Sonography
Student Handbook

Diagnostic Medical Sonography
Vascular Technology
Cardiac Sonography
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1 A. CLASSROOM AND CLINIC DEMEANOR

Students violating normal classroom decorum or disrupting lecture, clinic or lab sessions will be asked to leave for the remainder of the session. Readmittance will be allowed only upon counseling and written permission by the Vice President for Academic Affairs.

Cell phone and beeper use is not permitted in classrooms, laboratories or clinics.

1 B. CLASSROOM BREAKS

Classroom breaks are scheduled in accordance with state and/or accrediting body regulations. Please follow the breaks as directed by your instructor and be back in class on time after breaks.

1 C. CLASSROOM and CLINICAL ATTENDANCE

Students are expected to arrive on time for class and to stay until the class is over. Students arriving late for class will be considered absent for the entire hour and will be reflected in the class attendance grade.

Students who exceed 20% absences in an individual course will be dropped from the course and will receive a grade of "AW". Students that exceed 20% absence will be directed to the Program Director. At that time it will be decided on a case by case basis dependent upon the reason for the absence (ie: excused absence due to medical leave) whether the student will be readmitted into the program the next time the course is offered.

Students must attend at least 100% of the *on-campus lab hours completed in the college Sonography lab. (Hereinafter referred to as “on campus”) and 100% of clinical externship hours in order to graduate. Failure to complete the assigned lab hours will not allow the student to move to the next semester.

Termination from the program will occur for any of the following attendance situations:

1) Absences in excess of 20% of the Sonography courses and on campus lab hours.
2) Clinical I and II absences in excess of 20% of the course hours
3) Clinical III – 20% of the course hours and/or three consecutive absences from clinical without valid reason. Valid reasons may include but are not limited to approved medical leave by the program director or death of an immediate family member. This will be determined on a case to case basis with the final decision being made by the program director.

It is in the student's best interest to make every effort to avoid lateness and absence, since both are deducted from the final grade average (refer to course syllabus for attendance percentage of final average grade). Academic success and employment potential is negatively impacted by a lack of a reliable attendance history.
2. DRESS CODE

The following is the dress code that is required for students any time they are on campus for educational purposes. This includes scheduled classroom, laboratory or case studies activities. It also includes any tutoring sessions, refresher courses, auditing of classes, practice time in the imaging laboratory on any day of the week including weekends.

- All uniforms must be purchased from the designated uniform store.
  - Med Plus Uniforms and Scrubs with 2 locations:
    - 233 Scranton Carbondale Hwy/Fashion Mall, Scranton, PA 18508
    - 695 Kidder St #18, Wilkes Barre, PA 18702
  (All Information is provided to the student during the first week of the Pre-Semester)
  - Program Color designated scrub top and bottom.
    - DMS- Ceil Blue uniform
    - Vascular Technology- Navy Blue Uniform
    - Cardiac- Teal
  A white or gray shirt with no print tucked into the pants may be worn under the scrub top.
- White lab coat with Lackawanna College insignia.
- Student name tag (provided by Lackawanna College)
- White leather sneakers, white medical shoes with closed toes.
- Hair- short Shoulder length or tied back with a conservative band
- Nails- short (1/4 inch) with clear or no polish

Jewelry:
- watch
- wedding band or other single band
- one single strand short necklace
- one pair of earrings, either stud or tiny hoop
- **NO facial jewelry of any kind permitted in class, lab or clinic**
- **Tattoos must be covered at all times in clinic**

Visual tattoos may be offensive to the patient or clinical site and may be a deterrent to obtaining clinical sites and/or employment. Clinical sites may require additional standards which the students are expected to adhere to. Non-compliance will result in one warning. Continued non-compliance after a warning is issued will result in suspension and possible termination.

Students will be required to cover any visual tattoo(s) in the event the tattoo cannot be hidden, students will need permission from the clinical site to attend clinical rotation there.
If a student is denied permission from the clinical site the Clinical Coordinator and/or Program Director will attempt to find an alternate site. The Program Director will not guarantee placement at another site and the student is subject to dismissal of the Program and will be evaluated on a case to case basis. Final decision will be made by the Program Director.

The Clinical Coordinator and individual clinical site instructors may determine the Dress Code for students.
As stated in section 2. Some sites have a separate dress code unique to the clinical site that all students attending clinical rotation there must adhere to. If assigned there, the student will be given the alternate dress code.

3 A. STUDENT HEALTH POLICY

Students who are accepted into the program must provide evidence of good health prior to entering the program.

Students are required to purchase Student Injury and Sickness Insurance for the period of their enrollment from the group plan offered by Lackawanna College. This provides coverage for students during any designated courses or clinical training.

School authorities will call an ambulance service for any medical emergency involving a student at Lackawanna College.

In the event that a student becomes injured while in the clinical setting, the Emergency Department will provide treatment. The student is responsible for any costs incurred that are not covered by insurance.
If the site does not have an Emergency Department on premise either 911 will be called or the students emergency contact. All injuries must be reported to the clinical coordinator and /or program director immediately.
Clinical education centers do require additional medical information and/or inoculations, drug screens, and background checks for the student to begin their clinical program. The student is responsible for any cost associated with these additional requirements. If a student fails to meet the requirements at a clinical education center, the student will meet with the Program Director and Vice President of Academic Affairs to assess further action.

