regional Medical Center

2620 N Westwood Blvd (573) 686-5960
Poplar Bluff, MO 63901
Clinical Instructor: Kim Moser, RDMS(Ab)(Ob), Blaine Hoffman, RDCS(AE), RVT

St. Bernard's Imaging Center

1144 East Matthews Ave. Jonesboro AR 72401 (870) 336-4800
Clinical Instructor: Patty Billingsley RDMS(Ab)(Ob), RVT

St. Bernard's Medical Center

224 E. Matthews Ave. Jonesboro, AR 72401 (870) 972-4222
Clinical Instructor: Christi Murray RDMS(Ab)(Ob), RVT

St. Bernard's Medical Center - Noninvasive Cardiology

224 E. Matthews, Jonesboro, AR 72401 (870) 972-4571
Clinical Instructor: Lana Fischer RDMS(Ab)(Ob)(BR), RDCS(AE), RVT

<p>St. Francis Medical Center 221 Saint Francis Drive Cape Girardeau, MO 63703 Clinical Instructor: Charles Barwick RPA, RT(R), RDMS, RVT</p>	<p>(573) 331-5203</p>
<p>Twin River's Regional Medical Center 1301 First Street, Kennett, Mo 63857 Clinical Instructor: Stacey Rollins RDMS(Ob)</p>	<p>(870) 888-4522</p>
<p>White County Medical Center 3214 E. Race Searcy, AR 72143 Clinical Instructor: Trudy Weatherly RDMS(Ab); Marsh Moody RDMS(Ob)</p>	<p>(501) 268-6121 Ext. 2156</p>
<p>White County Medical Center - Cardiopulmonary 3214 E. Race Searcy, AR 72143 Clinical Instructor: Paula Peacock RDCS(AE), RVT</p>	<p>(501) 268-6121 Ext. 5605</p>
<p>White River Medical Center 1710 Harrison Street, Batesville, AR 72503 Clinical Instructor: Amanda Carter, RDMS(Ob); Tristen Sader, RDMS(Ab)(Ob), RVT</p>	<p>(870) 262-6092</p>
<p>Women's Health Specialist PC Dr. Carrie Carda OB/Gyn 2340 Katy Lane Poplar Bluff, MO 63901 Clinical Instructor: Kimberly (Kim) McVey RDMS(Ob)</p>	<p>(573) 776-7393</p>

3.5 OBJECTIVES FOR CLINICAL EVALUATIONS

The student will:

1. Check patient's identification.
2. Obtains complete patient history including appropriate laboratory records/values when available.
3. Student to patient relationship:
 - a) Pleasant attitude
 - b) Shows caring and concern for the patient
 - c) Reassures the difficult patient
 - d) Attends to patient's modesty and comfort
 - e) Utilizes proper head rest and supports if needed
 - f) Informs the patient what to expect before the scan evaluation begins
 - g) Informs the patient what to do during the evaluation scan
4. Maintains a professional and collaborative association with the physician/sonographer associated with the interpretation of the ultrasound procedure.
5. Manipulates equipment carefully and accurately. Maintains an understanding of the operation of each ultrasound machine at each facility.
6. Assists the sonographer with daily tasks:
 - a) Maintain room cleanliness by changing linens
 - b) Cleaning scanning probes and scanning tables
 - c) Stock room supplies
 - d) Transport patients
7. Student Attendance:

Students will attend the clinical site at the determined times and days unless previous arrangements have been made with the Clinical Coordinator and the clinical site. If the student will not attend clinic that day, the student is to notify the clinical coordinator and the clinical site of the absence prior to the assigned time (Policy 3.07).
8. Students will observe demonstrations of various procedures on patients, and then perform the procedure under the direct supervision of a Registered Diagnostic Medical Sonographer.
9. Utilize appropriate equipment in a knowledgeable manner consistent with the production of high quality diagnostic imaging.
10. Exercise independent judgment and discretion in the technical performance of diagnostic medical sonographic procedures.

11. Competently perform a full range of abdominal sonographic procedures in the following categories:

Abdominal Complete	Pancreas
Abdominal Vasculature	Scrotum
Breast	Soft Tissue
Gallbladder/ Biliary System	Spleen
Great Vessels	Thyroid/Parathyroid
Liver	Urinary Tract
Gyn/Transabdominal	OB - 1 st Trimester
Gyn/Transvaginal	OB - 2 nd Trimester
OB - 3 rd Trimester	Upper Extremity Arterial
Lower extremities Arterial	Upper Extremity Venous
Lower extremities Venous	Intracranial Cerebrovascular
Extracranial Cerebrovascular	

12. Display successful progress in the clinical education program including attainment of all goals.
13. Complete all required clinical education hours.
14. Complete all required clinical competencies and proficiencies.
15. Actively and effectively perform routine sonographic procedures associated with the specific clinical assignment.
16. During subsequent performances under direct supervision, students will be evaluated according to the competency-based clinical evaluation system standards.
17. Maintains a professional and collaborative association with the physician/sonographer associated with the interpretation of the ultrasound procedure.

3.6 THE PATIENT'S BILL OF RIGHTS

The Patient's Bill of Rights was designed to inform patients of their rights while in a hospital. As student in the Diagnostic Medical Sonography Program, you will be experiencing clinical education in several hospitals; you are obligated to respect these rights. The patient has the right to considerate and respectful care.

- a. The patient has the right to obtain from his physician complete current information concerning his diagnosis, treatment, and prognosis in terms the patient can be reasonably expected to understand. When it is not medically advisable to give such information to the patient, the information should be made available to an appropriate person in his behalf. He has the right to know, by name, the physician responsible for his care.
- d. The patient has the right to receive from his physician information necessary to give informed consent prior to the start of any procedure and/or treatment. Except in emergencies, such information for informed consent should include, but not necessarily be limited to, the specific procedure and/or treatment, the medically significant risks involved, and the probable duration of incapacitation. Where medically significant alternatives for care of treatment exist, or when the patient requests information concerning medical alternatives, the patient has the right to such information. The patient also has the right to know the name of the person responsible for the procedure and/or treatment.
- e. The patient has the right to refuse treatment to the extent permitted by law and to be informed of the medical consequences of his action.
- f. The patient has the right to every consideration of his privacy concerning his own medical care program. Case discussion, consultation, examination, and treatment are confidential and should be conducted discreetly. Those not directly involved in his care must have the permission of the patient to be present.
- g. The patient has the right to expect that all communications and records pertaining to his care should be treated as confidential
- h. The patient has the right to expect that within its capacity, a hospital must make reasonable response to the request of a patient for services. The hospital must provide evaluation, service, and/or referral as indicated by the urgency of the case. When medically permissible, a patient may be transferred to another facility only after he has received complete information and explanation concerning the needs for and the institution to which the patient is to be transferred must first have accepted the patient for transfer.
- i. The patient has the right to obtain information as to any relationship of his hospital to other health care and educational institutions insofar as his care is concerned. The patient has the right to obtain information as to the existence of any professional relationships among individuals, by name, which is treating him.
- j. The patient has the right to be advised if the hospital proposes to engage in or perform human experimentation affecting his care or treatment. The patient has the right to refuse to participate in such research projects.
- k. The patient has the right to expect reasonable continuity of care. He has the right to know in advance what appointment times and physicians are available and where. The patient has the right to expect that the hospital will provide a mechanism whereby he is informed by his physician or a delegate of the physician of the patient's continuing health care requirements following discharge. The patient has the right to examine and receive an explanation of his bill, regardless of source of payment.
- l. The patient has the right to know what hospital rules and regulations apply to his conduct as a patient.

This information can be located at <http://jrcdms.org/pdf/Standards2011.pdf>

Standards and Guidelines for the Accreditation of Educational Programs in Diagnostic Medical Sonography

Essentials/Standards initially adopted in 1979; revised in 1987, 1996, 2007, and 2011 by the:

American College of Cardiology Foundation

American College of Radiology

American College of Obstetricians and Gynecologists

American Institute of Ultrasound in Medicine

American Society of Echocardiography

American Society of Radiologic Technologists

Society of Diagnostic Medical Sonography

Society for Vascular Surgery

Society for Vascular Ultrasound

*Joint Review Committee on Education in Diagnostic Medical Sonography
and*

Commission on Accreditation of Allied Health Education Programs

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredits programs upon the recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS).

These accreditation **Standards and Guidelines** are the minimum standards of quality used in accrediting programs that prepare individuals to enter the Diagnostic Medical Sonography profession. Standards are the minimum requirements to which an accredited program is held accountable. Guidelines are descriptions, examples, or recommendations that elaborate on the Standards. Guidelines are not required, but can assist with interpretation of the Standards.

Standards are printed in regular typeface in outline form. *Guidelines* are printed in italic typeface in narrative form. **Preamble**

The Commission on Accreditation of Allied Health Education Programs (CAAHEP), Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS), and the American College of Cardiology, American College of Radiology, American College of Obstetricians and Gynecologists, American Institute of Ultrasound in Medicine, American Society of Echocardiography, American Society of Radiologic Technologists, Society of Diagnostic Medical Sonography, Society for Vascular Surgery, and Society for Vascular Ultrasound cooperate to establish, maintain and promote appropriate standards of quality for educational programs in diagnostic medical sonography and to provide recognition for educational programs that meet or exceed the minimum standards outlined in these accreditation **Standards and Guidelines**. Lists of accredited programs are published for the information of students, employers, educational institutions and agencies, and the public.

These **Standards and Guidelines** are to be used for the development, evaluation, and self-analysis of diagnostic medical sonography programs. On-site review teams assist in the evaluation of a program's relative compliance with the accreditation Standards. **Description of Profession**

The profession of diagnostic medical sonography includes general sonography, cardiac sonography, vascular technology, and various subspecialties. The profession requires judgment and the ability to provide appropriate health care services. General sonographers, adult cardiac sonographers, pediatric

cardiac sonographers, and vascular technologists are highly skilled professionals qualified by education to provide patient services using diagnostic techniques under the supervision of a licensed doctor of medicine or osteopathy. The general sonographer, adult cardiac sonographer, pediatric cardiac sonographer, and vascular technologist may provide this service in a variety of medical settings where the physician is responsible for the use and interpretation of appropriate procedures. General sonographers, adult cardiac sonographers, pediatric cardiac sonographers, and vascular technologists assist physicians in gathering data necessary to reach diagnostic decisions.

The general sonographer, adult cardiac sonographer, pediatric cardiac sonographer, and vascular technologist are able to perform the following:

Obtain, review, and integrate pertinent patient history and supporting clinical data to facilitate optimum diagnostic results;

Perform appropriate procedures and record anatomic, pathologic, and/or physiologic data for interpretation by a physician;

Record, analyze, and process diagnostic data and other pertinent observations made during the procedure for presentation to the interpreting physician;

Exercise discretion and judgment in the performance of sonographic and/or other diagnostic services;

Demonstrate appropriate communication skills with patients and colleagues;

Act in a professional and ethical manner;

Provide patient education related to medical ultrasound and/or other diagnostic vascular techniques, and promote principles of good health.

The four learning concentrations are:

1. General (Defined as abdomen, obstetric, gynecologic, superficial parts, and other appropriate areas)
2. Adult Echocardiography (including adult congenital)
3. Pediatric Echocardiography (including adult congenital and fetal)
4. Vascular

I. Sponsorship A. Sponsoring Institution

A sponsoring institution must be at least one of the following:

1.

A post-secondary academic institution accredited by an institutional accrediting agency that is recognized by the U.S. Department of Education, and authorized under applicable law or other acceptable authority to provide a post-secondary program, which awards a minimum of a certificate at the completion of the program.

A hospital or medical center or other governmental medical service, which is accredited by a health care accrediting agency or equivalent that is recognized by the U.S. Department of Health and Human Services, and authorized under applicable law or other acceptable authority to provide healthcare, which awards a minimum of a certificate at the completion of the program.

A branch of the United States Armed Forces, which awards a minimum of a certificate at the completion of the program.

B. Consortium Sponsor

1.

A consortium sponsor is an entity consisting of two or more members that exists for the purpose of operating an educational program. In such instances, at least one of the members of the consortium must meet the requirements of a sponsoring institution as described in I.A.

The responsibilities of each member of the consortium must be clearly documented as a formal affiliation agreement or memorandum of understanding, which includes governance and lines of authority.

C. Responsibilities of Sponsor

The Sponsor must assure that the provisions of these *Standards and Guidelines* are met.

Diagnostic Medical Sonography 3 **II. Program Goals A. Program Goals and Outcomes**

There must be a written statement of the program's goals and learning domains consistent with and responsive to the demonstrated needs and expectations of the various communities of interest served by the educational program. The communities of interest that are served by the program must include, but are not limited to, students, graduates, faculty, sponsor administration, employers, physicians, and the public.

Program-specific statements of goals and learning domains provide the basis for program planning, implementation, and evaluation. Such goals and learning domains must be compatible with both the mission of the sponsoring institution(s), the expectations of the communities of interest, and nationally accepted standards of roles and functions. Goals and learning domains are based upon the substantiated needs of health care providers and employers, and the educational needs of the students served by the educational program. **B. Appropriateness of Goals and Learning Domains**

The program must regularly assess its goals and learning domains. Program personnel must identify and respond to changes in the needs and/or expectations of its communities of interest.

An advisory committee, which is representative of at least each of the communities of interest named in these **Standards**, must be designated and charged with the responsibility of meeting at least annually, to assist program and sponsor personnel in formulating and periodically revising appropriate goals and learning domains, monitoring needs and expectations, and ensuring program responsiveness to change. **C. Minimum Expectations**

The program must have the following goal(s) defining minimum expectations:

"To prepare competent entry-level general sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains" and/or

"To prepare competent entry-level adult cardiac sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains" and/or

"To prepare competent entry-level pediatric cardiac sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains" and/or

"To prepare competent entry-level vascular technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains."

Programs adopting educational goals beyond entry-level competence must clearly delineate this intent and provide evidence that all students have achieved the basic competencies prior to entry into the field.

Nothing in this Standard restricts programs from formulating goals beyond entry-level competence.

III. Resources A. Type and Amount

Program resources must be sufficient to ensure the achievement of the program's goals and outcomes.

Resources must include, but are not limited to: faculty, clerical and support staff; curriculum; finances; offices; classroom, laboratory, and ancillary student facilities; clinical affiliates; equipment; supplies; computer resources, instructional reference materials, and faculty/staff continuing education.

1.

Support Staff

- a. *Support staff should be available to provide counseling or referral for problems that may interfere with the student's progress through the program. Guidance should be available to assist students in understanding course content and in observing program policies, and practices.*

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1.

Clinical Resources

- a. *Maximum student enrollment should be commensurate with the volume and variety of sonographic procedures, equipment, and personnel available for educational purposes. The number of students assigned to the clinical affiliate/clinical education center should be determined by a student/clinical staff ratio not greater than one-to-one, and a student/work station ratio of not greater than one-to-one.*
- b. *Programs should provide students with a variety of care settings in which sonographic and/or other diagnostic vascular procedures are performed on in-patients and outpatients. These settings may include the following: Ambulatory care facilities, Emergency/trauma, Intensive/critical/coronary care, Surgery, Angiography/cardiac catheterization*
- (1) *Each general learning concentration affiliate or clinical education center should perform approximately 1500 completed patient examinations, including production of permanent records and reports, per year, per student equivalent. The overall volume of procedures in which students participate in throughout the program should include a minimum of 30% ob/gyn procedures and a minimum of 30% abdominal procedures.*
- (2) *Each cardiac learning concentration affiliate or clinical education center should perform approximately 800 completed patient examinations, including permanent records and reports, per year, per student equivalent. The overall volume of procedures in which students participate in throughout the program should be representative of the range of cardiac procedures.*
- (3) *Each pediatric cardiac learning concentration affiliate or clinical education center should perform approximately 150 completed transthoracic echocardiograms (at least 50 in infants age < 1 year), including permanent records and reports, per year, per student equivalent. In addition, each pediatric cardiac learning concentration should perform approximately 50 adult echocardiograms and 25 fetal echocardiograms.*
- (4) *Each vascular learning concentration affiliate or clinical education center should perform approximately 1000 completed patient examinations, representative of the range of vascular procedures, including permanent records and reports, per year, per student equivalent. The overall volume of procedures in which students participate in throughout the program should be representative of the range of non-invasive vascular procedures.*

A student equivalent is defined as equal to one full-time student for one year. **B. Personnel**

The sponsor must appoint sufficient faculty and staff with the necessary qualifications to perform the functions identified in documented job descriptions and to achieve the program's stated goals and outcomes.

1. Program Director

a. Responsibilities

The program director must be responsible for the structure as well as the daily operation of the program, including organization, administration, periodic review and evaluation, continued development, and general effectiveness of program curricula. The program director must ensure that the effectiveness of all clinical affiliates/clinical education centers is maintained. The responsibilities of the program director must not be adversely affected by educationally unrelated functions.

b. Qualifications

The program director must;

- 1) be an appointed faculty member or institutional equivalent
- 2) possess a minimum of a Bachelor's Degree
- 3) have course work in instructional methodologies, evaluation and assessment
- 4) possess the appropriate credential(s) specific to one or more of the concentration(s) offered Diagnostic Medical Sonography 5

- 5) have proficiency in curriculum development
- 6) possess a minimum of two years of full-time experience as a registered sonographer in the professional sonography field. Full-time is defined as 35 hours per week.

As of January 1, 2012, program directors at CAAHEP-accredited Diagnostic Medical Sonography programs will be grandfathered for the Bachelor's degree requirement in their current positions at their current institutions. Upon leaving the grandfathered position the individual will be required to meet all of the qualification standards in order to qualify as a Program Director at another institution.

2. Concentration Coordinator(s)

a. Responsibilities

Concentration coordinator(s) report(s) to the Program Director, and must be designated and responsible for the coordination of concentration(s) for which the Program Director does not possess the appropriate credential.

b. Qualifications

Concentration coordinator(s) must:

- 1) be an appointed faculty member or institutional equivalent;
- 2) possess an academic degree at least equivalent to the degree that is offered in the concentration(s) that s/he is designated to coordinate;
- 3) possess the appropriate credential(s) specific to the concentration(s) that s/he is designated to coordinate;
- 4) have proficiency in curriculum development;
- 5) possess a minimum of two years of full time experience as a registered sonographer in the professional sonography field. Full-time is defined as 35 hours per week.

3. Clinical Coordinator(s)

Programs with eight or more clinical affiliates / clinical education centers must have an additional faculty member designated as the clinical coordinator. For programs with fewer than eight clinical affiliates/clinical education centers that do not have an additional faculty member designated as the clinical coordinator, the Program Director must have the qualifications and fulfill the responsibilities of the Clinical Coordinator.

a. Responsibilities

The clinical coordinator(s) must be responsible for coordinating clinical education with didactic education as assigned by the program director. The clinical coordinator must evaluate and ensure the effectiveness of the clinical affiliate/clinical education centers. The clinical coordinator's responsibilities must include coordination, instruction, and evaluation. The responsibilities of the clinical coordinator must not be adversely affected by educationally unrelated functions.

b. Qualifications

The clinical coordinator(s) must possess, at a minimum, the following:

- 1) proficiency in teaching methodology, supervision, instruction, evaluation, and guidance;
- 2) appropriate credential(s) specific to the concentrations offered;
- 3) the equivalent of two years full-time professional experience as a general sonographer, cardiac sonographer, pediatric cardiac sonographer and/or vascular technologist. Full-time is defined as 35 hours per week; and
- 4) an academic degree no lower than an associate's degree and at least equal to that for which the graduates are being prepared.

The clinical coordinator should document experience as a clinical or didactic instructor in a general sonography, cardiac sonography, pediatric sonography and/or vascular technology program. The instructor experience may have been attained concurrently with the professional experience requirement.

4. Medical Advisor

a. Responsibilities

The medical advisor must provide guidance that the medical components of the didactic and clinical curriculum meet current acceptable performance standards. Diagnostic Medical Sonography 6

b. Qualifications

The medical advisor must be a United States licensed physician, Board certified in a medical specialty related to at least one of the cardiac, vascular or general learning concentrations as applicable to the program’s design.

The medical advisor should participate in goal determination, curriculum development and outcomes assessment. The medical director/advisor should participate in instruction.

5. Faculty and Instructional Staff

If the key personnel do not have all of the appropriate credentials for the learning concentrations offered, then there must be another faculty member with the appropriate credentials who will assume the didactic instruction and clinical evaluation responsibilities specific to that concentration.

All faculty must be familiar with program goals, be able to demonstrate the ability to develop an organized plan of instruction and evaluation, and have appropriate credentials for the learning areas they teach.

a.

Didactic Instructor(s)

1) Responsibilities

The instructional staff must be responsible for providing didactic content, evaluating students, reporting progress, and for the periodic review and updating of course material.

2) Qualifications

The instructors must be individually credentialed if a credentialing examination is offered in the concentration that the instructor is teaching and the program is seeking initial or continuing accreditation in the concentration. They must also be qualified by education and experience, and be effective in teaching the subjects assigned.

b. Clinical Instructor(s)

A clinical instructor must be identified for each clinical affiliate/clinical education center.

1) Responsibilities

A clinical instructor must be available to students whenever he or she is assigned to a clinical setting, provide appropriate clinical supervision, and be responsible for student clinical evaluation. The program must provide a position description for a clinical instructor to carry out educational responsibilities.

2) Qualifications

Clinical instructors must have the appropriate credential for the concentration they are teaching. **C. Curriculum**

The curriculum must ensure the achievement of program goals and learning domains. Instruction must be an appropriate sequence of classroom, laboratory, and clinical activities. Instruction must be based on clearly written course syllabi that include course description, course objectives, methods of evaluation, topic outline, and competencies required for graduation.

A desirable program-length goal for the core curriculum and one learning concentration, excluding requisites, is 18 months. Each additional learning concentration should encompass an additional six months of education.

1. Curriculum Requisites

The following curriculum requisites must be met prior to the beginning of the core curriculum of the diagnostic medical sonography education program; they must be included in college level courses:

a.

Algebra, statistics, or higher mathematics course

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- b. General college-level physics and/or radiographic physics
- c. Communication skills and
- d. Human anatomy and physiology

The communication skills requisite may be met by a variety of courses including English, speech, or composition.

The following curriculum requisites must either be met prior to the diagnostic medical sonography education program or be presented within the program at the college level and must include the following:

- e. Patient care
- f. Medical ethics and law
- g. Medical terminology and
- h. Pathophysiology

2. Master Plan

The master plan of education must be sufficiently detailed to provide for continuity, delivery, and ongoing evaluation of the program in the event of staff changes. The master plan of education must be available for review.

Documentation of the program master plan of education should include the following:

Philosophies and goals of the program and institution

Curriculum sequence with rationale

Course outlines, course descriptions, and performance (behavioral) objectives

Clinical education plan demonstrating correlation with the didactic curriculum

List of clinical affiliates and contact person for each site

Performance objectives for clinical education

Evaluation tools of learning concentration competencies

Grading policy

Objectives, evaluation tools, and grading criteria for each course

Description of evaluation methods for each course

Program policies

Internal and external mechanisms for evaluating program effectiveness

3. Learning Competencies Common to Each Concentration

The minimum competency offered by the program must include the following:

a. Utilize oral and written communication.

- 1) Maintain clinical records;
- 2) Interact with the interpreting physician or other designated physicians with oral or written summary of findings as permitted by employer policy and procedure
- 3) Recognize significant clinical information and historical facts from the patient and the medical records, which may impact the diagnostic examination;
- 4) Comprehend and employ appropriate medical terminology, abbreviations, symbols, terms, and phrases; and
- 5) Educate other health care providers and the public in the appropriate applications of ultrasound and other diagnostic vascular evaluation, including the following:

Medical terminology

Sonographic/other vascular terminology

Pertinent clinical signs, symptoms, and laboratory tests

Pertinent legal principles

b. Provide basic patient care and comfort.

- 1) Maintain infection control and utilize standard precautions;
 - 2) Anticipate and be able to respond to the needs of the patient;
- Demonstrate age related competency (i.e., neonates, pediatric patients, adolescents, adults, and Obstetric patients) Diagnostic Medical Sonography 8

Respond appropriately to parental needs

Recognize when sedation may be appropriate

Demonstrate appropriate care in nursery and intensive care environments (ancillary equipment, thermal, central venous lines, ET tubes, respiratory needs)

3) Identify life-threatening situations and implement emergency care as permitted by employer procedure, including the following:

Pertinent patient care procedures
Principles of psychological support
Emergency conditions and procedures
First aid and resuscitation techniques

4) Proper patient positioning

c. Demonstrate knowledge and understanding of human gross anatomy and sectional anatomy.

1) Evaluate anatomic structures in the region of interest; and

2) Recognize the sonographic appearance of normal tissue structures, including the following:

Sectional anatomy
Embryology
Normal sonographic patterns

d. Demonstrate knowledge and understanding of physiology, pathology, and pathophysiology.

1) Obtain and evaluate pertinent patient history and physical findings;

2) Extend standard diagnostic testing protocol as required by patient history or initial findings;

3) Review data from current and previous examinations to produce a written/oral summary of technical findings, including relevant interval changes, for the interpreting physician's reference and

4) Recognize examination findings that require immediate clinical response and notify the interpreting physician of such findings, including the following:

Patient interview and examination techniques
Chart and referral evaluation
Diagnostic testing protocols related to specific disease conditions
Physiology including blood flow dynamics
Pertinent pathology and pathophysiology
Pertinent legal issues

e. Demonstrate knowledge and understanding of acoustic physics, Doppler ultrasound principles, and ultrasound instrumentation.

1) Select the appropriate technique(s) for examination(s) being performed;

2) Adjust instrument controls to optimize image quality;

3) Perform linear, area, circumference, and other related measurements from sonographic images or data;

4) Recognize and compensate for acoustical artifacts

5) Utilize appropriate devices to obtain pertinent documentation

6) Minimize patient exposure to acoustic energy

7) Apply basic concepts of acoustic physics which include the following:

Sound production and propagation
Interaction of sound and matter
Instrument options and transducer selection
Principles of ultrasound instruments and modes of operation
Operator control options
Physics of Doppler
Principles of Doppler techniques
Methods of Doppler flow analysis
Recording techniques
Acoustic artifacts

8) Emerging Technologies Diagnostic Medical Sonography 9

f. Demonstrate knowledge and understanding of the interaction between ultrasound and tissue and the probability of biological effects in clinical examinations, including the following:

- Biologic effects
- Pertinent in-vitro and in-vivo studies
- Exposure display indices
- Generally accepted maximum safe exposure levels
- ALARA principle

g. Employ professional judgment and discretion.

- 1) Protect the patient's right to privacy based on current federal standards and regulations;
- 2) Maintain confidentiality; and
- 3) Adhere to the professional codes of conduct/ethics through the following:
 - Medical ethics
 - Pertinent legal principles
 - Professional interaction skills
 - Professional scopes of practice

h. Understand the fundamental elements for implementing a quality assurance and improvement program, and the policies, protocols, and procedures for the general function of the ultrasound laboratory, including the following:

- Administrative procedures
- Quality control procedures
- Elements of quality assurance program
- Records maintenance
- Personnel and fiscal management
- Trends in health care systems

i. Recognize the importance of continuing education, through the following:

- Professional journals
- Conferences
- Lectures
- In-house educational offerings
- Professional organizations and resources
- Recent developments in sonography
- Research statistics and design

j. Recognize the importance of, and employ, ergonomically correct scanning techniques:

- Personal fitness
- Supports, tools, and devices
- Equipment adjustments
- Patient positioning

4. The General Learning Concentration must include the following:

- a.** Demonstrate the ability to perform sonographic examinations of the abdomen, superficial structures, non-cardiac chest, and the gravid and nongravid pelvis according to protocol guidelines established by national professional organizations and the protocol of the employing institution utilizing real-time equipment with both transabdominal and endocavitary transducers, and Doppler display modes.
- b.** Recognize and identify the sonographic appearance of normal anatomic structures, including anatomic variants and normal Doppler patterns:
 - Liver
 - Biliary system
 - Pancreas
 - Urinary tract
 - Adrenal glands
 - Spleen
 - Prevertebral vessels

- Peritoneal cavity, including potential spaces
- Gastrointestinal tract
- Noncardiac chest
- Neck
- Breast
- Scrotum
- Prostate
- Anterior abdominal wall
- Extremities
- Brain and spinal cord
- Musculoskeletal

- c.** Recognize, identify, and appropriately document the abnormal sonographic and Doppler patterns of disease processes, pathology, and pathophysiology of the structures listed in III.C.4.b. Modify the scanning protocol based on the sonographic findings and the differential diagnosis:

- History and physical examination

- Related imaging, laboratory, and functional testing procedures

- Clinical differential diagnosis

- Role of ultrasound in patient management

- Sonographic and Doppler patterns in clinical diseases that may occur in the following categories:

- iatrogenic

- Degenerative

- Inflammatory

- Traumatic

- Neoplastic

- Infectious

- Obstructive

- Congenital

- Metabolic

- Immunologic

- d.** Recognize and identify the sonographic appearance of normal anatomic structures of the female pelvis, including anatomic variants and normal Doppler patterns:

- Reproductive system

- Pelvic muscles

- Suspensory ligaments

- Peritoneal spaces

- Pelvic vasculature

- e.** Recognize and identify the sonographic appearance of normal maternal, embryonic, and fetal anatomic structures during the first, second, and third trimesters:

- Sectional anatomy

- Pertinent measurement techniques

- Doppler applications

- f.** Recognize, identify, and appropriately document the sonographic appearance of gynecologic disease processes, pathology, and pathophysiology:

- History and physical examination

- Related imaging, laboratory, and functional testing procedures

- Differential diagnosis

- Role of ultrasound in patient management

- Abnormal sonographic patterns:

- iatrogenic

- Degenerative

- Inflammatory

- Traumatic

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- Neoplastic
- Infectious
- Obstructive
- Congenital
- Metabolic
- Immunologic
- Contraceptive devices
- Infertility procedures
- Doppler applications

g. Recognize, identify, and appropriately document the sonographic appearance of obstetric abnormalities, disease, pathology, and pathophysiology:

- History and physical examination
- Related imaging, laboratory, and functional testing procedures
- Differential diagnosis Role of ultrasound in patient management
- Use of three-dimensional obstetric sonography
- Abnormal sonographic characteristics in pregnancy:
 - Placenta
 - Congenital/genetic anomalies
 - Growth abnormalities
 - Amniotic fluid
 - Viability
 - Multiple gestation
 - Fetal monitoring
 - Maternal factors
 - Postpartum
 - Fetal therapy

h. Demonstrate knowledge and understanding of the role of the sonographer in performing interventional/invasive procedures.