If the student, instructor, or physician suspects a disease of a contagious nature, the student will be expected to refrain from attending clinical assignments and should seek prompt medical attention and follow-up care. The student may return to clinical with a written clearance from the student’s physician.

Students are expected to apply principles of Universal Precautions when working at the clinical site.
3 B. PREGNANCY POLICY

Failure to inform the Program Director of pregnancy as soon as possible may result in student’s inability to progress and may require remediation.

A student must cease clinical rotation if pregnancy is determined. If the student obtains written permission from her physician stating that she is physically capable of resuming her clinical education, she may do so when the Program Director receives the written permission. A pregnant student may continue her didactic courses without a written release.

Pregnant students may withdraw from the program and reenter at a later date by following the policies for withdrawal and re-entry outlined in Lackawanna College Catalog. Please refer to Section 5 B.

3 C. OUTSIDE WORK POLICY

The Sonography Programs are academically rigorous programs that require a significant commitment of your time. While we recognize that students have financial obligations and may need to work while they are in school, outside work obligations may not be used as an excuse from completing requirements of the program.

3 D. STUDENT CONDUCT

Lackawanna College expects students to conduct themselves at all times in a professional manner. The forms of misconduct below are considered to be in conflict with the educational objectives of the campus. Students who engage in such misconduct are subject to up to three class days’ suspension or termination from the program at the sole discretion of Lackawanna College.

- Any type of dishonesty, including cheating, plagiarism, knowingly furnishing false information to Lackawanna College, forgery, alteration or use of institution documents or identification with intent to defraud.
- Intentional disruption or obstruction of teaching, research, administration, disciplinary proceedings, public meetings and programs, clinical practice or other school activities.
- Physical or verbal abuse of any person on School premises or at functions sponsored or supervised by Lackawanna College.
- Any harassment based on sex, race, religion or national origin.
- Theft or damage to Lackawanna College premises or damage to the property of a member of Lackawanna College community on Lackawanna College premises. Students will be charged for the repair or replacement of any equipment lost or damaged through negligence or willful mischief. This includes damage to any part of the building or its immediate surroundings.
• Possession of guns or knives or other weapons on Lackawanna College or clinical externship site premises.
• Failure to comply with directions of institutional officials acting in the performance of their duties.
• Violation of the law on School premises or at clinical externship sites, in a way that affects Lackawanna College community’s pursuit of its proper educational objectives. This includes, but is not limited to, use of alcoholic beverages and/or controlled or dangerous substances.
• Any behavior which would not be considered generally acceptable by an employer of one of his/her employees.
• Violation of employee conduct and clinical externship policies at the externship site.
• Any other behavior which Lackawanna College, at its sole discretion, determines to be inconsistent with the intent of this section or the interest of Lackawanna College or its other students.

The “on campus” clinical laboratory scanning rationale is as follows:

**Purpose:** To provide the student with the opportunity of demonstrating the mastery of theory and practice of essential clinical skills under simulated conditions prior to assuming actual clinical responsibilities.

**Procedure:** Laboratory exercises in sonographic positioning skills, equipment technique and transducer manipulation. Also includes, terminology, anatomy, physical parameters of machine settings, probable pathologic findings, performance of scanning protocols, and patient care issues relevant to the study being performed.

Students are allowed and encouraged to scan each other during organized/ scheduled lab practice sessions. Use of the laboratory equipment may occur only while a qualified instructor is actually present in the building and aware of the practice session. Students who are uncomfortable with having another student perform practice scanning should contact the program director to discuss possible alternatives. Alternate possibilities may include scanning members of the college community, other students, friends or family members. All scanning volunteers are required to sign the scanning waiver found in the college sonography lab. Students are *not* required to be a scanning model at any time during the Program. Students that are uncomfortable with being scanned will *not* be penalized from scanning nor will it be reflected in their sonography course grades.

During campus laboratory scanning, Lackawanna College is not responsible for reporting or diagnosing any unusual or pathological findings as a result of this practicum.
4. Hands-on scanning informed consent (Sample Information seen below; a separate form will be given to students prior to the start of the Program Semester)

I hereby allow myself to be scanned as a model for in-class demonstration. I acknowledge that my participation is strictly voluntary. I understand that the scanning procedure, which I will experience, is not a formal diagnostic procedure. If any abnormalities are detected during this process, I will see a personal physician if I wish to obtain formal diagnostic studies or counseling.

I hereby waive and release Lackawanna College officials, staff and fellow students from any claim for damages alleged to result from injuries arising from or related to my participation as a volunteer for the in-class demonstrations.

Printed Name: ________________________________
Signature of acceptance: ________________________________
Date: ________________
Witness: ________________________________

5A. Grade Policy

All Sonography students must maintain a minimum of an 82-B in all sonography courses and maintain a minimum of a 3.0 GPA. All sonography courses follow the Lackawanna College grading scale.