5. The Cardiac Learning Concentration must include the following:

a. Demonstrate knowledge of normal and abnormal cardiac anatomy:

- Embryology and fetal cardiac development
- Cardiac chambers and septation
- Valve anatomy and dynamics
- Coronary artery anatomy
- Relationships of cardiac chambers and great vessels

b. Demonstrate knowledge of normal cardiovascular physiology:

- Hemodynamics
- Ventricular function, including influence of loading conditions and measurement of cardiac output
- Exercise physiology
- Electrophysiology and conduction system
- Pulmonary vascular disease

c. Demonstrate knowledge and understanding of cardiac pathology, pathophysiology, and hemodynamics in different types of cardiac disease:

- Valvular heart disease
- Ischemic cardiac disease
- Cardiomyopathy
- Pericardial disease
- Congenital heart disease
- Cardiac neoplasms and masses
- Cardiac trauma
- Pulmonary vascular disease
- Diseases of the aorta and great vessels

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- d. Demonstrate knowledge and understanding of clinical cardiology:**
 - Relationship of echocardiography to history and physical examination (including indications for echocardiography)
 - Differential diagnosis as it relates to the echocardiographic examination
 - Cardiovascular surgery and interventional cardiology
 - Effect of systemic diseases on cardiovascular anatomy and physiology
- e. Demonstrate knowledge of other cardiac procedures emphasizing indications, utility, and limitations of these procedures:**
 - Angiography and cardiac catheterization
 - Electrocardiography, electrophysiologic studies, Holter monitoring
 - Stress testing
 - Radionuclide studies
 - Other tomographic imaging procedures
 - Phonocardiography and external pulse recording
- f. Demonstrate proficiency in the performance of M-mode, two-dimensional, and Doppler (pulsed wave, continuous wave, color flow and power) echocardiographic studies.**
- g. Recognize, identify, and appropriately document the abnormal echocardiographic and Doppler patterns of disease, pathology, and pathophysiology for the disease categories listed**
- h. Demonstrate knowledge and understanding of the indications, utility, limitations, and technical procedures for related echocardiographic studies:**
 - Stress echocardiography
 - Transesophageal echocardiography
 - Intraoperative echocardiography
 - Contrast echocardiography
 - Three-dimensional echocardiography
 - Echo-guided procedures
- i. Demonstrate knowledge and understanding of clinical pharmacology as it relates to echocardiography and provocative maneuvers:**
 - Cardiovascular pharmacology
 - Theory and use of provocative stress agents
 - Non-pharmacologic stress
 - Potential effects of cardiac medications on echocardiographic findings
- j. Demonstrate knowledge, understanding, and proficiency in the use of quantitation principles applied to echocardiographic images and flow data:**
 - Standard M-mode, two-dimensional, and Doppler measurements and calculations
 - Knowledge and understanding of normal and abnormal values for M-mode, two-dimensional and Doppler echocardiography
 - Evaluation of normal and abnormal ventricular function
 - Evaluation of the severity of valve stenosis and regurgitation
 - Knowledge of normal and abnormal cardiovascular hemodynamics and flow patterns
- 6. The Pediatric Cardiac Learning Concentration must include the following:**
 - a. Demonstrate knowledge of normal and abnormal cardiac anatomy (adult, pediatric, and fetal):**
 - Embryology and fetal cardiac development
 - Segmental approach
 - Cardiac chambers and septation
 - Valve anatomy and dynamics
 - Coronary artery anatomy
 - Relationships of cardiac chambers and great vessels
 - Mediastinal structures

- Arch anatomy
- Pulmonary artery and venous anatomy
- Systemic venous return

b. Demonstrate knowledge of normal cardiovascular physiology as appropriate to the patient or fetus with congenital heart disease:

- Hemodynamics
- Ventricular function, including influence of loading conditions and measurement of cardiac output
- Exercise physiology
- Electrophysiology and conduction system
- Pulmonary vascular disease
- Fetal physiology
- Transitional Neonatal physiology

c. Demonstrate knowledge and understanding of cardiac pathology, pathophysiology, and hemodynamics in different types of cardiac disease as appropriate in the fetus or patient with congenital heart disease:

- Valvular heart disease
- Ischemic cardiac disease
- Cardiomyopathy
- Pericardial disease
- Congenital heart disease
 - Situs abnormalities
 - Defects in cardiac septation
 - Abnormalities in atrial-ventricular connections
 - Ventricular hypoplasia
 - Ventricular Inflow anomalies
 - Abnormalities in ventriculoarterial connection
 - Ventricular outflow anomalies
 - Abnormal vascular (arterial and venous) connections
 - Abnormalities within cardiac chambers, vessels and thorax
 - Post operative repair
- Cardiac neoplasms and masses
- Cardiac trauma
- Pulmonary vascular disease
- Diseases of the aorta and great vessels

d. Demonstrate knowledge and understanding of clinical cardiology as appropriate to the fetus and patient with congenital heart disease:

- Relationship of echocardiography to history and physical examination (including indications for echocardiography) - diagnostic approach to congenital heart disease
- Acquired heart disease and noncardiac disease and effects of systemic diseases on cardiovascular anatomy and physiology
- Differential diagnosis as it relates to the echocardiographic examination
- Arrhythmias
- Genetic syndromes and chromosomal anomalies associated with congenital heart disease (CHD)
- Cardiovascular surgery and interventional cardiology
- Post-operative repair evaluation
- Current and future approaches to caring for the fetus identified with CHD
- Current and future approaches to caring for the pediatric patient with CHD
- Current and future approaches to caring for the adult patient with CHD

e. Demonstrate knowledge of other cardiac procedures emphasizing indications, utility, and limitations of these procedures:

- Chest X-ray
- Angiography and cardiac catheterization
- Electrocardiography, electrophysiologic studies, Holter monitoring Diagnostic Medical Sonography

- Stress testing
- Radionuclide studies
- Tomographic imaging procedures (CT, MRI)
- Fetal interventions for congenital heart disease

f. Demonstrate proficiency in the performance of M-mode, two-dimensional, and Doppler (pulsed wave, continuous wave, color flow) echocardiographic studies.

g. Recognize, identify, and appropriately document the abnormal echocardiographic and Doppler patterns of disease, pathology, and pathophysiology for the disease categories (knowledge of additional views to obtain based on patient history).

h. Demonstrate knowledge and understanding of the indications, utility, limitations, and technical procedures for related echocardiographic studies:

- Stress echocardiography
- Transesophageal echocardiography
- Intraoperative echocardiography
- Contrast echocardiography
- Three-dimensional echocardiography
- Echo-guided procedures
- Strain echocardiography
- Targeted obstetric exam

i. Demonstrate knowledge and understanding of clinical pharmacology as it relates to echocardiography and provocative maneuvers:

- Cardiovascular pharmacology
- Theory and use of provocative stress agents
- Non-pharmacologic stress
- Potential effects of cardiac medications on echocardiographic findings

j. Demonstrate knowledge, understanding, and proficiency in the use of quantitation principles applied to echocardiographic images and flow data:

- Standard M-mode, two-dimensional, and Doppler measurements and calculations (which should be normalized based on body surface area, and/or other biometric measurements for the fetus)

- Knowledge and understanding of normal and abnormal values for M-mode, two-dimensional and Doppler echocardiography

- Evaluation of normal and abnormal ventricular function

- Evaluation of the severity of valve stenosis and regurgitation

- Knowledge of normal and abnormal cardiovascular hemodynamics and flow patterns

 - Knowledge of normal and abnormal sonographic appearances of peripheral vascular anatomy (i.e., branches of pulmonary artery, branches of aortic arch)

 - Miscellaneous measurements specific to patient history

7. The Vascular Learning Concentration must include the following:

a. Demonstrate knowledge of normal and abnormal vascular anatomy:

- Extremity Arterial (upper and lower)
- Extremity Venous (upper and lower)
- Cerebrovascular: extracranial and intracranial
- Abdominal Vasculature: arterial and venous
- Special circulations: arterial and venous

b. Demonstrate knowledge of normal and abnormal vascular physiology;

- Normal and Abnormal Arterial and Venous Hemodynamics: Flow physics
- Exercise physiology
- Effects of collateralization on Hemodynamics

c. Demonstrate knowledge and understanding of vascular physiology, pathophysiology, and hemodynamics in the different types of vascular disease/dysfunction: Diagnostic Medical Sonography 15

Iatrogenic

Degenerative
Inflammatory
Traumatic
Neoplastic
Infectious
Obstructive
Congenital
Metabolic
Immunologic

Flow changes secondary to other states, e.g., cardiac diseases, pulmonary diseases, pregnancy, inflammatory diseases, intracranial and extracranial disease, anemia

Pharmacology

d. Demonstrate knowledge and understanding of clinical vascular diagnostic procedures:

Relationship of vascular diagnostic techniques to patient history and physical examination

Knowledge of appropriate indications for vascular examination

Differential diagnosis as it relates to vascular testing and examination

Vascular surgery and interventional vascular procedures including intravascular ultrasound, angiography, transluminal angioplasty with and without stenting, atherectomy, endarterectomy, patch graft endarterectomy, vein and synthetic vascular bypass procedures as well as embolectomy and thrombectomy, radio-frequency and laser vein ablation, endovascular repair

e. Demonstrate knowledge of other vascular procedures emphasizing indications, utility, and limitations of these procedures:

Angiography

Venography

Magnetic resonance angiogram

Magnetic resonance flow meters

Computed tomography

Nuclear medicine vascular procedures

f. Knowledge of importance and impact of other laboratory values and invasive and non-invasive testing/imaging modalities.

g. Demonstrate proficiency in the performance of physiologic testing (including volume pulse recording, pressure measurements, plethysmography, and stress testing), real-time ultrasound imaging, and Doppler evaluation (pulsed and continuous wave, color and power flow) as relates to the vasculature. Vascular testing proficiency must be demonstrated in the following areas:

Extracranial Cerebrovascular

Intracranial Cerebrovascular (transcranial Doppler)

Extremity Arterial (upper and lower)

Extremity Venous (upper and lower)

Visceral Vascular (renal artery, mesenteric/splanchnic, hepatoportal)

h. Demonstrate knowledge and understanding of clinical pharmacology as it relates to vascular evaluation and stress testing:

Vasoactive relationships

Potential effects of medications on vascular diagnostic findings

i. Demonstrate knowledge, understanding, and proficiency in the use of quantitative principles applied to vascular testing:

Ankle/brachial pressure ratios

Segmental pressures

Aorta/renal ratios

Resistive index

Pulsatility index Diagnostic Medical Sonography 16

Internal carotid artery to common carotid artery ratio
Percentage velocity change across stenosis for grading arterial lesions
Area and diameter reduction measurements
Knowledge of normal and abnormal vascular flow patterns and waveform morphology **D.**

Resource Assessment

The program must, at least annually, assess the appropriateness and effectiveness of the resources described in these **Standards**. The results of resource assessment must be the basis for ongoing planning and appropriate change. An action plan must be developed when deficiencies are identified in the program resources. Implementation of the action plan must be documented and results measured by ongoing resource assessment. **IV. Student and Graduate (Outcomes)**

Evaluation/Assessment

A. Student Evaluation

1. Frequency and purpose

Evaluation of students must be conducted on a recurrent basis and with sufficient frequency to provide both the students and program faculty with valid and timely indications of the students' progress toward and achievement of the competencies and learning domains stated in the curriculum.

The supervising sonographer/vascular technologist should be identified on all student clinical education records.

2. Documentation

Records of student evaluations must be maintained in sufficient detail to document learning progress and achievements.

Records indicating the number and type of procedures performed by the student, the examination findings, the extent of student supervision, and the level of involvement of the student in scanning/performance must be maintained and must document that all students meet the minimum numbers of procedures and types of procedures established by the program.

B. Outcomes

1. Outcomes Assessment

The program must periodically assess its effectiveness in achieving its stated goals and learning domains. The results of this evaluation must be reflected in the review and timely revision of the program.

Outcomes assessments include, but are not limited to: national credentialing examination performance, programmatic retention/attrition, graduate satisfaction, employer satisfaction, and job (positive) placement. The program must meet the outcomes assessment thresholds.

"Positive Placement" means that the graduate is employed full or part-time in a related field; and/or continuing his/her education, and/or serving in the military.

"National credentialing examinations" are those accredited by the National Commission for Certifying Agencies (NCCA) or American National Standards Institute (ANSI). Participation and pass rates on national credentialing examination(s) performance may be considered in determining whether or not a program meets the designated threshold, provided the credentialing examination(s), or alternative examination(s) offered by the same credentialing organization, is/are available to be administered prior to graduation from the program. Results from said alternative examination(s) may be accepted, if designated as equivalent by the same organization whose credentialing examination(s) is/are so accredited.

2. Outcomes Reporting Diagnostic Medical Sonography 17

The program must periodically submit to the JRC-DMS its goal(s), learning domains, evaluation systems (including type, cut score, and appropriateness), outcomes, its analysis of the outcomes and an appropriate action plan based on the analysis.

Programs not meeting the established thresholds must begin a dialogue with the JRC-DMS to develop an appropriate plan of action to respond to the identified shortcomings. **V. Fair Practices**

A. Publications and Disclosure

1. Announcements, catalogs, publications, and advertising must accurately reflect the program offered
2. At least the following must be made known to all applicants and students: the sponsor's institutional and programmatic accreditation status as well as the name, mailing address, web site address, and phone number of the accrediting agencies; admissions policies and practices, including technical standards (when used); policies on advanced placement, transfer of credits, and credits for experiential learning; number of credits required for completion of the program; tuition/fees and other costs required to complete the program; policies and processes for withdrawal and for refunds of tuition/fees.
3. At least the following must be made known to all students: academic calendar, student grievance procedure, criteria for successful completion of each segment of the curriculum and graduation, policies for student leave of absence, exposure to blood borne pathogens, communicable diseases, and pregnancy, and policies and processes by which students may perform clinical work while enrolled in the program.
4. The sponsor must maintain, and provide upon request, current and consistent information about student/graduate achievement that includes the results of one or more of the outcomes assessments required in these **Standards**.

The sponsor should develop a suitable means of communicating to the communities of interest the achievement of students/graduates

B. Lawful and Non-discriminatory Practices

All activities associated with the program, including student and faculty recruitment, student admission, and faculty employment practices, must be non-discriminatory and in accordance with federal and state statutes, rules, and regulations. There must be a faculty grievance procedure made known to all paid faculty.

A procedure should be established for determining that a student's health will permit him or her to meet the documented technical standards of the program.

C. Safeguards

The health and safety of patients, students, and faculty associated with the educational activities of the students must be adequately safeguarded.

All activities required in the program must be educational and students must not be substituted for staff.

The program must ensure voluntary and prudent use of students or other human subjects for non-clinical scanning. Students' grades and evaluations must not be affected by participation or non-participation.

The combined total didactic/clinical involvement of the student in the program must not exceed 40 hours per week.

Students should be informed of and have access to the health care services provided to all other students of the institution.

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D. Student Records

Satisfactory records must be maintained for student admission, advisement, counseling, and evaluation. Grades and credits for courses must be recorded on the student transcript and permanently maintained by the sponsor in a safe and accessible location.

E. Substantive Change

The sponsor must report substantive change(s) as described in Appendix A to CAAHEP/JRC-DMS in a timely manner. Other substantive change(s) to be reported to JRC-DMS within the time limits prescribed include:

1. Changes in affiliates
2. Added or deleted learning concentrations
3. Institution's mission or objectives if these will affect the program
4. Addition of courses that represent a significant departure in content or in method of delivery
5. Degree or credential level
6. Substantial change in clock or credit hours for successful completion of a program or in the length of a program.

F. Agreements

There must be a formal affiliation agreement or memorandum of understanding between the sponsor and all other entities that participate in the education of the students describing the relationship, role, and responsibilities between the sponsor and that entity.

The delineation of responsibilities should include student supervision, benefits, liability and financial arrangements, if any. The agreement should include a clause to protect students and to ensure due process.

An affiliate is an institution having adequate resources to provide a broad range of appropriate clinical education opportunities for students.

A clinical education center is a department, division, or other designated part of a clinical affiliate having adequate resources to provide clinical education opportunities for students. Multiple clinical education centers may be identified within a clinical affiliate.

APPENDIX A

Application, Maintenance and Administration of Accreditation

A. Program and Sponsor Responsibilities

1. Applying for Initial Accreditation

- a. The chief executive officer or an officially designated representative of the sponsor completes a "Request for Accreditation Services" form. The "Request for Accreditation Services" form can be found online via the CAAHEP website at www.caahep.org. The form can be completed on-line and submitted directly to the JRC-DMS via the CAAHEP website (preferred); completed on-line, printed, signed and mailed to the JRC-DMS; or it can be printed as a blank form, completed, signed and mailed to:

JRC-DMS
6021 University Blvd. Suite 500
Ellicott City, MD 21043

Note: There is **no** CAAHEP fee when applying for accreditation services; however, individual committees on accreditation may have an application fee.

- b. The program undergoes a comprehensive review, which includes a written self-study report and an on-site review.