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Numeric Range</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>96 – 100</td>
<td>4.0</td>
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<tr>
<td>A-</td>
<td>90 – 95</td>
<td>3.67</td>
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<tr>
<td>B+</td>
<td>87 – 89</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>83 – 86</td>
<td>3.0</td>
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<tr>
<td>B-</td>
<td>80 – 82</td>
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<td>C+</td>
<td>77 – 79</td>
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<td>C</td>
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<td>D+</td>
<td>67 – 69</td>
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</tr>
<tr>
<td>D</td>
<td>60 – 66</td>
<td>1.0</td>
</tr>
<tr>
<td>F</td>
<td>0 – 59</td>
<td>0</td>
</tr>
</tbody>
</table>

In the interest of fostering improved academic achievement, struggling students who receive grades below the required 82-B during the semester will be given an academic warning and will be required to meet with the Program Director to determine the student’s area of weakness. All efforts will be made to supplement student’s knowledge base including tutoring and group studies.
If a student does not meet the required 82-B in any/all Sonography courses, or does not meet the required 3.0 GPA:

- Any Cardiac, Vascular or Diagnostic Medical Sonography student that fails a required ultrasound course by obtaining less than a ‘B’-82 or does not maintain a 3.0 GPA grade will be notified by mail to change their next semester schedule and major through Academic Affairs.
- Students that do not meet the requirements will not be given an opportunity to re-apply to the Program. This decision was based on statistics of prior students. The majority of past students that were given an opportunity to repeat a course(s) did not gain employment in the field of Sonography after graduation. Furthermore, the majority failed to register for the national examination or did not successfully pass the registry examination.

5 B. RE-ADMISSION WITH AUDITING OF SONOGRAPHY COURSE WORK

- In the event a student is afforded the opportunity to repeat a course(s) i.e. due to medical leave of absence, the student will be required to audit Sonography courses that were previously passed. Since courses are only offered once a year, it is in the student’s best interest to maintain both academic and technical skills through auditing of course work and mandatory lab hours during the waiting time.
  1. **Pre-Semester** students will need to audit courses that were successfully passed during the pre-semester in addition to any courses that the student did not meet the 82-B requirements.
  2. A **second semester** student will be required to maintain lab hours while waiting for second semester course(s) to resume. A minimum of 60 hours per semester including summer session (if applicable) will be required. Once the second semester courses resume, the student will be required to repeat all courses that they did not meet the required 82-B. In addition, all Sonography courses that were successfully completed (excluding pre-semester courses) with a minimum of an 82-B will need to be retaken through auditing of course work.
  3. A **third semester** student will be required to audit all second and third semester Sonography courses that were previously taken in addition to any course(s) that the student needs to obtain an 82-B in.
  4. A **fourth semester** student will need to audit all second and third semester Sonography coursework in addition to summer lab hours prior to re-admission into Clinical III.

- The student must actively participate in all auditing courses and attendance is mandatory. Students will be required to fully participate and follow the course outline of the auditing courses along with taking exams, quizzes, and maintaining the required lab hours. Students must maintain an 82-B in the auditing courses. If the student does not meet the required 82-B in an auditing course, they will not continue as a student in the Sonography Program and will not be considered for re-application.
• If the student receives lower than an 82-‘B’ grade in the course for the second time, they will lose placement and be removed from the Program. Students will be directed to appropriate faculty to change their next semester schedule and major. The student will not be granted any further option to reapply or continue in the program.

5 C. APPLICATION TO ANOTHER PROGRAM
Sonography students may apply to pursue an additional modality after successful graduation of their original major. The Sonography graduate must be credentialed by an accrediting body prior to admission of the newly selected program. In addition, acceptance into the next program is based on clinical availability and the students CGPA.

5 D. SUMMER LAB HOURS
Students enrolled in any Sonography program must complete additional lab hours during summer break to maintain the technical skills from prior semester(s).

- **Vascular Technology** – 60 hours
- **DMS and Cardiac Sonography** - 40 hours (an additional 20 hours will be required during Summer I Intro to Vascular Technology)

Lab hours will be posted in the Sonography Lab prior to the end of the Spring Semester. Lab hours are tracked bi-weekly by Sonography Faculty and are reported to the Program Director. After review of hours mid-session, if it appears the student is in jeopardy of not meeting the requirements, the student will meet with the Program Director to make a schedule to complete the hours. If a student does not meet the required lab hours the student will be dismissed from the Sonography Program and will not be able to reapply to the Program.

5 E. Sonography Mock Registries

• Students are required to pass a mock registry examination that will count for 20% of the student’s Clinical III grade. The student has a maximum of two attempts to pass the examination. If the student does not successfully pass the mock registry, the student will need to meet with the Vice President for Academic Affairs along with the Program Director to discuss the best course of action for the student.

• Students enrolled in the Diagnostic Medical Sonography, must pass two mock registry exams. The first (either OB GYN or Abdominal) by October 15th and the second prior to the week of final exams.