The self-study instructions and report form are available from the JRC-DMS. The on-site review will be scheduled in cooperation with the program and JRC-DMS once the self-study report has been completed, submitted, and accepted by the JRC-DMS.

2. Applying for Continuing Accreditation

- a. Upon written notice from the JRC-DMS, the chief executive officer or an officially designated representative of the sponsor completes a "Request for Accreditation Services" form. The "Request for Accreditation Services" form can be found online via the CAAHEP website at www.caahep.org. The form can be completed on-line and submitted directly to the JRC-DMS via the CAAHEP website (preferred); completed on-line, printed, signed and mailed to the JRC-DMS; or it can be printed as a blank form, completed, signed and mailed to:

JRC-DMS
6021 University Blvd. Suite 500
Ellicott City, MD 21043

- b. The program may undergo a comprehensive review in accordance with the policies and procedures of the JRC-DMS.

If it is determined that there were significant concerns with the on-site review, the sponsor may request a second site visit with a different team.

After the on-site review team submits a report of its findings, the sponsor is provided the opportunity to comment in writing and to correct factual errors prior to the JRC-DMS forwarding a recommendation to CAAHEP. Diagnostic Medical Sonography 20

3. Administrative Requirements for Maintaining Accreditation

a.

The program must inform the JRC-DMS and CAAHEP within a reasonable period of time (as defined by JRC-DMS and CAAHEP policies) of changes in chief executive officer, dean of health professions or equivalent position, and required program personnel.

b.

The sponsor must inform CAAHEP and the JRC-DMS of its intent to transfer program sponsorship. To begin the process for a Transfer of Sponsorship, the current sponsor must submit a letter (signed by the CEO or designated individual) to CAAHEP and the JRC-DMS that it is relinquishing its sponsorship of the program. Additionally, the new sponsor must submit a "Request for Transfer of Sponsorship Services" form. The JRC-DMS has the discretion of requesting a new self-study report with or without an on-site review. Applying for a transfer of sponsorship does not guarantee that the transfer of accreditation will be granted.

c. The sponsor must promptly inform CAAHEP and the JRC-DMS of any adverse decision affecting its accreditation by recognized institutional accrediting agencies and/or state agencies (or their equivalent).

d. Comprehensive reviews are scheduled by the JRC-DMS in accordance with its policies and procedures. The time between comprehensive reviews is determined by the JRC-DMS and based on the program's on-going compliance with the Standards, however, all programs must undergo a comprehensive review at least once every ten years.

e. The program and the sponsor must pay JRC-DMS and CAAHEP fees within a reasonable period of time, as determined by the JRC-DMS and CAAHEP respectively.

f. The sponsor must file all reports in a timely manner (self-study report, progress reports, annual reports, etc.) in accordance with JRC-DMS policy.

g. The sponsor must agree to a reasonable on-site review date that provides sufficient time for CAAHEP to act on a JRC-DMS accreditation recommendation prior to the "next comprehensive review" period, which was designated by CAAHEP at the time of its last accreditation action, or a reasonable date otherwise designated by the JRC-DMS.

Failure to meet any of the aforementioned administrative requirements may lead to administrative probation and ultimately to the withdrawal of accreditation. CAAHEP will immediately rescind administrative probation once all administrative deficiencies have been rectified.

4. Voluntary Withdrawal of a CAAHEP- Accredited Program

Voluntary withdrawal of accreditation from CAAHEP may be requested at any time by the Chief Executive Officer or an officially designated representative of the sponsor writing to CAAHEP indicating: the desired effective date of the voluntary withdrawal, and the location where all records will be kept for students who have completed the program.

5. Requesting Inactive Status of a CAAHEP- Accredited Program

Inactive status may be requested from CAAHEP at any time by the Chief Executive Officer or an officially designated representative of the sponsor writing to CAAHEP indicating the desired date to become inactive. No students can be enrolled or matriculated in the program at any time during the time period in which the program is on inactive status. The maximum period for inactive status is two years. The sponsor must continue to pay all required fees to the JRC-DMS and CAAHEP to maintain its accreditation status.

To reactivate the program the Chief Executive Officer or an officially designated representative of the sponsor must notify CAAHEP of its intent to do so in writing to both CAAHEP and the JRC-DMS. The sponsor will be notified by the JRC-DMS of additional requirements, if any, that must be met to restore active status.

If the sponsor has not notified CAAHEP of its intent to re-activate a program by the end of the two-year period, CAAHEP will consider this a "Voluntary Withdrawal of Accreditation." Diagnostic Medical Sonography 21

B. CAAHEP and Committee on Accreditation Responsibilities – Accreditation Recommendation Process

1. After a program has had the opportunity to comment in writing and to correct factual errors on the on-site review report, the JRC-DMS forwards a status of public recognition recommendation to the CAAHEP Board of Directors. The recommendation may be for any of the following statuses: initial accreditation, continuing accreditation, transfer of sponsorship, probationary accreditation, withhold accreditation, or withdraw accreditation.

The decision of the CAAHEP Board of Directors is provided in writing to the sponsor immediately following the CAAHEP meeting at which the program was reviewed and voted upon.

2. Before the JRC-DMS forwards a recommendation to CAAHEP that a program be placed on probationary accreditation, the sponsor must have the opportunity to request reconsideration of that recommendation or to request voluntary withdrawal of accreditation. The JRC-DMS reconsideration of a recommendation for probationary accreditation must be based on conditions existing both when the committee arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The CAAHEP Board of Directors' decision to confer probationary accreditation is not subject to appeal.

3. Before the JRC-DMS forwards a recommendation to CAAHEP that a program's accreditation be withdrawn or that accreditation be withheld, the sponsor must have the opportunity to request reconsideration of the recommendation, or to request voluntary withdrawal of accreditation or withdrawal of the accreditation application, whichever is applicable. The JRC-DMS reconsideration of a recommendation of withdraw or withhold accreditation must be based on conditions existing both when the JRC-DMS arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The CAAHEP Board of Directors' decision to withdraw or withhold accreditation may be appealed. A copy of the CAAHEP "Appeal of Adverse Accreditation Actions" is enclosed with the CAAHEP letter notifying the sponsor of either of these actions.

At the completion of due process, when accreditation is withheld or withdrawn, the sponsor's Chief Executive Officer is provided with a statement of each deficiency. Programs are eligible to re-apply for accreditation once the sponsor believes that the program is in compliance with the accreditation *Standards*.

Any student who completes a program that was accredited by CAAHEP at any time during his/her matriculation is deemed by CAAHEP to be a graduate of a CAAHEP-accredited program.

4.0 EXHIBIT 1

AIUM STATEMENT ON IN VITRO BIOLOGICAL EFFECTS
Approved by the AIUM, March 1998

It is difficult to evaluate reports of ultrasonically induced in vitro biological effects with respect to their clinical significance. The predominant physical and biological interactions and mechanisms involved in an in vitro effect may not pertain to the in vivo situation. Nevertheless, an in vitro effect must be regarded as a real biological effect.

Results from in vitro experiments suggest new endpoints and serve as a basis for design of in vivo experiments. In vitro studies provide the capability to control experimental variables and thus offer a means to explore and evaluate specific mechanisms. Although they may have limited applicability to in vivo biological effects, such studies can disclose fundamental intercellular or intracellular interactions.

While it is valid for authors to place their results in context and to suggest further relevant investigations, reports of in vitro studies which claim direct clinical significance should be viewed with caution.

AIUM STATEMENT ON CLINICAL SAFETY
Approved March 1998, Reaffirmed 1992

Diagnostic ultrasound has been in use since the late 1950's. Given its known benefits and recognized efficacy for medical diagnosis, including use during human pregnancy, the American Institute of Ultrasound in Medicine herein addresses the clinical safety of such use:

No confirmed biological effects on patients or instruments operators caused by exposure at intensities typical of present diagnostic ultrasound instruments have ever been reported. Although the possibility exists that such biological effects may be identified in the future, current data indicate that the benefits to patients of the prudent use of diagnostic ultrasound outweigh the risks, if any that may be present.

5.0 EXHIBIT 2

AIUM STATEMENT ON SAFETY IN TRAINING AND RESEARCH
Approved March 1998

Diagnostic ultrasound has been in use since the late 1950's. No confirmed adverse biological effects on patients resulting from this usage have ever been reported. Although no hazard has been identified that would preclude the prudent and conservative use of diagnostic ultrasound in education and research, experience from normal diagnostic practice may or may not be relevant to extended exposure times and altered exposure conditions. It is therefore considered appropriate to make the following recommendations:

In those special situations in which examinations are to be carried out for purposes other than direct medical benefit to the individual being examined, the subject should be informed of the anticipated exposure conditions, and of how these compared with conditions, and of how these compare with conditions for normal diagnostic practice.

When there is no direct medical benefit to a person undergoing an ultrasound exam (e.g. training or research), it is necessary to **educate** the person regarding the risks of the procedure and obtain his or her **informed consent**.

-
- The AIUM suggests the following:
-
- | | |
|---|-----------------------------------------------------------------------------------------|
| X | Do not perform studies without reason |
| X | Do not prolong studies without reason |
| X | Use the maximum output power and
Maximum amplification to optimize
Image quality. |
-

It has been proved that, compared with a broad unfocused beam, highly focused ultrasound is much less likely to cause bioeffects

.0 **EXHIBIT 3**
IN VIVO
BIOEFFECT
INVESTIGATIONS

In vivo means Δ observed in living tissue Δ

The following are recent conclusions of in vivo bioeffects investigations:

When compared with unfocused beams, focused beams require higher intensities to produce bioeffects. This occurs because smaller beam area means less thermal build up and less interactions with cavitation nuclei.

Note: An unfocused ultrasound beam causes a higher temperature elevation than a focused ultrasound beam at the same intensity.

Maximum intensities (SPTA): 100 mW/cm² - unfocused
1W/cm² - focused

CONCLUSIONS REGARDING IN VIVO MAMMALIAN
BIOEFFECTS

Approved by the AIUM, October 1992

In the low megahertz frequency range there have been (as of this date) no independently confirmed significant thermal biological effects in mammalian tissues exposed in vivo to unfocused ultrasound with intensities below 100 mW/cm², or to focused ultrasound with intensities below 1W/cm² SPTA

IN VITRO BIOEFFECTS INVESTIGATIONS

In vitro means observed in test tubes in an experimentally controlled environment.

Advantage of in vitro studies: Careful measurements can be made under rigorous experimental conditions.

7.0 EXHIBIT 4

**CONCLUSIONS REGARDING A THERMAL BIOEFFECTS
MECHANISM**

Approved by AIUM October 1987

1. A thermal condition is one reasonable approach to specifying potentially hazardous exposure for diagnostic ultrasound.
2. Based solely on a thermal criterion, a diagnostic exposure that produces a maximum temperature rise of 1° C above normal physiological levels may be used in clinical examinations without reservations.
3. An in situ temperature rise above 41° C is considered hazardous in fetal exposures; the longer this temperature elevation is maintained, the greater is the likelihood for damage to occur.
4. Analytical models of ultrasonically induced heating have been applied successfully to in vivo mammalian situations. In those clinical situations where local tissue temperatures are not measured, estimates of temperature elevations can be made by employing such analytical models.
5. Calculations of ultrasonically induced temperature elevation, based on a simplified tissue model and a simplified model of stationary beams, suggests the following: For examinations in fetal soft tissue with typical perfusion rates, employing center frequencies between 2 and 10 MHz and beam widths less than 11 wavelengths, the computed temperature rise will not be significantly above 1° C if the in situ SATA intensity does not exceed 200 mW/cm². If the beam width does not exceed eight wavelengths the corresponding intensity is 300 mW/cm². However, if the same beam impinges on fetal bone, the local temperature rise may be higher.

8.0 Exhibit 5

Cavitation is not considered a clinically significant risk to patients because if harmful effects do occur, they are found only in a few cells.

CONCLUSIONS REGARDING CAVITATION
Approved by the AIUM, October 1992

1. Acoustic cavitation may occur with short pulses and has the potential for producing deleterious biological effects. The temporal peak outputs of some currently available diagnostic ultrasound devices can exceed the threshold for cavitation in vitro and can generate levels that produce extravasations of blood cells in the lungs of laboratory animals.
6. A number, called the Mechanical Index, has been developed to predict the likelihood of cavitation induced bioeffects.
7. No confirmed biological significant adverse effects have been reported in mammalian tissues that do not contain well-defined gas bodies.

CONCLUSIONS REGARDING EPIDEMIOLOGY
Approved by the AIUM, October 1987

1. Widespread clinical use over 25 years has not established any adverse effect arising from exposure to diagnostic ultrasound.
2. Randomized clinical studies are the most rigorous method for assessing potential adverse effects of diagnostic ultrasound. Studies using this methodology show no evidence of an effect on birth weight humans.
3. Other epidemiologic studies have shown no causal association of diagnostic ultrasound with any of the adverse fetal outcomes studied.

9.0 ***Ambidextrous Scanning Policy***

Rationale: Musculoskeletal Stress Injury (MSI) is currently approaching epidemic proportions among sonographers. Current research indicates that approximately 80% of sonographers are scanning with some form of pain.

Students are to scan ambidextrously in the laboratory and clinical sites.

Suggested methods include:

- Scanning with the non-dominant hand one day/week
- Scanning with the non-dominant hand 2 weeks/month
- Scanning with the non-dominant hand 5 cases/day

Clinical sites are requested to support this policy.

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ARKANSAS STATE UNIVERSITY
COLLEGE OF NURSING AND HEALTH PROFESSIONS
College Student Code of Honor

Each student admitted to a professional program in the College of Nursing and Health Professions is charged with the responsibility of honorable conduct. A student is assumed honorable until his/her actions prove otherwise. An honor offense is defined as an act of lying, cheating, or stealing. Formal procedures exist for violations of the honor code.

As a student in a health program, it is fundamental that you act in an honorable and virtuous way so that a community of trust is established among members of the college and your clients. Honor is a practiced ideal that will positively impact your relationship with fellow students, faculty, administrators, patients and other members of the community. As you live an honorable life, you will find that you cannot live without it.

All students in this college are bound by the Honor Code and all are needed to make it work. The atmosphere of trust and integrity that is created by an honor system enables the student to know his/her word will be taken as true, to compete fairly in the classroom and to keep what is rightfully his/hers. The system functions best when all members of the college not only take responsibility for their own actions, but hold their peers to the same standards.

As a student admitted to a health professions program, you must agree to live by and support the basic principles of honesty - no lying, cheating or stealing; be accountable for your actions; and share information about honor offenses. If you are not prepared to accept these responsibilities, you should select a program outside this college.

I have read the explanation of the College Student Code of Honor. I understand that as an admitted student in one of the programs in the college, I have accepted the pledge of honesty and will be expected to meet the standards as set forward.

Signature

Date

PROCEDURES FOR COLLEGE STUDENT CODE OF HONOR

The College Student Code of Honor exists in addition to the University Code of Conduct and the Academic Integrity Policy found in the Student Handbook. An honor offense by the college code is defined as an act of lying, cheating or stealing. These terms are defined as follows:

Lying - a false statement (written or oral) made with the deliberate intent to deceive; something intended to or serving to convey a false impression.

Cheating - to practice fraud or deceit; academic fraud is a form of cheating and includes such things as plagiarism (including Internet resources), false citation, false data and submission of the same work to fulfill academic requirements in multiple classes.

Stealing - to take the property of others without permission or right; to take ideas, credits, words without right or acknowledgement; to accept credit for another's work.

These honor code violations apply whether they are performed individually or in groups. They apply to didactic, laboratory and clinical experiences of the program as well as in situations where you are representing your program/college.

PROCEDURES:

If a student is aware of an honor offense, the student should report that offense to their ethics committee representative. The representative will accompany the student to the faculty member, program/director or chair's office OR will direct the student to the faculty member of the class in question, the program director or the department chair. An investigation will result.