• Students enrolled in the Vascular Technology and Cardiac Sonography Programs, will be required to take one mock exam in their specialty. The first attempt must be completed by March 15th.
Registry review materials are available in the College Library. Students will also be required to attend a registry review provided by college faculty. Students will be excused if they have attended a national registry review course. National Review courses will be posted in the college lab.

5 F. ARDMS Specialty Examination(s)

- All Sonography students are required to schedule and sit for the ARDMS specialty board(s) within 60 days of their graduation date. Students will be eligible to take this examination upon successful completion of the mock registry (ies). Students are responsible to pay the associated fees to the accrediting organization.
- Successful completion of the ARDMS registry is NOT a requirement for graduation; however, scheduling and attempting the examination is a requirement for successful completion of the Sonography Program. Students that are not eligible to take the ARDMS registry will need to meet with the Program Director to discuss available options. The final decision will be made by the Program Director on a case by case basis.

5 G. Physics Registry

- All Sonography Students are required to challenge a physics registry examination through a recognized accrediting organization such as the American Registry Diagnostic Medical of Sonography (ARDMS). Students are responsible to pay the associated fees to the accrediting organization.
- DMS Students will need to apply for the examination after successful completion of Physics II in Spring Semester. Students will need to schedule the examination no later than July 1st.
- Vascular and Cardiac Sonography students will need to apply for the examination after successful completion of Physics II in the Fall Semester. Students will need to sit for the examination no later than January 31st.

6 A. GRADUATION REQUIREMENTS

Graduation requirements are:

- successful completion of all on-campus courses with a minimum cumulative grade average of 3.0
- successful completion of the clinical externship with 100% of clinical hours completed
• an overall on-campus attendance rate of 85%
• successfully passing all required mock registry examination(s)
• current financial and administrative obligations to Lackawanna College; and
  completion of required institutional exit interviews including submission of the
  graduation portfolio

6 B. RESOURCE CENTER

As part of the ultrasound education program, students may be assigned additional reading
as well as independent study topics related to emerging trends and challenging case
studies. Lackawanna College will provide access to current reference materials, videotapes
and journals for student use. There is computer access to the Internet for the purpose of
investigating relevant topics as well as for participating in Continuing Medical Education
on-line opportunities and visiting the web sites of professional organizations.
Videotapes/DVD’s for reviewing protocols, seminars, and pathology cases can be checked
out by contacting the Program Director or Seeley Memorial Library. Hours of operation
have been scheduled to allow coverage of all class sessions and are posted by the Seeley
Memorial Library. Students may also request to use the Medical Library at their clinical
site. Sites vary as to allowing student access to their Medical Library.

6 C. CLINICAL FINAL EXAMS

Students are given a final exam in clinical when they are approaching graduation. Exams
are given in several areas of the imaging specialty. Students must receive a grade of 85 or
better on each exam to graduate. If a student fails a competency exam, one retest for each
exam will be given. Students will be given the opportunity to work directly with the clinical
coordinator and/or clinical preceptor in the areas of weakness prior to being re-tested.
The student must successfully pass all clinical competencies to complete the graduation
requirements. If a student fails the clinical retest, the student will be withdrawn from the
program. Students that fail to meet these requirements will not be given an
opportunity to return to the program.

7 A. CLINICAL TRAINING POLICIES

Clinical experiences are designed to be instructional in nature by providing students with
hands-on experience. Clinical training is a cooperative effort among Lackawanna College,
the student and the clinical education center. Students may not take the place of paid
staff, and may not be paid for their clinical hours. Lackawanna College maintains
professional malpractice insurance on all students and faculty while at clinical sites.

The student is a guest at the clinical facility. The clinical site expects that the student will
obey all rules and regulations regarding the clinical site and clinical assignment. The
clinical site has the right to remove any student who demonstrates disregard for program and/or clinical site policies and procedures (refer to Clinical Externship Conduct).

7 B. PATIENT SAFETY AND CONFIDENTIALITY STATEMENT

Students are expected to treat all information regarding patients as confidential. Copies of films for case study presentation may only be made if the Clinical Supervisor gives permission based on hospital HIPAA guidelines. Original patient records (charts, films, etc.) are NEVER removed from the clinical facility. All references to patient identity must be removed from all copies of records and films used for case studies.

The patient’s right to a safe and accurate examination is more important than a student’s need to practice scanning. Students must use good professional judgment regarding whether or not the student should scan a patient.

7 C. CLINICAL ROTATION POLICY

The Program Director and Clinical Coordinator are responsible for placing students at clinical education centers. Students may be asked for their preferences, but the decision of the faculty is final. Students may not make their own arrangements for clinical training. **Students must be prepared to travel to the clinical education centers and are responsible for having reliable transportation.** Lackawanna College will attempt to assign sites that are within a 120+-mile radius of Lackawanna College and that are convenient for the students. However, this may not always be possible since some sites require overnight accommodations. Students may be assigned to more than one clinical education center during the duration of the program in order to participate in an appropriate number of cases.

Students are required to obtain the following Background checks and medical information before attending clinic. Students who fail to complete paperwork by due dates listed will be suspended from current Sonography classes until all requirements are met. These absences will be marked as “Unexcused Absences” and continued absence per the class syllabus will result in academic failure of the course(s). Please see section 5 A referring to the Sonography Grading Policy.

**Vascular and Cardiac Students** that are accepted into the course work for the Fall Semester

-- Due Date December 1

**DMS Students** that are accepted into the course work for the Spring Semester

-- Due Date August 1
CPR Certification (2 year American Red Cross or American Heart Association only)
*FBI Background check (pa.cogentid.com) choose Department of Public Welfare
*PA State Police Background Check (epatch.state.pa.us)
*Child Abuse Clearance (dpw.state.pa.us)
*Full Physical Exam
2 Step PPD (1 step must be done annually after initial 2 step)
  *Must be done within 30 days of clinical rotation

Copy of Childhood Immunizations
Proof of Varicella Vaccine or Chicken Pox illness
Hepatitis B vaccination or signed waiver refusing
Urine Drug Testing to be done within 30 days of the beginning of each clinical rotation
SEE COLLEGE POLICY FOR FAILED DRUG TESTING
*Must be done every 12 months in order to be considered up-to-date.

Because clinical sites have strict requirements that apply both to employees and to students or externs assigned to the site, students must annually supply updated PA State Clearances, PA Child Abuse Clearances and FBI Clearances to the Sonography Program by the dates outlined above. Students’ ability to be placed in a clinical site or to continue their clinical placement is contingent upon the submission of these clearances and students’ maintenance of a clean record. If student records indicate a misdemeanor or felony conviction during enrollment in the program, the student will not be permitted to continue his or her clinical placement and will be removed from the program. A student may re-apply for admission to the program after his or record has been expunged following the Re-Application Process outlined on page 8 of the Student Handbook. Readmission is not guaranteed. If a student is convicted of a misdemeanor or felony after they have already submitted clearances, it is the student’s responsibility to notify the Sonography Program immediately. Failure to do so will result in immediate dismissal from the program without the opportunity to re-apply for admission.

CLINICAL ATTENDANCE REQUIREMENTS

Students will attend clinical training on the days and hours designated by the clinical education center and Lackawanna College’s Clinical Coordinator or staff. Days or times of clinical training may not be rearranged without the permission of Lackawanna College’s Clinical Coordinator and the clinical education center preceptor. In the event that the student will be absent from clinical the student must call the clinical education site (number provided at clinical meeting prior to semester) and Lackawanna College (570-504-7920) in advance.

Students are required to attend externship in the fourth quarter at a minimum of 32 hours per week. Students who fail to meet the minimal weekly hours may be terminated from the program.

Students are required to attend 100% of required clinical hours. It is the responsibility of the student to provide Lackawanna College with a Time Sheet signed by the clinical
education center supervisor documenting clinical hours completed for the week no later than Monday of the following week during the externship courses. If a student has missed any clinical time, arrangements for make-up time must be made with the clinical site supervisor and Clinical Coordinator. Students will not be considered to have completed their clinical externship until the site supervisor and Clinical Coordinator have certified all required attendance hours.

CLINICAL PERFORMANCE STANDARDS

The Clinical Coordinator will evaluate a student’s progress in the externship and submit evaluations to Lackawanna College. The student is responsible for submitting evaluations, case studies and case logs to the specific program Clinical Coordinator. These submissions are required for graduation.

Externships are graded on a Satisfactory / Unsatisfactory basis and, therefore, are not used in the calculation of grade average. If a student fails to progress in the externship, the student may be subject to an extension of the clinical program, remediation or termination from Lackawanna College.

If a student is removed from a clinical site during the semester due to lack of professionalism or poor performance, the Program Director will not guarantee placement at another site and the student is subject to dismissal of the Program evaluated on a case to case basis and final decision will be made by the Program Director.

Students in the Sonography Programs are not permitted to obtain their own placement in a facility that is not already established by the Program: however, we welcome any information to obtain a new clinical site. Site will be contacted by Sonography Faculty and will be determined valid though a clinical contract.

CLINICAL EXTERNSHIP CONDUCT

The clinical site is a professional medical environment. Students must conduct themselves in the professional manner deemed appropriate for the workplace including arriving on time, leaving on time and acting in a reliable and responsible manner. Students must demonstrate a professional image, demeanor and personal hygiene at all times during the externship. Dress must meet site standards and lab coats must be clean and neat at all times.

Students must adhere to site protocols and complete any and all assignments given by clinical instructors. The student is never to reveal any confidential medical information regarding patients.

The student’s ability to complete an assignment at a clinical site is at the sole discretion of the clinical site supervisor. The clinical site supervisor may at any time, for any reason,
request that Lackawanna College relocate the student to another clinical site. Students who have been asked to leave the externship site by the clinical supervisor may have to wait until another clinical rotation becomes available to resume their clinical program. The Program Director will not guarantee placement at another site and the student is subject to dismissal of the Program evaluated on a case to case basis and final decision will be made by the Program Director therefore, students should make every effort to ensure that their clinical experiences are successful. If a student is afforded the opportunity to complete their externship at another site, the hours the student attended at the previous site will be calculated towards the required hours to successfully complete the course as long as the time it took to obtain a new site will not inhibit the student’s skills to meet the objectives of the course. The Program Director will make the final decision based on the student skills if the course will need to be repeated in full.