If there is evidence to bring forward, the student will be notified, in writing, of the specific charges, who the hearing body will be and the time and place of the hearing. Such notification will be delivered at least two working days in advance of the hearing. The date of the hearing, if possible, must be set within 10 working days from the date of notification to the student.

The College Code of Ethics Committee will hear the case. The Ethics Committee will be selected each fall and will be comprised of six CNHP student representatives and two CNHP faculty appointed by the dean. A committee of alternate representatives will be selected by the Dean to include six (6) students and two (2) faculty members*. Actions by the Ethics Committee may include: 1) dismissal of the case, 2) sanction the student, 3) refer the case to the Dean of Students, Student Affairs. Disciplinary sanctions by the committee may include educative, reprimand, restrictions and restitution. The committee does not have the authority to suspend or expel the student. However, the committee may forward the case to the faculty member or director/chair with a recommendation of suspension or program dismissal. The Dean of Students, or designee, will educate the committee and their alternates on the hearing process and sanctions in the fall semester of each year.

Student rights in this committee process are outlined in the ASU Student Handbook under the caption "Disciplinary Hearings". The student is entitled to one appeal rendered by the Associate Dean for Judicial Affairs. The process for appeal is found in the section on Appeal Process.

*On each distance campus, one student will be designated as an ethics representative.

**COLLEGE OF NURSING AND HEALTH PROFESSIONS
Incident Report Form**

CLINICAL LABORATORY SCIENCES
COMMUNICATION DISORDERS
NURSING
PHYSICAL THERAPY
RADIOLOGIC SCIENCES

Time: _____

Date: _____

Location: _____

(On Campus/Off Campus)

Student: _____ **SS#:** _____

Description of Incident (Name all persons involved):

Witnesses of the Incident:

Action taken (notification of/by whom):

Review/Comments:

Does this need review by the Infection Control Committee? Yes ____ **No** ____

Student

Date

Faculty

Date

Follow-up:

If more space is necessary, use additional pages or back of sheet.

ARKANSAS STATE UNIVERSITY
Diagnostic Medical Sonography Program
Counseling Document Form

Student: _____

Date: ___/___/___

Faculty Advisor:

Reasons for Counseling
Suggestions for Corrective Action
Faculty Advisor's Comments
Student's Comments

Faculty Advisor Signature

Date

Student Signature

Date

**COLLEGE OF NURSING AND HEALTH PROFESSIONS
ARKANSAS STATE UNIVERSITY
SUBSTANCE ABUSE COMPLIANCE CONTRACT**

I, _____, have read the Board of Trustee approved *Substance Abuse Policy & Procedures* of the Arkansas State University College of Nursing and Health Professions and agree, as a student in the professional health program, to comply with all aspects of the policy as written, including testing for substances and appropriate release of that information. Furthermore, I agree to abide by the provisions for determining dismissal and to follow the conditions of readmission as outlined.

Student's Name

Student's Signature

Date

Background Checks

Arkansas State University College of Nursing and Health Professions now requires background checks for students admitted to professional programs. This is to ensure compliance with agreements between the College and Clinical Facilities.

Arkansas State University's College of Nursing and Health Professions has worked with Verified Credentials, Inc. to establish an acceptable screening procedure. This cost of the background check is \$47.50. Applicants who fail to submit a background check will not be eligible to participate in the clinical experience.

Please follow the directions below for submitting your application to Verified Credentials:

- Go to www.myvci.com/asu
- Select ASU- CNHP from the drop down menu.
- Complete and sign disclosure.
- Complete information page.
- Step 3 allows payment by credit card or bank transfer. Make selection and place order.
- Print the "Confirmation Page" and provide to your Departmental office as documentation that this process has been initiated.

Upon completion, the results of the background screening will be sent to you via email that will apprise you of the findings as well as your final score of:

- Red—Convictions or Discrepancy found
- Yellow—Possible Discrepancy found
- Green—No Convictions or Discrepancies found

The detailed report will be sent to the clinical site. If any information is found that would negatively affect your eligibility for clinical placement in the Program, you will be given an opportunity to challenge the information through the Adverse Action process associated with Verified Credentials. The clinical site will receive the information concerning any reports that are yellow or red and will determine your eligibility to participate in the clinical experience base on their criteria. If you have any questions, please contact Verified Credentials Client Services at 800.938.6090.

It is important that you submit information in a timely fashion. Thank you for your prompt attention to this request.

Objective: To assist students in meeting requirements for placement in certain health care facilities through documentation of a satisfactory criminal background check.

Required: Effective August 1, 2009 students must submit to and demonstrate a satisfactory criminal background check as a prerequisite for clinical practice for certain health care facilities. Students who fail to submit to a background check or to allow the Clinical facilities access to the report will be ineligible for clinical placement. Those who do not pass the background check are afforded the opportunity to explain the circumstances surrounding the situation and if the final determination is that the student is ineligible for clinical placement he/she will be given the opportunity to withdraw from the Program. Attendance in clinical practice is mandatory for successful completion of all of the Nursing or Health Professions Program.

The criminal background check will include but is not limited to: ID Search Plus; Criminal Background; Sex Offender Search; Abuse Registry; OIG Medicare Sanctioned List;

Situations in which a student does not receive a satisfactory background check will be reviewed by the Clinical Facility on a case-by-case basis. Convictions involving the following crimes, but not limited to these crimes, may serve to disqualify a student from participating in the mandatory clinical learning experiences.

- Any felony, whether listed below or not
- Crimes involving drugs, including but not limited to unlawful possession or distribution
- Crimes of physical violence to include any type of abuse (child, spousal, or of the elderly), abduction such as kidnapping, manslaughter, murder, robbery, sexual crimes, possession of a restricted fire arm or any related weapons offenses, assault and battery
- Conviction of a misdemeanor related to abuse, neglect or exploitation

A private company approved to perform Criminal Background Checks will conduct the background check. The cost of the background check will be borne by the student.

Process Guidelines:

- Arkansas State University College of Nursing and Health Professions has adopted Verified Credentials as the background screening vendor for those clinical sites that require a background check. This will become effective August 1, 2009. Students will be responsible for all associated costs.
- Students will be required to complete a background check screening with the Program's vendor. The background check is to be completed prior to participating at the health care facility where such a requirement is stipulated.

- At present, Verified Credentials completes screening through Criminal Search (County), FACIS (Level I – Individual), IDSearchPlus and the National Sex Offender Public Registry.
- Through Verified Credentials, students are assigned a GREEN, YELLOW or RED indicator in each of the screening areas listed above. A copy of each student’s report will be sent directly to the clinical site for review and/or available for review per Verified Credentials’ WEB site. Students will be required to provide all clinical affiliates open access to criminal background check reports.
- In the event the student receives a **GREEN** indicator(s), the student will be cleared to participate in clinical experiences.
- In the event the student receives any **YELLOW** indicator(s), the student’s Verified Credentials Report will be reviewed by the clinical to determine if they will be permitted to participate in the clinical experience.
- In the event the student receives any **RED** indicator(s), the student’s Verified Credentials Report will be reviewed by the clinical site to determine if the student will be permitted to participate in the clinical experience.
- Additional background checks with other vendors may be stipulated by some clinical affiliates (e.g. mental/behavioral health). Clinical affiliates reserve the right to refuse entrance of any student based on background check information. In the event, a clinical affiliate declines a student for clinical experience the student may not be able continue in the program since program objectives cannot be met. Students will be provided a copy of the program policy regarding criminal background check screening. In the event changes are made to the background check screening process, students will receive the applicable updates.

RELEASE OF SCREENING RESULTS

I, _____, am currently enrolled in one of the Arkansas State University College of Nursing and Health Professions Programs below as indicated by the check mark:

- Nursing
- Clinical Laboratory Science
- Physical Therapy
- Medical Imaging and Radiation Science
- Communication Disorders
- Social Work

I realize that the criminal background check policy/process may require that my results be shared with clinical affiliates and if a negative indicator is recorded , determine if I am permitted to participate in the clinical experience. My signature on this document serves as proof that I am granting permission for my criminal background check reports to be released as indicated.

Printed name: _____

Signature: _____

Date: _____

PLEASE TAKE TO YOUR DEPARTMENT TO BE PLACE IN YOUR STUDENT FILE.

**ARKANSAS STATE UNIVERSITY
DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM
LIABILITY RELEASE FORM**

I, _____ am enrolled in the Bachelor of Sciences in Diagnostic
(Print last name, first name)

Medical Sonography program of Arkansas State University and may elect to participate in the optional volunteer learning experience of live ultrasound scanning on myself and other volunteer ultrasound students in the classroom.

By signing this release form, I acknowledge that I have read the attached AIUM statements (Exhibits 1-5), and that I have been informed of the possible risks of ultrasound scanning. It is my understanding that my experience in the classroom will be limited by my instructor who serves as an information source and observer, but not as a guarantor of safety. It is also my understanding that I will be advised to consult with my own personal physician at my own expense if the instructor observes any abnormality during the course of the volunteer scanning experience.

I realize that by signing this document, I am releasing from liability and holding harmless the members of the Board of Trustees of Arkansas State University, and their officers and employees, including the employees of the Diagnostic Medical Sonography Program.

I also understand that it is my responsibility to consult a physician regarding any possible negative effects which may result from my participation in the ultrasound scanning activity and the effects that it may have on my health and well-being.

I realize that my participation in this program is wholly voluntary and that the purpose of participating in live ultrasound scanning is to learn as much as possible about ultrasound technique that will aid in my hospital (clinical) experience.

By signing this document, I certify that I have read and understand its contents.

Student signature

Date

Protecting the Privacy of Patients' Health Information

Overview: *Each time a patient sees a doctor, is admitted to a hospital, goes to a pharmacist or sends a claim to a health plan, a record is made of their confidential health information. In the past, family doctors and other health care providers protected the confidentiality of those records by sealing them away in file cabinets and refusing to reveal them to anyone else. Today, the use and disclosure of this information is protected by a patchwork of state laws, leaving gaps in the protection of patients' privacy and confidentiality.*

Congress recognized the need for national patient record privacy standards in 1996 when they enacted the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and Health Information and Technology for Economic and Clinical Health Act of 2009. The law included provisions designed to save money for health care businesses by encouraging electronic transactions, but it also required new safeguards to protect the security and confidentiality of that information. The law gave Congress until August 21, 1999 to pass comprehensive health privacy legislation. When Congress did not enact such legislation after three years, the law required the Department of Health and Human Services (HHS) to craft such protections by regulation.

In November 1999, HHS published proposed regulations to guarantee patients new rights and protections against the misuse or disclosure of their health records. During an extended comment period, HHS received more than 52,000 communications from the public. In December 2000, HHS issued a final rule that made significant changes in order to address issues raised by the comments. To ensure that the provisions of the final rule would protect patients' privacy without creating unanticipated consequences that might harm patient's access to care or quality of care, HHS Secretary Tommy G. Thompson opened the final rule for comment for 30 days. After that comment period, President Bush and Secretary Thompson allowed the rule to take effect on April 4, 2001, as scheduled, and make appropriate changes during the next year to clarify the requirements and correct potential problems that could threaten access to, or quality of, care. On July 6, 2001, HHS issued its first set of guidance to answer common questions and clarify confusion about the final rule's provisions.

COMPLIANCE SCHEDULE

The final rule took effect on April 14, 2001. As required by the HIPAA law, most covered entities have two full years - until April 2003 - to comply with the final rule's provisions. The law gives HHS the authority to make appropriate changes to the rule prior to the compliance date.

COVERED ENTITIES

As required by HIPAA/HITECH, the final regulation covers health plans, health care clearinghouses, and those health care providers who conduct certain financial and administrative transactions (e.g., electronic billing and funds transfers) electronically.

INFORMATION PROTECTED

All medical records and other individually identifiable health information used or disclosed by a covered entity in any form, whether electronically, on paper, or orally, are covered by the final rule.

CONSUMER CONTROL OVER HEALTH INFORMATION

under the final rule, patients will have significant new rights to understand and control how their health information is used.

- patient education on privacy protections. Providers and health plans will be required to give patients a clear written explanation of how the covered entity may use and disclose their health information.
- Ensuring patient access to their medical records. Patients will be able to see and get copies of their records, and request amendments. In addition, a history of non-routine disclosures must be made accessible to patients.

- Receiving patient consent before information is released. Health care providers who see patients will be required to obtain patient consent before sharing their information for treatment, payment, and health care operations. In addition, separate patient authorization must be obtained for non-routine disclosures and most non-health care purposes. Patients will have the right to request restrictions on the uses and disclosures of their information.

BOUNDARIES ON MEDICAL RECORD USE AND RELEASE

With few exceptions, such as appropriate law enforcement needs, an individual's health information may only be used for health purposes.

- Ensuring that health information is not used for non-health purposes. Health information covered by the rule generally may not be used for purposes not related to health care - such as disclosures to employers to make personnel decisions, or to financial institutions - without explicit authorization from the individual.
- Providing the minimum amount of information necessary. In general, disclosures of information will be limited to the minimum necessary for the purpose of the disclosure. However, this provision does not apply to the disclosure of medical records for treatment purposes because physicians, specialists, and other providers need access to the full record to provide quality care.

ENSURE THE SECURITY OF PERSONAL HEALTH INFORMATION

The final rule establishes the privacy safeguard standards that covered entities must meet, but it gives covered entities the flexibility to design their own policies and procedures to meet those standards. The requirements are flexible and scalable to account for the nature of each entity's business, and its size and resources. Covered entities generally will have to:

- **Adopt written privacy procedures.** These include who has access to protected information, how it will be used within the entity, and when the information may be disclosed. Covered entities will also need to take steps to ensure that their business associates protect the privacy of health information.
- **Train employees and designate a privacy officer.** Covered entities will need to train their employees in their privacy procedures, and must designate an individual to be responsible for ensuring the procedures are followed.

ESTABLISH ACCOUNTABILITY FOR MEDICAL RECORDS USE AND RELEASE

In HIPAA/HITECH, Congress provided penalties for covered entities that misuse personal health information.

- **Civil penalties.** Health plans, providers and clearinghouses that violate these standards will be subject to civil liability. Civil money penalties are \$100 per violation, up to \$25,000 per person, per year for each requirement or prohibition violated.
- **Federal criminal penalties.** Under HIPAA/HITECH, Congress also established criminal penalties for knowingly violation patient privacy. Criminal penalties are up to \$50,000 and one year in prison for obtaining or disclosing protected health information under "false pretenses"; and up to \$250,000 and up to 10 years in prison for obtaining or disclosing protected health information with the intent to sell, transfer or use it for commercial advantage, personal gain or malicious harm.

BALANCING PUBLIC RESPONSIBILITY WITH PRIVACY PROTECTIONS

In limited circumstances, the final rule permits - but does not require - covered entities to continue certain existing disclosures of health information without individual authorization for specific public responsibilities.

These permitted disclosures include: emergency circumstances; identification of the body of a deceased person, or the cause of death; public health needs; research, generally limited to when a waiver of authorization is independently approved by a privacy board or Institutional Review Board; oversight of the health care system; judicial and administrative proceedings; limited law enforcement activities; and related to national defense and security.

All of these disclosures could occur today under existing laws and regulations, although the privacy rule generally establishes new safeguards and limits. If there is no other law requiring that information be disclosed, covered entities will use their professional judgments to decide whether to disclose any information, reflecting their own policies and ethical principles.

SPECIAL PROTECTION FOR PSYCHOTHERAPY NOTES

Psychotherapy notes (used only by a psychotherapist) are held to a higher standard of protection because they are not part of the medical record and are never intended to be shared with anyone else. All other personal health information is considered to be sensitive and protected consistently under this rule.

EQUIVALENT REQUIREMENTS FOR GOVERNMENT ENTITIES

The provisions of the final rule generally apply equally to private sector and public sector entities. For example, both private hospitals and government medical units have to comply with the full range of requirements, such as providing notice, access rights and requiring consent for routine uses.

COST OF IMPLEMENTATION

The final rule projected the implementation costs at \$17.6 billion over 10 years - a figure more than offset by the \$29.9 billion in projected savings under the final electronic transactions regulation issued in August 2000.