**Students are expected to demonstrate the utmost integrity and honesty at the clinical site. Providing inaccurate data to Lackawanna College regarding clinical attendance or performance is grounds for termination from Lackawanna College.**

**CLINICAL PROCEDURES**

**Clinical Assignment Sheets**

1. Clinical Assignment Sheets will be completed prior to beginning a clinical rotation.
2. Clinical Assignment Sheets are similar to contracts and state days and hours on site.
3. The Student Extern must abide by the days and hours as stated on the Clinical Assignment Sheet. As stated in Lackawanna College catalog, “Days or times of clinical externship may not be rearranged by the student without written permission from the Clinical Coordinator and Clinical Site Supervisor.”
4. This is just like a job. If you are going to be late or absent from clinical, the student is required to call both the Clinical Site Instructor and the Clinical Coordinator at Lackawanna College (numbers are provided at the clinical meeting) at least 30 minutes of scheduled start time. If the student is not able to reach appropriate personnel, the student may leave a phone message at the site.
5. Do not arrive later than the scheduled time or leave earlier than the scheduled time unless permitted by the Clinical Preceptor and/or Clinical Coordinator. Students may stay beyond the minimum of 32 hours per week but you will only receive credit for a maximum of 40 hours per week. there will be extenuating circumstances based on clinical availability.
6. It is recommended that you not leave while a study or procedure is in progress regardless of the time.

**Clinical Hours**

1.) You must take and document a 30 minute lunch break.  
2.) The externship course is full time (32 - 40 hours per week).
3.) You may not receive credit for more than 10 hours per day.
4.) You may not receive credit for more than 40 hours per week.
5.) If there are circumstances that prevent you from participating in a 32 hour per week externship schedule, you will need to provide a written request to the Program Director. Deviations from the 32-hour per week schedule are granted only under unusual circumstances. The request must be made in writing and be made at least 30 days prior to the first day of the externship. The Program Director will respond to the request in writing within 10 days of the request.

Absenteism and Tardiness

1.) You are to be present at your clinical site during the hours stated on your Clinical Assignment Sheet. You are not to take any days off or change your hours without permission of the site instructor and the clinical coordinator.
2.) If you are going to be absent due to illness or are going to be tardy, you must call both the site and Lackawanna College’s Clinical Coordinator (numbers are provided at the clinical meeting) at least 30 minutes prior to the time of your scheduled arrival on site. You must do this each time, even if you are ill for a second day and already called in the day before. This is the same procedure that you would follow if you were an employee of the site. If the absence is more than one day, the student will be required to submit a physician’s note unless extenuated circumstances were discussed with the Clinical Coordinator and/or Program Director. (Please refer to Section 1 C for attendance).

Vacation and Holidays

1.) You may not take vacation time during the scheduled hours of your clinical externship.
2.) If your site is going to be closed for a day in observance of a holiday, you may also follow that schedule. Please notify Lackawanna College’s Clinical Coordinator in advance.

Weekly Time Sheets

1.) Time Sheets are the responsibility of the Student Extern. They are to be completed on a daily basis. There is a sample included in your Student Extern Handbook.
2.) The Weekly Time Sheet must be completed in its entirety. Failure to do so will result in the time sheet being invalid and will be returned to the student to fill
Failure to hand in completed timesheet by Monday at 9am will be considered late and will be reflected in the student’s grade.

3.) You must record time in, time out for lunch, time in after lunch, time out at the end of the day.

4.) You must take a 30-minute lunch break sometime during the day.

5.) Weekly Time Sheets must be signed by the person designated on the Clinical Assignment Sheet.

6.) Weekly Time Sheets must be FAXED to the campus by 9am Monday of the following scheduled clinical week to 570-961-7832. If the Weekly Time Sheet has not arrived by Monday of the following week, you will receive a phone call from Lackawanna College and will be considered late. Failure to FAX the Weekly Time Sheet and provide verification that your time sheet has arrived will result in a warning and will be reflected in the student’s grade. A second offense will result in probation. A third offense will result in termination from the program. The Weekly Time Sheet is our method of taking attendance and policy states that termination is necessary if we have no evidence of attendance for 3 consecutive days. If a student does not have access to a fax machine alternate means will be discussed with the Clinical Coordinator.

7.) If a student fails to meet institutional or site attendance standards while on site, the student will be permanently dismissed from the program and will not be granted re-application.

8.) Maintain the original time sheets until the Clinical Coordinator makes a site visit. Keep a copy for your own records. Provide a copy to the Clinical Site Instructor.

Clinical Competencies

1.) All clinical competencies must be successfully completed prior to graduation.

2.) All original signed competencies must be provided to the Clinical Coordinator. Keep a copy for your own records.

SCAN Student Extern Handbook

1.) The SCAN Student Extern Handbook is your guide for the externship experience. It contains your educational plan and all required forms with instructions for completion. It is your responsibility to be familiar with this information.

2.) The forms included in the Handbook are Master copies. Please maintain them as Masters and make copies as needed.

3.) All paperwork, time sheets, evaluations, logs, completed scans, case studies, etc. are the responsibility of the Student Extern. You will need to provide your site instructor with the appropriate evaluation forms in order to have them completed by the deadlines outlined in the Handbook.

4.) Keep all original paperwork in your Handbook until the Clinical Coordinator accepts it from you. Make a copy for your own records.
Professionalism

1.) Maintain professional behavior at all times.
2.) The medical field requires cleanliness and conservative appearance.
3.) Dress must include your school lab coat with insignia and your student nametag. You may also be required to wear a nametag provided by the site.
4.) You must be identified as a student at all times.
5.) You should wear your school scrubs unless specifically requested by the site to wear other attire. Such requests should be referred to the Clinical Coordinator.
6.) Maintain patient confidentiality at all times. Students are required to maintain HIPAA regulations at all times in any/all college and/or clinical setting.
7.) Treat every patient with whom you have contact with respect and compassion. Be friendly but maintain your professional demeanor.
8.) Refer to patients as Mrs., Ms., or Mr. along with their last names
9.) You are representing both your school and the facility at which you are doing your externship. Respect their standards. Comply with their rules. Represent them well, as if you are an employee. Their primary obligation is to their patients and your behavior should reflect that obligation. Being a student extern on that site is a privilege.
10.) Respect yourself. Be proud of your accomplishments. Strive to learn, to teach, to make life better for everyone with whom you come in contact.

Supervision and Student Status

1.) You are required to maintain your Student Status while attending scheduled Clinical Externship hours.
2.) You may not perform ultrasound and patient care duties without supervision from a person employed by the facility. This may include direct supervision and indirect supervision.
3.) You may not take the place of the technologist if the technologist is absent from work.
4.) The Clinical Site Instructor and appropriate physicians are your supervisors. Comply with their requests and follow their instructions.

Tasks and Responsibilities

1.) There are many tasks required of a sonographer and you should perform those tasks willingly. You are not at the site only to practice scanning. While on site, you may be required to answer phones, make appointments, transport patients, retrieve files, process films, maintain the cleanliness of the room, orient other personnel, restock supplies, empty trash, etc.

Student Concerns

1.) The Clinical Coordinator will be speaking with you by phone every 1-2 weeks. Please address any concerns at that time. If it cannot wait until the call, please contact the Clinical Coordinator prior to that time.
2.) Do not speak negatively about the site, the patients, the technologists, the physicians, etc.
3.) Do not speak negatively about Lackawanna College, your campus instructors, school staff, etc.
4.) Your Clinical Coordinator is your primary supervisor representing your school and is there to assist and encourage you. Work together for mutual satisfaction.
5.) Students in the Sonography Programs are not permitted to obtain their own placement in a facility not already established by the Program. Lackawanna College Sonography Programs welcome information to obtain new sites. Students may give information to the Clinical Coordinator for follow up.
6.) Students are not permitted to communicate directly about issues with a clinical site. All questions and concerns are to be discussed with the Clinical Coordinator and/or Program Director. Failure to comply with college policy will result in permanent dismissal of the program and will not be granted re-application.

I have read and have had the opportunity to discuss and ask questions about all of the above procedures related to my externship. I will abide by these procedures and follow the instructions of the Clinical Coordinator. I understand that a failure to abide by these standards or instructions from my Clinical Coordinator or Clinical Site Instructor may result in my termination from the program.

(Please initial beside all bold categories and sign below.)

__________________________ ____________________________
Printed Name: Class Code:

__________________________ ____________________________
Signature: Date:
SONOGRAPHY EXTERNSHIP
FAX COVER SHEET

THIS FORM MUST BE FILLED OUT IN ITS ENTIRETY TO BE ACCEPTED.

TO: 

CLINICAL COORDINATOR: ______________________________

LACKAWANNA COLLEGE: ______________________________

FAX NUMBER: (570) 961-7832

DATE: _______________ TIME: _______________

FROM: 

STUDENT NAME: ________________________________________
(Print)

SITE NAME: _____________________________________________
(Print)

FAX NUMBER: ______________ PHONE NUMBER: _____________
(Origin)

ATTACHED PLEASE FIND:

1.) WEEKLY TIME SHEET(S) _____ PAGE(S)

2.) LOG SUMMARY _____ PAGE(S)

3.) COMPETENCIES _____ PAGE(S)

4.) EVALUATIONS _____ PAGE(S)

TOTAL (including cover) _____ PAGES

PLEASE NUMBER ALL OF THE PAGES INCLUDING THE COVER SHEET AND INITIAL IN THE UPPER RIGHT HAND CORNER OF EACH PAGE.
FACULTY AVAILABILITY

The Program Director has office hours blocked for student meetings on Monday evenings from 5:00pm -7:00pm and Saturdays after 3pm (hours are subject to change). Additional times are also available by appointment. Student appointments with other faculty must be made by arrangement with the faculty member.