PRESERVING EXISTING, STRONG STATE CONFIDENTIALITY LAWS

As required by the HIPAA/HITECH law itself, stronger state laws (like those covering mental health, HIV infection, and AIDS information) continue to apply. These confidentiality protections are cumulative; the final rule will set a national "floor" of privacy standards that protect all Americans, but in some states individuals enjoy additional protection. In circumstances where states have decided through law to require certain disclosures of health information, the final rule does not preempt these mandates.

COMPLIANCE AND ENFORCEMENT

The rule will be enforced by the HHS Office for Civil Rights (OCR). On July 6, OCR issued its first set of guidance to answer many common questions about the new patient privacy rule and to clarify some of the confusion regarding the rule's potential impact on health care delivery and access. Before covered entities must comply with the rule, OCR will provide assistance to providers, plans and health clearinghouses in meeting the requirements of the regulation. The initial guidance and other information about the new regulation are available on the Web at <http://www.hhs.gov/ocr/hipaa/>.

Note: All HHS press releases, fact sheets and other press materials are available at <http://www.hhs.gov/news>.

**Arkansas State University
College of Nursing and Health Professions
HIPAA/HITECH Compliance Contract**

I, _____, have read the information provided to me concerning the Health Insurance Portability and Accountability Act (HIPAA)/Health Information and Technology for Economic and Clinical Health Act of 2009 and understand its intention. As a student in a professional health program, I agree to comply by the requirements of HIPAA/HITECH.

I understand that during clinical experiences, I will have access to protected personal health information (PHI as defined by HIPAA/HITECH) of individuals and agree to:

- a) Only use or disclose PHI as permitted Clinical Service under HIPAA/HITECH statute(s);
- b) Use appropriate available safeguards to prevent misuse of PHI;
- c) Make PHI available to individuals as set forth under the HIPAA/HITECH statute(s);
- d) Return or destroy all PHI upon termination of a clinical assignment: and
- e) Report any improper disclosure of PHI within ten days of discovery to my Clinical Instructor and/or the Director of Clinical Education.

Student's name

Student's signature

Date

ARKANSAS STATE UNIVERSITY
Diagnostic Medical Sonography Program
Physical Performance Requirements and Technical Standards

Students are advised of the following physical guidelines for working in Diagnostic Medical Sonography. These technical standards have been developed to better define the physical conditions necessary for a sonographer to function in the health care environment. Please indicate if you can perform at the level indicated or if you need accommodations to accomplish the designated task.

STRENGTH & MOBILITY ___ YES ___ NO

Rationale: In the field of Ultrasound, sonographers are very often required to lift incapacitated patients onto examination tables, to move immobile patients into appropriate positions for imaging. The inability to move, stand, or lift is an occupational deficit affecting the employment potential of the graduate.

- Y On your feet most of the day.
- Y Walking several hours of the day, either performing exams, patient transfers, or portable procedures.
- Y Assume varied postural positions (bending, kneeling, stretching) to work with equipment and patients meeting established procedures and standards of speed and accuracy.
- Y Lift heavy weight as necessary, either equipment or patients.
- Y Push/pull stretchers, wheelchairs, and supply carts as necessary.
- Y Must have a command of the English language to be able to respond in an emergency situation.
- Y Must be able to respond with speed to situations requiring basic first aid and emergency care.

In NO, please explain

MANUAL DEXTERITY & COORDINATION ___ YES ___ NO

- Y Able to perform manipulative skills using thumb/hand/wrist and arm and hand movements such as repetitive movement associated with scanning, positioning of equipment, assisting patient movements, operating a computer, and positioning table.
- Y Able to perform manipulative skills using the lower extremities, such as foot table locks.
- Y Wears protective clothing correctly, when necessary, such as gowns, masks, gloves, shoe covers when working with patients in isolation, and surgical gowns, caps, gloves, shoe covers for surgery cases.

If NO, please explain

SENSORY DISCRIMINATION ___ YES ___ NO

Rationale: In Doppler ultrasound technique, an audible signal guides the diagnostic examination and is part of the output. A sonographer without an adequate sense of hearing and sight could not perform these examinations.

- Y Able to see objects distinctly and clearly with or without corrective devices.
- Y Must be able to hear patients when at a distance of 10-15 feet.
- Y Must be able to communicate with [patients rapidly
- Y Must hear audible sound between 3-15,000 MHz.

If NO, please explain

MENTAL ABILITIES ___ YES ___ NO

Follows oral and written instructions correctly.

If NO, please explain

In accordance with the Americans with Disabilities Act, I

Print Name

(Please check one)

Need special accommodations to complete the Diagnostic Medical Sonography program (list needs on back).

Require no special accommodations to complete the Diagnostic Medical Sonography program

Student signature: _____

Date: ____/____/____

**ARKANSAS STATE UNIVERSITY
DEPARTMENT OF HEALTH PROFESSIONS
Diagnostic Medical Sonography Program**

STATEMENT OF UNDERSTANDING/AGREEMENT

NAME
(PRINT): _____

ADDRESS & TELEPHONE:

My signature below certifies that I agree with the following:

1. I have received the Diagnostic Medical Sonography Student Handbook.
2. I have read the Diagnostic Medical Sonography Student Handbook.
3. I understand that I am responsible for all assignments and policies specified in the Handbook, even if they are not stated aloud by the Diagnostic Medical Sonography Faculty.
4. I understand all policies stated in the Handbook.
5. I understand the penalties for policy violation and/or misconduct.
6. I understand the clinical grading procedure.
7. I agree to abide by the professional behavior requirements stated in the Handbook.
8. I understand that addendums may be made at any time that will affect the policies listed in the Handbook. I agree to abide by the changes made by those addendums. Any addendums will be presented in writing and require student and faculty signatures.
9. I agree to adhere to the guidelines and policies stated in the Handbook.

Signature

Date

Faculty Witness

**ARKANSAS STATE UNIVERSITY
COLLEGE OF NURSING AND HEALTH PROFESSIONS
SUBSTANCE ABUSE POLICY AND PROCEDURES
WAIVER OF RELEASE OF MEDICAL INFORMATION**

I, _____, am a professional health student at Arkansas State University and have previously received, read and understand the College of Nursing and Health Professions' *Substance Abuse Policy & Procedures*.

Since this is my second incident of verified reportable behavior, I hereby consent to having a sample of my body fluid collected on this _____ day of _____, 20____, according to the terms set forth in the policy for the purpose of testing for identified substances at my own expense.

I understand that a positive test result will require a subsequent confirmation test. If that result remains positive, it will affect my status in the professional program. I understand that if I am taking any medications which would adversely affect the results of the test, that I should disclose those immediately. Written medical documentation from my physician will be required by me for verification of that medication/s taken.

I authorize the release of test results related to the screening or testing of my blood/urine specimen to the Dean, College of Nursing and Health Professions at Arkansas State University, and to myself. I understand that my body fluid specimen will be sent for actual testing.

I hereby release Arkansas State University, its Board of Trustees, officers, employees, and agents from legal responsibility or liability arising from such a test, including but not limited to, the testing procedure, analysis, the accuracy of the analysis, or the disclosure of the results.

_____	Student's	_____	_____
signature		Date	Time
_____	Witness	_____	_____
		Date	Time

Arkansas State University
Diagnostic Medical Sonography

REPORT OF MEDICAL HISTORY

PLEASE PRINT

NAME: _____ FIRST NAME: _____ M.I.: _____

Date of birth: / / Social Security Number: - - Sex: M F

Marital status: Single or Married
Citizenship: _____

HOME ADDRESS

Street Number: _____ City: _____ State: _____ Zip code: _____

EMERGENCY CONTACT INFORMATION

Name: _____ Relationship: _____

Street Number: _____ City: _____ State: _____ Zip code: _____

Home telephone number: _____ Business telephone number: _____

Business address: _____

Do you have medical insurance? Yes ___ No ___

Name of Insurance Company: _____

Immunizations Completed		Date last injection
	yes	no
Tetanus		
Diphtheria		
Small Pox		

Have any of your relatives ever had any of the following?			
	yes	no	relationship
Tuberculosis			
Diabetes			
Kidney Disease			

Mumps			
Rubella			
Polio			
Typhoid			
Other			

Heart Disease			
Arthritis			
Stomach Disease			
Asthma, Hay Fever			
Epilepsy, Convulsions			

PERSONAL HISTORY

Please answer all questions. Comment on all positive answers in space below or on additional sheet.

Have you had	yes	no		yes	no		yes	no
Scarlet Fever			Insomnia			Chest pain/pressure		
Measles			Nervous Disorder			Diabetes		
German Measles			Frequent Depression			Chronic Cough		
Mumps			Seizures			Palpitations (Heart)		
Chicken Pox			Recurrent Headache			High Blood Pressure		
Malaria			Recurrent Colds			Lung Disease		
Gum or Tooth Trouble			Head Injury with Unconsciousness			Rheumatic Fever or Heart Murmur		
Sinusitis			Hay Fever, Asthma			Disease of Injury of Joints		
Eye Trouble			Tuberculosis			Other Injuries		
Ear, Nose, Throat Trouble			Shortness of breath			Gallbladder Trouble or Gallstones		
Have you had	Yes	No		Yes	No		Yes	No
Recurrent Diarrhea			Rupture Hernia			Recent gain or loss of weight		
Dizziness,			Weakness,			Venereal Disease		

Fainting			Paralysis					
Kidney Disease			Albumin/Sugar in Urine			Other		
Surgery			Allergy			Back Problems		
Appendectomy			Penicillin			Tumor/Cyst, Cancer		
Tonsillectomy			Sulfonamides					
Hernia Repair			Foods (which)					
Other			Other					

Yes No

A	Has your physical activity been restricted during the past five years? (Give reasons and durations).		
B	Have you had difficulty with school, studies, or teachers? (Give details)		
C	Have you received treatment or counseling for a nervous or emotional condition or personality or character disorder?		
D	Have you had any illness or injury or been hospitalized other than already noted? (Give details)		
E	Have you consulted or been treated by clinics, physicians, healers, or other practitioners within the past five years? (Other than routine checkups?)		
F	Have you been rejected for or discharged from military service because of physical, emotional, or other reasons? (If so, give reasons)		
G	Do you have any questions in regard to your health, family history, or other matter which you would like to discuss now with a member of the staff of the Health Services?		

REMARKS OR ADDITIONAL INFORMATION
 Comment on any items checked Yes No above
 (Use additional sheet if necessary)

_____ Student's Signature _____ Date



REPORT OF HEALTH EVALUATION

TO THE EXAMINING PHYSICIAN: Please review the student's history and complete the form below. Please comment on all positive answers. The information supplied will not affect the student's admission status; It will be used only as a background for providing necessary health care. This information is strictly for the use of the Health Services and will not be released without student consent.

PLEASE PRINT

LAST NAME: _____ FIRST NAME: _____ M.I.: _____

Height: _____ inches

Weight: _____ lbs.

Overweight: _____

Underweight: _____

Blood Pressure: _____

VISION

Right Eye: 20/ _____

Left Eye: 20/ _____

Corrected Vision – Right Eye: 20/ _____ Left Eye: 20/ _____

Tuberculin Skin Test Positive: _____ / Negative: _____ Date of Test: _____

Are there abnormalities of the following systems? Describe fully. Use additional sheet, if needed.

URINALYSIS Sugar: _____ Albumin: _____ Micro: _____

HEMOGLOBIN (If indicated) GM% _____ Hematocrit (if indicated) _____

- | | | |
|----------------------------|-----------|----------|
| 1. Head, Ear, Nose, Throat | _____ Yes | _____ No |
| 2. Respiratory | _____ Yes | _____ No |
| 3. Cardiovascular | _____ Yes | _____ No |
| 4. Gastrointestinal | _____ Yes | _____ No |
| 5. Hernia | _____ Yes | _____ No |
| 6. Eyes | _____ Yes | _____ No |
| 7. Genitourinary | _____ Yes | _____ No |
| 8. Musculoskeletal | _____ Yes | _____ No |
| 9. Metabolic/Endocrine | _____ Yes | _____ No |
| 10. Neuropsychiatry | _____ Yes | _____ No |
| 11. Skin | _____ Yes | _____ No |

Impaired function of any paired organ? _____ Yes _____ No

If so, please explain _____

OTHER LABORATORY TESTS

Recommendations for physical activity (PE, Intramurals, and ROTC)

Unlimited: _____ Limited: _____

Explain: _____

Do you have any recommendations regarding the care of this student? ____ Yes ____ No

If yes, please explain: _____

Is the patient now under treatment for any medical or emotional condition? ____ Yes ____ No

If yes, please explain: _____

PHYSICIAN'S SIGNATURE: _____

PRINT NAME: _____

DATE: ____/____/____

**ARKANSAS STATE UNIVERSITY
Radiologic Sciences
Diagnostic Medical Sonography**

Box 910, State University, AR 72467-0910
Jennifer DeClerk, BSRS, RDMS Program Coordinator
870-972-2914 office 870-972-2004 fax
jdeclerk@astate.edu

Policy 9.0

Ambidextrous Scanning Policy

Rationale: Musculoskeletal Stress Injury (MSI) is currently approaching epidemic proportions among sonographers. Current research indicates that approximately 80% of sonographers are scanning with some form of pain.

Students are to scan ambidextrously in the laboratory and clinical sites.

Suggested methods include:

- Scanning with the non-dominant hand one day/week
- Scanning with the non-dominant hand 2 weeks/month
- Scanning with the non-dominant hand 5 cases/day

Clinical sites are requested to support this policy

I am aware of this policy and agree to adhere to this policy when required.

Student Signature

Date

Arkansas State University
College of Nursing & Health Professions

Clarification of Student Role

I hereby confirm that I am being assigned to the clinical sites (the “Institution,”) listed below for the purpose of participating in clinical training and experience required as a part of my course of study at Arkansas State University, the “University.” I recognize and agree that I am not the agent or employee of the University for any purposes whatsoever during my clinical studies at the Institution. I further acknowledge and confirm that I am a student only and have no authority to act on behalf of the University in any capacity.

Student

Date

Arkansas Methodist Hospital
Crittenden Memorial Hospital
Baxter County Regional Medical Center
NEA Cardiology
NEA Baptist
NEA Baptist Noninvasive Cardiology
Poplar Bluff Regional Medical Center
St. Bernard’s Imaging Center
St. Bernard’s Regional Medical Center
St Bernard’s Noninvasive Cardiology
St Francis Medical Center
Twin River’s Regional Medical Center
White County Medical Center
White Country Medical Center-Cardiopulmonary
White River Medical Center
Women’s Health Specialist, PC

**ARKANSAS STATE UNIVERSITY
DEPARTMENT OF HEALTH PROFESSIONS
Diagnostic Medical Sonography Program**

MASTER PLAN

I, _____, am aware that a master plan of education exists and is located in the program directors office for my review.

Contents of master plan:

1. 18 month course map
2. Course syllabi
3. Examples of:
 - a. Power Point lecture
 - b. Quiz
 - c. Test
 - d. Clinical Rotation Schedule

Student Signature

APPENDIX II
CLINICAL FORMS

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Clinical Orientation Checklist

- _____ Staff Sonographers
- _____ Radiologist(s)
- _____ Supplies (procedure supplies, linen, gel, cleaning supplies, etc.)
- _____ Exam Rooms
- _____ Radiologists' Office
- _____ Printer/Processor
- _____ Reception/Waiting Area
- _____ Requisitions
- _____ Department Manuals (MSDS, Safety, Protocols, etc.)

Student _____

Sonographer's Signature _____

Clinical Site _____

Date _____

ARKANSAS STATE UNIVERSITY
Diagnostic Medical Sonography Program
CLINICAL INSTRUCTOR EVALUATION

The purpose of this questionnaire is to evaluate the clinical instructor. Please be objective when considering your responses to these questions. Please read each statement and rate your response using a 1 to 5 scale, with 5 = strongly agree, 4 = agree, 3 = no opinion, 2 = disagree, 1 = strongly disagree.

Clinical Instructor:

1.	Helps me to apply classroom knowledge to the clinical situation.	1	2	3	4	5
2.	Is willing to provide clinical supervision and guidance as required by the student handbook?	1	2	3	4	5
3.	Discusses my performance with me, if necessary.	1	2	3	4	5
4.	Corrects me in a constructive and professional manner when necessary.	1	2	3	4	5
5.	Appears interested in me and my learning experience.	1	2	3	4	5
6.	Is a professional role model for me?	1	2	3	4	5
7.	Helps me develop my problem-solving skills.	1	2	3	4	5
8.	Encourages me to perform at an appropriate level of confidence.	1	2	3	4	5
9.	Evaluates me according to my clinical performance.	1	2	3	4	5
10.	Assists me in finding answers to my questions.	1	2	3	4	5

Comments:

 Student Signature

 Date

ARKANSAS STATE UNIVERSITY
Diagnostic Medical Sonography Program
Clinical Evaluation Form
Student Self Evaluation

Student Name: _____

Clinical Site: _____

Semester/Year _____

INSTRUCTIONS: As students you are constantly evaluated by your instructors, in order to monitor your progress during clinical education. However, it is important that your instructors also are made aware of how you perceive your experiences and ability. This evaluation asks you to candidly discuss your current progress. Please check the appropriate column or columns which best describe your feelings about your level of proficiency at this point in your education.

	Excellent	good	average	fair	poor
Professional Conduct	_____	_____	_____	_____	_____
Mannerisms, cleanliness, neatness					
Attitude	_____	_____	_____	_____	_____
Enthusiasm for profession interest in Assigned activities					
Communication Skills	_____	_____	_____	_____	_____
Interpersonal skills pts/staff					
Patient Care Skills	_____	_____	_____	_____	_____
Awareness of emotions, modesty					
Cooperation	_____	_____	_____	_____	_____
Willingness to assume duties					
Dependability	_____	_____	_____	_____	_____
Punctuality & reliability					
Self-control	_____	_____	_____	_____	_____
Confidence in personal ability					
Application of Knowledge	_____	_____	_____	_____	_____
Use of academic information					
Organization of Duties	_____	_____	_____	_____	_____
Logical & efficient performance					
Adaptability	_____	_____	_____	_____	_____
Achievement of routine exams on Non-routine patients					
Attendance	_____	_____	_____	_____	_____
Always punctual and notifies clinical site When you will not be in attendance					

Please rate your overall professional ability at this point in your education:

_____Excellent _____good _____average _____fair _____poor

In the space below, list the area or procedure that you find the most difficult.

ARKANSAS STATE UNIVERSITY
Diagnostic Medical Sonography Program
Clinical Evaluation Form
Student Self Evaluation, cont.

ALL GOALS MET FROM PREVIOUS TERM Yes No

In the space below list at least one measurable goal that you wish to set for yourself for next term:

TERM _____ YEAR

GOAL #1

MET

Circle one

yes

no

TERM _____ YEAR

GOAL #2

MET

yes

no

TERM _____ YEAR

GOAL #3

MET

yes

no

TERM _____ YEAR

GOAL #4

MET

yes

no

Please add any additional comments which you deem important (e.g., disagreements with this or other evaluations, clinical assignments, etc.):

ARKANSAS STATE UNIVERSITY
Diagnostic Medical Sonography PROGRAM
Clinical Evaluation Form #1
 (1st and 2nd clinical semesters)
Student Evaluation by Sonographer

Student Name: _____ **Clinical Site :** _____

Semester/Year: _____

INSTRUCTIONS: In order to monitor their progress during their clinical education, this evaluation asks you to candidly discuss their current progress. Please check the appropriate column or columns which best describe your feelings about their level of proficiency at this point in their education. The students do not receive a grade from this evaluation.

	Excellent	good	average	fair	poor
Professional Conduct	_____	_____	_____	_____	_____
Mannerisms, cleanliness, neatness	_____	_____	_____	_____	_____
Attitude	_____	_____	_____	_____	_____
Enthusiasm for profession interest in Assigned activities	_____	_____	_____	_____	_____
Communication Skills	_____	_____	_____	_____	_____
Interpersonal skills pts/staff	_____	_____	_____	_____	_____
Patient Care Skills	_____	_____	_____	_____	_____
Awareness of emotions, modesty	_____	_____	_____	_____	_____
Cooperation	_____	_____	_____	_____	_____
Willingness to assume duties	_____	_____	_____	_____	_____
Dependability	_____	_____	_____	_____	_____
Punctuality & reliability	_____	_____	_____	_____	_____
Self-control	_____	_____	_____	_____	_____
Confidence in personal ability	_____	_____	_____	_____	_____
Application of Knowledge	_____	_____	_____	_____	_____
Use of academic information	_____	_____	_____	_____	_____
Organization of Duties	_____	_____	_____	_____	_____
Logical & efficient performance	_____	_____	_____	_____	_____
Adaptability	_____	_____	_____	_____	_____
Achievement of routine exams on Non-routine patients	_____	_____	_____	_____	_____
Attendance	_____	_____	_____	_____	_____
Always punctual and notifies the clinical site When they will not be in attendance	_____	_____	_____	_____	_____

Please rate their overall professional ability at this point in their education:

___Excellent ___good ___average ___fair ___poor

1. In the space below, list the area or procedure that you find the student experiencing the most difficulty.

Please add any additional comments which you deem important (e.g., disagreements with this or other evaluations, clinical assignments, etc.):

Signature of Evaluator _____
(Please include your credentials)

Do you wish this evaluation to be anonymous? Yes No

**Scale 1: Level of Performance at THIS Rotation:
Place a hash mark (!) anywhere on the line.**

Rate this student's overall performance relative to what you would expect at this level of clinical and academic experience.

1 2 3 4 5 6 7 8 9
10

Well Below Far Exceeds
Expectations Expectations

**Scale 2: Level of Performance Compared to Entry Level Sonographer:
Place a hash mark (!) anywhere on the line.**

ⒶEntry LevelⓈ is the minimal level of competence a student is expected to achieve by the end of all didactic and clinical preparation prior to graduation and initial entry into the clinical setting as a sonography professional. A student who has reached this level will be working independently requiring only occasional guidance, primarily when addressing new or complex problems.

Rate this student=s overall performance relative to what you would expect of an entry-level sonographer at your facility.

1 2 3 4 5 6 7 8 9
10

Significantly below Beyond
entry-level entry-level

**Sign to indicate discussion of this evaluation:
Student's Signature**

Signature of Evaluator _____
(Please include your credentials)

Do you wish this evaluation to be anonymous? Yes No



**Arkansas State University
Radiologic Sciences
Diagnostic Medical Sonography
Clinical Log-Abdomen/Small Parts**



Name:

Semester:

Date	Patient Reference	Abdomen Complete	Adrenals	Appendix	Breast	GB/Biliary System	Great Vessels	Limited Abdomen	Liver	Pancreas	Prostate opt	Retroperitoneum/P eritoneum	Rotator Cuff opt	Scrotum	Spleen	Soft Tissue	Thyroid/Parathyroi	Urinary Tract(Renal)

S- scanned

C- competency

P – proficiency

A - Assisted



Arkansas State University
Radiologic Sciences
Diagnostic Medical Sonography
Clinical Log-Obstetrics & Gynecology



Name:

Semester:

Date	Patient Reference	Transabdominal	Transvaginal	1 st Trimester OB	2 nd Trimester OB	3 rd Trimester OB	Biophysical Profile	Physician-Assisted Procedure



**Arkansas State University
Radiologic Sciences
Diagnostic Medical Sonography
Clinical Log-Vascular**



Name:

Semester:

Date	Patient Reference	Lower Extremity Art	Upper Extremity Art	Carotid	Hemodialysis Grafts	Lower Extremity Venous	Upper Extremity Venous	Peripheral Grafts	Penile Sonography	Vein Mapping	Venous Incompetence	Trans-cranial Doppler	Assisted Procedure

S- scanned C- competency P - proficiency



Arkansas State University
Radiologic Sciences
Diagnostic Medical Sonography
Clinical Log-Cardiac



Name:

Semester:

Day	Patient Reference	Trans Thoracic Echocardiogram	Trans Esophageal Echocardiogram	Stress Echocardiogram	Dobutamine Stress Echocardiogram

I A – Assisted C – Competency P- Proficiency S-scanned



Arkansas State University
Radiologic Sciences
Diagnostic Medical Sonography
Clinical Log- Special Procedures



Name:

Semester:

Date	Patient Reference	Physician-Guided Procedure															

S- scanned

C- competency

P - proficiency

Arkansas State University
 Diagnostic Medical Sonography
Abdomen/Small Parts

Clinical Tally

Name: _____

Exam	1 st Fall	Spring	Summer I	Summer II	2 nd Fall	Totals
Abdomen Complete						
Adrenals						
Appendix						
Breast						
GB/Biliary System						
Great Vessels						
Liver						
Pancreas						
Prostate opt						
Retroperitoneum/ Peritoneum						
Rotator Cuff opt						
Scrotum						
Spleen						
Soft Tissue						
Thyroid/Parathyroid						
Urinary Tract						

**Arkansas State University
Radiologic Sciences
Diagnostic Medical Sonography
OB/Gyn**

Clinical Tally

Name: _____

Exam	1 st Fall	Spring	Summer I	Summer II	2 nd Fall	Totals
Transabdominal						
Transvaginal						
1 st Trimester OB						
2 nd Trimester OB						
3 rd Trimester OB						
Biophysical Profile						
Physician-Assisted Procedure						

Arkansas State University
Radiologic Sciences
Diagnostic Medical Sonography

Vascular Clinical Tally

Name: _____

Exam	1 st Fall	Spring	Summer I	2 nd Summer II	2 nd Fall	Totals
Lower Extremity Artery						
Upper Extremity Artery						
Carotid						
Hemodialysis Grafts						
Lower Extremity Venous						
Upper Extremity Venous						
Peripheral Grafts						
Penile Sonography						
Vein Mapping						
Venous Incompetence						
Trans-cranial Doppler						
Physician Assisted Procedure						

Arkansas State University
Diagnostic Medical Sonography

Special Procedures

Clinical Tally

Name: _____

Exam	1st Fall	Spring	Summer I	2nd Summer II	2nd Fall	Totals



ASU Diagnostic Medical Sonography
Competency Technical Sheet

Student Name: _____
 Procedure: _____
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

The evaluator will not agree to observe the Competency Evaluation unless this form is presented prior to the evaluation and the information section above is complete.

Instructions: Indicate the student's performance by checking the appropriate box for each objective according to your observations for the entire procedure.

Patient History:

1. Age _____ 2. Gender _____ 3. Habitus _____
 4. Indications: _____
 5. Chronology: _____
 6. Localization: _____

CLINICAL OBJECTIVES: Utilizing skills from clinical, laboratory, and academic education, for the above procedure, the student should be able to:

Patient Relationships	YES	NO	N/A
Interpret Request Accurately			
Correlate Patient Identification			
Obtain Accurate History/Assessment			
Assist Patient Appropriately			
Technical Factors	YES	NO	N/A
Measures anatomy correctly			
Select Appropriate Procedure/Transducer			
Select Suitable Gain/Depth/Focus/ect.			
Utilizes Accessory Functions As Needed (color/Doppler/ect.)			
Procedure Skills	YES	NO	N/A
Instruct Patient Properly(Breathing/Explanation of procedure)			
Position Patient Correctly (Supine, LLD, RLD, Upright,etc.)			
Utilize Anatomic Landmarks Correctly			
Utilizes Appropriate Labeling on Images			
Utilizes the ALARA principle			



ASU Diagnostic Medical Sonography
Proficiency Technical Sheet

Student Name: _____
 Procedure: _____
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

The evaluator will not agree to observe the Competency Evaluation unless this form is presented prior to the evaluation and the information section above is complete.

Instructions: Indicate the student's performance by checking the appropriate box for each objective according to your observations for the entire procedure.

Patient History:

1. Age _____ 2. Gender _____ 3. Habitus _____
 4. Indications: _____
 5. Chronology: _____
 6. Localization: _____

CLINICAL OBJECTIVES: Utilizing skills from clinical, laboratory, and academic education, for the above procedure, the student should be able to:

Patient Relationships	YES	NO	N/A
Interpret Request Accurately			
Correlate Patient Identification			
Obtain Accurate History/Assessment			
Assist Patient Appropriately			
Technical Factors	YES	NO	N/A
Measures anatomy correctly			
Select Appropriate Procedure/Transducer			
Select Suitable Gain/Depth/Focus/ect.			
Utilizes Accessory Functions As Needed (color/Doppler/ect.)			
Procedure Skills	YES	NO	N/A
Instruct Patient Properly(Breathing/Explanation of procedure)			
Position Patient Correctly (Supine, LLD, RLD, Upright,etc.)			
Utilize Anatomic Landmarks Correctly			
Utilizes Appropriate Labeling on Images			
Utilizes the ALARA principle			



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Abdominal Complete**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and Identifies the following anatomy in both longitudinal and transverse planes:			
a. Liver			
b. Gallbladder			
c. Right and Left Kidney			
d. Spleen			
e. Pancreas			
f. Aorta			
Measurements: Appropriate caliper placement for the following			
a. Common bile			
b. Gallbladder Wall			
c. Right and Left Kidney			
d. Spleen			
Measures other structures when indicated (liver, portal vein, pancreas, aorta, ect.)			
Utilizes different patient positioning to achieve optimal images (LLD, RLD, Upright)			
Utilizes Color imaging and Doppler technology when appropriate			
Identifies and Demonstrates abnormal sonographic findings			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Abdominal Doppler**
 Clinical Site: _____
 Date: _____
 Patient _____
 ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

Demonstrates color, power, and/or pulsed Doppler flow patterns in the following vessels:	YES	NO	N/A
Hepatic Veins			
Hepatic Arteries			
Portal Vein			
Great Vessels			
Superior Mesenteric Artery and Vein			
Splenic Vein			
Renal Arteries and Veins			
Identifies and Demonstrates abnormal sonographic findings or venous collaterals			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Adrenals**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Utilizes appropriate patient positions to demonstrate the right and left adrenal gland region			
Demonstrates appropriate anatomical landmarks for right adrenal gland in longitudinal axis			
Demonstrates appropriate anatomical landmarks for right adrenal gland in transverse axis			
Demonstrates appropriate anatomical landmarks for left adrenal gland in longitudinal axis			
Demonstrates appropriate anatomical landmarks for left adrenal gland in transverse axis			
Measurements: Appropriate Caliper Placement			
Identifies and Demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Appendix**
 Clinical Site: _____
 Date: _____
 Patient _____
 ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and documents the appendix or appendiceal region in Longitudinal and Transverse(with and without graded compression)			
Measurements: Appropriate Caliper Placement			
Identifies and Demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Breast**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and identifies area of interest in Long			
Demonstrates and identifies area of interest in transverse			
Measurements as indicated.			
Identifies and demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **GB/biliary system**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and identifies gallbladder in Longitudinal in both supine and decubitus position			
Demonstrates and identifies gallbladder in transverse in both supine and decubitus position			
Demonstrates and identifies biliary ducts both intrahepatic and extrahepatic			
Demonstrates and identifies relational anatomy			
a. Pancreatic head			
b. Main Lobar Fissure			
c. Portal triad			
Measurements: appropriate caliper placement for measurement of common bile duct and gallbladder wall thickness.			
Identifies and demonstrates abnormal sonographic findings			
Properly utilized color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Great Vessels**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and identifies Aorta Longitudinal Axis(Superior, Mid, Distal)			
Demonstrates and identifies Aorta in transverse Axis(Superior, Mid, Distal)			
Demonstrates and identifies the IVC in Longitudinal Axis			
Demonstrates and identifies the IVC in Transverse Axis			
Measurements: appropriate caliper placement for diameter of Aorta			
Identifies and demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Liver**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and identifies in Longitudinal:			
a. Left Lobe			
b. Right Lobe			
c. Caudate			
Demonstrates and identifies in transverse:			
a. Left Lobe			
b. Right Lobe			
Demonstrates and identifies hepatic vessels: Hepatic Veins, IVC, Portal Vein, Hepatic Artery			
Demonstrates and identifies Ligaments and fissures			
d. Teres/Falciform			
e. Venosum			
f. Main Lobar Fissure			
Demonstrates and Identifies relational anatomy: Diaphragm, porta hepatis, right kidney/Morrison's Pouch			
Measurements: appropriate caliper placement			
Identifies and demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



**ASU Diagnostic Medical Sonography
Competency or Proficiency**

Student Name: _____
 Procedure: **Pancreas**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and identifies in Longitudinal axis the pancreatic d. Head			
e. Body			
f. Tail			
Demonstrates and identifies in transverse axis the pancreatic c. Head			
d. Body			
e. Tail			
Demonstrates and identifies the vascular landmarks of the pancreas: a. Splenic vein, portal confluence/SMV			
b. SMA, Great Vessels			
Demonstrates and identifies g. Common Bile duct			
h. Pancreatic duct			
Demonstrates and Identifies relational anatomy: Stomach, duodenum, left kidney			
Measurements: appropriate caliper placement			
Identifies and demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Prostate**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Prepares patient(explains exam, positions patient and probe, inserts probe).			
Identifies and demonstrates prostate in multiple planes (peripheral and central portions)			
Identifies and demonstrates in multiple planes prostatic urethra, seminal vesicles, ejaculatory ducts, vas deferens, verumontanum			
Measurements: Appropriate caliper placement.			
Monitors patient for rectal bleeding post exam.			
Identifies and demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Retroperitoneum/Peritoneum**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Assesses regions of potential spaces, in longitudinal and transverse			
a. Spaces around great vessels			
b. Morrison's pouch			
c. Lesser Sac			
d. Pericolic gutter			
e. Para/Peri renal spaces			
f. Right and left lower quadrants			
Identifies and demonstrates abnormal sonographic findings (ex: fluid collections)			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Scrotal**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and identifies in Longitudinal			
g. Right Testicle			
h. Left Testicle			
i. Right Epididymis			
j. Left Epididymis			
k. Mediastinum Testes- right and left			
Demonstrates and identifies in transverse			
f. Right Testicle			
g. Left Testicle			
h. Right Epididymis			
i. Left Epididymis			
Provides comparative image of left and right testes			
Asses vascular flow within the testes and epididymis: pampiniform plexus and intratesticular vessels			
Measurements: appropriate caliper placement			
Identifies and demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Soft Tissue**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Identifies and demonstrates area of interest in multiple planes.			
Utilizes stand-off pad as indicated.			
Identifies relational anatomy as indicated.			
Demonstrates vascularity.			
Measurement: appropriate caliper placement.			
Identifies and demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Spleen**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and identifies the spleen in longitudinal.			
Demonstrates and identifies the spleen in Transverse.			
Demonstrates and identifies relational anatomy:			
a. Stomach			
b. Left Kidney			
Measurement: appropriate caliper placement.			
Identifies and demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Thyroid/Parathyroid**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and identifies in Longitudinal:			
l. Left Lobe			
m. Right Lobe			
n. Isthmus			
Demonstrates and identifies in transverse:			
j. Left Lobe			
k. Right Lobe			
Demonstrates and identifies Vascular Landmarks			
i. Carotid Arteries			
j. Jugular Veins			
Demonstrates and Identifies relational anatomy: Trachea, Sternocleidomastoid muscle, Longus Colli muscle			
Measurements: appropriate caliper placement			
Identifies and demonstrates abnormal sonographic findings			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Urinary Tract**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Demonstrates and identifies in Longitudinal (Medial, Mid, Lateral)			
o. Right Kidney			
p. Left Kidney			
Demonstrates and identifies in transverse (Upper, Middle, and Lower portions)			
l. Right Kidney			
m. Left Kidney			
Demonstrates and identifies Vascular Anatomy			
k. Great Vessels			
l. Right renal vein/arteries, hilar and paranchymal flow			
m. Left renal vein/arteries, hilar and parenchymal flow			
Demonstrates and Identifies relational anatomy: Adrenals, liver, spleen, retroperitoneum			
Demonstrates and identifies urinary bladder in long and transverse.			
Measurements: appropriate caliper placement for measurement of the kidneys, and foe volume measurement of the bladder			
Identifies and demonstrates abnormal sonographic findings.			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



**ASU Diagnostic Medical Sonography
Competency or Proficiency**

Student Name: _____
 Procedure: **1st Trimester OB**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Obtains relevant patient clinical history(LMP, GPA, Lab Values)			
Utilizes trans-abdominal and/or trans-vaginal imaging as indicated			
Able to identify and assess the following:			
a. Number and location of gestational sacs			
b. Size and shape of yolk sac			
c. Presence or absence of cardiac activity and rate of activity			
d. Fetal pole and fetal movement			
e. Presence and appearance of amnion			
Measures all appropriate parameters related to 1 st trimester (gestational sac, fetal pole, nuchal thickness)			
Demonstrates ability to incorporate the instrument's obstetrical statistical package to analyze measurements.			
Surveys other pelvic structures (ovaries, adnexa, etc.)			
Images other areas of interest when needed (kidneys, Morrison's pouch, ect.)			
Identifies and Demonstrates abnormal sonographic findings			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



**ASU Diagnostic Medical Sonography
Competency or Proficiency**

Student Name: _____
 Procedure: **2nd Trimester OB**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Obtains relevant patient clinical history(LMP, GPA, Lab Values)			
Utilizes trans-abdominal and/or trans-vaginal imaging as indicated			
Able to identify and assess the following:			
f. Cerebellum			
g. Cisterna Magnum			
h. Nuchal fold (with measurements as needed)			
i. Cavum Septum Pellucidum			
j. Lateral Ventricles (with measurements as needed)			
k. Choroid plexus			
l. Thalamus			
m. Orbits			
n. Facial profile			
o. Lips/Nose			
p. Cardiac Four Chamber			
q. Diaphragm			
r. Stomach			
s. Gallbladder			
t. Kidneys			
u. Bladder			
v. Spine (multiple views)			
w. Upper and lower extremities			
Assesses the Following:			
a. Fetal lie			
b. Number of vessels in the umbilical cord			
c. Location/Grade of placenta			
d. Amniotic Fluid level			
e. Length and state of cervix			
Correctly Measures the following:			
a. Biparietal diameter			
b. Head Circumference			

c. Abdomen circumference			
d. Femur Length			
Expands sonographic measurements to include other growth parameters when needed such as:			
a. Tibia			
b. Fibia			
c. Humerus			
d. Ulna			
e. Radius			
Demonstrates ability to incorporate the instrument's obstetrical statistical package to analyze measurements.			
Correlates measurement data in order to determine whether discrepancies exist.			
Identifies and Demonstrates abnormal sonographic findings.			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



**ASU Diagnostic Medical Sonography
Competency or Proficiency**

Student Name: _____
 Procedure: **3rd Trimester OB**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Obtains relevant patient clinical history(LMP, GPA, Lab Values)			
Utilizes trans-abdominal and/or trans-vaginal imaging as indicated			
Able to identify and assess the following:			
x. Cerebellum			
y. Cisterna Magnum			
z. Nuchal fold (with measurements as needed)			
aa. Cavum Septum Pellucidum			
bb. Lateral Ventricles (with measurements as needed)			
cc. Choroid plexus			
dd. Thalamus			
ee. Orbits			
ff. Facial profile			
gg. Lips/Nose			
hh. Cardiac Four Chamber			
ii. Diaphragm			
jj. Stomach			
kk. Gallbladder			
ll. Kidneys			
mm. Bladder			
nn. Spine (multiple views)			
oo. Upper and lower extremities			
Assesses the Following:			
f. Fetal lie			
g. Number of vessels in the umbilical cord			
h. Location/Grade of placenta			
i. Amniotic Fluid level			
j. Length and state of cervix			
Correctly Measures the following:			
e. Biparietal diameter			
f. Head Circumference			

g. Abdomen circumference			
h. Femur Length			
Expands sonographic measurements to include other growth parameters when needed such as:			
f. Tibia			
g. Fibia			
h. Humerus			
i. Ulna			
j. Radius			
Demonstrates ability to incorporate the instrument's obstetrical statistical package to analyze measurements.			
Correlates measurement data in order to determine whether discrepancies exist.			
Identifies and Demonstrates abnormal sonographic findings.			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Gyn Trans-abdominal**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Determines adequacy of patient preparation (bladder filling)			
Demonstrates and identifies the following in longitudinal and transverse planes:			
a. Uterus			
b. Right Ovary			
c. Left Ovary			
d. Right Adnexa			
e. Left Adnexa			
f. Posterior Cul de sac			
Measurements appropriately in longitudinal and transverse planes.			
Utilizes different patient positions and windows to adequately visualize structures.			
Properly utilizes color, power, and/or pulsed Doppler			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Gyn Endo-vaginal**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

	YES	NO	N/A
Properly explains procedure and obtains consent.			
Demonstrates and identifies the following in longitudinal and transverse planes:			
g. Uterus			
h. Right Ovary			
i. Left Ovary			
j. Right Adnexa			
k. Left Adnexa			
l. Posterior Cul de sac			
Properly elevates patients for the exam.			
Ensures patient privacy throughout exam			
Measurements appropriately in longitudinal and transverse planes.			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Extracranial Cerebrovascular Duplex Exam**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

Indication: _____

	YES	NO	N/A
Demonstrates and Identifies the following anatomy utilizing gray-scale sonography in transverse and longitudinal planes:			
g. CCA (from origin to bifurcation)			
h. ICA – Proximal to Distal			
i. ECA – Proximal to Distal			
Longitudinal transducer position with Spectral and/or Color Doppler in:			
e. CCA (from origin to bifurcation)			
f. ICA – Proximal to Distal			
g. ECA – Proximal to Distal			
h. Vertebral Artery			
Utilizes different patient positioning to achieve optimal images			
Utilizes Color imaging and Doppler technology correctly			
Identifies and Demonstrates abnormal sonographic findings			
Obtains appropriate Doppler measurements			
Properly interprets Doppler measurements to classify stenotic regions			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.

Physiology: Interpret the physiologic findings in this exam.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Lower Extremity Arterial Color Duplex Exam**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____
 Unilateral _____ Bilateral _____

Indication: _____

	YES	NO	N/A
Longitudinal transducer position with Spectral and/or Color Doppler in:			
j. EIA			
k. CFA			
l. SFA – Proximal to Distal			
m. PFA (Profunda Femoral Artery)			
n. Pop A			
o. PTA			
p. Per A			
Identifies and Demonstrates abnormal sonographic findings			
Identifies exact anatomical location of arterial occlusive disease			
Differentiates stenosis from total occlusion			
Defines length of occlusion			
Utilizes Color imaging and Doppler technology appropriately			

Supervising Sonographer
 Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.

Physiology: Interpret the physiologic findings in this exam.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Lower Extremity Arterial Segmental Physiologic Evaluation**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____

Method: 3-Cuff _____ 4-Cuff _____

Indication: _____

				YES	NO	N/A
Obtains systolic pressures in:						
q. Arm	Right	Left	Both			
b. Leg	Right	Left	Both			
c. Toe	Right	Left	Both			
Correctly selects the appropriate cuff size (width/length)						
Properly applies pressure cuffs to arms & legs						
Accurately manipulates the CW Doppler probe						
Correctly Identifies abnormal physiologic findings						
Calculates and Interprets the Ankle-Brachial Index						

Supervising Sonographer Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.

Physiology: Interpret the physiologic findings in this exam.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Upper Extremity Arterial Color Duplex Exam**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____
 Unilateral _____ Bilateral _____

Indication: _____

	YES	NO	N/A
Longitudinal transducer position with Gray Scale, Spectral and/or Color Doppler in:			
a. Subclavian Artery			
b. Axillary Artery			
c. Brachial– Proximal to Distal			
d. Radial Artery			
e. Ulnar Artery			
Identifies and Demonstrates abnormal sonographic findings			
Identifies exact anatomical location of arterial occlusive disease			
Differentiates stenosis from total occlusion			
Defines length of occlusion			
Utilizes Color imaging and Doppler technology appropriately			

Supervising Sonographer Signature: _____

Sonographer Comments: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.



ASU Diagnostic Medical Sonography
Competency or Proficiency

Student Name: _____
 Procedure: **Venous Doppler – Lower Extremity**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____
 Unilateral _____ Bilateral _____

Indication: _____

	YES	NO	N/A
Demonstrates and Identifies the following anatomy & compressibility in transverse planes:			
f. EIV			
g. CFV - @ origin of proximal segment of profunda femoris			
h. Prox GSV- @ sapheno-femoral junction			
i. SFV (FV) – Proximal to Distal			
j. PopV			
k. PTV			
l. PerV			
Longitudinal transducer position with Spectral and/or Color Doppler in:			
i. EIV			
j. GSV			
k. CFV			
l. SFV (FV)			
m. PopV			
n. PTV			
o. PerV			
Recognizes compressibility, appearance of thrombus, location, & extent			
Utilizes different patient positioning to achieve optimal images (Supine, Reverse Trendelenburg, Prone)			
Utilizes Color imaging and Doppler technology when appropriate			
Identifies and Demonstrates abnormal sonographic findings			

Supervising Sonographer
 Signature: _____

Student self evaluation:
 Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.

Physiology: Interpret the physiologic findings in this exam.



**ASU Diagnostic Medical Sonography
Competency or Proficiency**

Student Name: _____
 Procedure: **Venous Doppler – Upper Extremity**
 Clinical Site: _____
 Date: _____
 Patient ID#: _____
 Semester: _____

Patient: Average _____ Technically Difficult _____ Pathology _____
 Unilateral _____ Bilateral _____

Indication: _____

	YES	NO	N/A
Longitudinal transducer position with Spectral and/or Color Doppler in:			
p. Junction of SCV & IJV			
q. SCV			
r. AXIL			
s. BRACH			
t. BACIL			
u. CEPH			
v. RADIAL & ULNAR			
Short Axis w/ intermittent compression			
a. AXIL			
b. BRACH			
c. BACIL			
d. CEPH			
e. RADIAL & ULNAR			
Recognizes compressibility, appearance of thrombus, location, & extent			
Utilizes different patient positioning to achieve optimal images (Supine, Reverse Trendelenburg, Prone)			
Utilizes Color imaging and Doppler technology when appropriate			
Identifies and Demonstrates abnormal sonographic findings			

Supervising Sonographer Signature: _____

Student self evaluation:

Evaluate films. State reasons for suboptimal images due to technical errors.

Anatomy/Physiology: list the anatomical structures/landmarks you believe most critical. Be able to identify those listed.

Physiology: Interpret the physiologic findings in this exam.

**Arkansas State University
Diagnostic Medical Sonography
Scrotal Sign-Off Sheet**

In addition to the Scrotal competencies required for graduations, students are required to document direct scanning of 5 additional Scrotal examinations. These examinations must be documented by the student and signed-off by an abdominal registered sonographer.

Exam #	Date	Medical Record #	Sonographer Signature (include credentials)
1			
2			
3			
4			
5			

**Arkansas State University
Diagnostic Medical Sonography
Transvaginal Sign-Off Sheet**

In addition to the transvaginal pelvic competency required for graduations, students are required to document direct scanning of 10 additional Transvaginal examinations. These examinations must be documented by the student and signed-off by an OB/Gyn registered sonographer.

Exam #	Date	Medical Record #	Sonographer Signature (include credentials)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

**Arkansas State University
Diagnostic Medical Sonography
Obstetrical Sign-Off Sheet**

In addition to the Obstetrical competencies required for graduations, students are required to document direct scanning of 10 additional Obstetrical examinations. Exams may be performed on any trimester. These examinations must be documented by the student and signed-off by an OB/Gyn registered sonographer.

Exam #	Date	Medical Record #	Sonographer Signature (include credentials)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			