The Clinical Coordinator visits each student on a regular basis at the clinical site during the externship. If problems arise at the clinical site, contact the Clinical Coordinator through Lackawanna College by phone at 570-504-7920 or by calling the Clinical Coordinator’s mobile phone. The Clinical Coordinator will give students the contact number during clinical orientation meetings.

MEDICAL DIRECTOR

The Medical Directors serve on the Program’s Advisory Committee. They are licensed physicians, experienced and proficient in the use of ultrasound in their medical specialty. They provide guidance to the faculty to ensure that the medical components of the didactic and clinical curriculum meet current acceptable performance standards.

Diagnostic Medical Sonography Program- Dr. Juan Gaia  
Vascular Technology Program- Dr. Edward Batzel  
Cardiac Sonography Program- Dr. David Fitzpatrick

TUTORING

Students may be advised to come in after class for extra help, or they may request tutoring or extra help. Students are encouraged to schedule time for tutoring. Faculty and the ultrasound lab assistants are usually available daily. See semester postings in the laboratory.

STUDENT COUNSELING

The Program Director meets with each student monthly to review the student’s progress in the Program. Additional counseling may be scheduled as needed.

Lackawanna College does not provide personal counseling. Career Services maintains a list of local services for counseling services. Please contact SAP Coordinator Marsha Pigga at 570-504-1466 for further information.
CAREER SERVICES/JOB SEARCH ASSISTANCE

Lackawanna College provides Job Search Assistance to graduates in good standing. Lackawanna College cannot and does not promise or guarantee employment upon graduation. Embarking on a course of education typically enhances one’s thinking and potential productivity, but concentrated programs such as those offered at Lackawanna College require a significant commitment of time and effort. There is always a risk that, due to market fluctuations, personal issues or other factors, some graduates are unable to find employment in their field of training within a time frame that may be acceptable to them. Therefore, some graduates may elect to pursue other career options; some use their training indirectly until the time a more favorable position in the right location arrives.

Job search assistance will be in the form of some or all of the following:

- Interviewing skills seminars
- Resume preparation seminars
- Job search techniques seminars
- Interview scheduling

ALUMNI PRIVILEGES

Graduates in good standing of Lackawanna College’s programs who desire to audit a course in the program from which they graduated may do so on a space-available basis. There is no fee for this service and graduates are welcome to make use of this privilege. Graduates should contact the Dean of Continuing Education well in advance of a program start to ascertain if seats are available in a class and should undertake orientation sessions on any new generation lab equipment. Students accepted in a program as auditors must comply with all attendance, test and quiz requirements, homework assignments, dress code and the professional behavior standards as outlined in this handbook. Students auditing a course will be required to purchase all necessary uniforms, books and other material needed for academic progress. Grades will not be registered.

ACADEMIC ADVISEMENT

The Sonography Programs provides individual assistance and advisement to students with academic problems in particular subjects. Students are encouraged to schedule an appointment with their instructors to work on any specific problem they may be having in their program.
REGISTRY AND CERTIFICATION INFORMATION

The American Registry of Diagnostic Medical Technologists (ARDMS) offers examinations for those who desire to earn Registry credentials. The Registry is voluntary and does not constitute state licensure or certification. ARDMS certification may, however, enhance employment opportunities and is highly encouraged.

Graduates of Lackawanna College’s imaging programs may be eligible to sit for the registry examinations after meeting the appropriate prerequisites.

Graduates possessing a Medical Degree, a Bachelor’s Degree, or who are a graduate of a 2-year CAAHEP or CMA approved program in ultrasound/vascular technology may take the examination upon graduation from Lackawanna College. The exact date will depend upon the Registry’s examination schedule.

Graduates are responsible for arranging their registry examinations. The Program Director and faculty assist and encourage the graduate students to pursue the examination in a timely manner. Registry Review classes are provided to the graduates. The ARDMS application booklets are provided to the graduates along with assistance in completion of the necessary paperwork.

The ARDMS reserves the right to deny, revoke, or otherwise take action with regard to the application or certification of an applicant or registrant in the case of
- Revocation, suspension, or other disciplinary action by a licensing board
- The conviction of, plea of guilty, or plea of nolo contendere to a crime that is directly related to public health or the provision of diagnostic medical Sonography/vascular technology services

Conditions to sit for the registry examinations are determined by the individual agencies. These pre-requisites may be changed by ARDMS.

PROFESSIONAL ORGANIZATIONS

Students are encouraged to join professional organizations. Student fees for membership are usually offered at a reduced rate. Some of these professional organizations are:

- Society of Diagnostic Medical Technologists
- Society of Vascular Ultrasound
- American Society of Echocardiography
- American Institute of Ultrasound in Medicine
1. **COMMUNICATION**

Sonography students must be able to:

- work as team members
- exhibit strong written and verbal communication skills
- communicate effectively with co-workers, peers, supervisors, physicians, patients, and family members

If unable to meet these standards, please explain:

2. **PROFESSIONAL ETHICS**

Professional ethics is the rightness or wrongness in relation to performing duties and responsibilities of a profession. Ethical behavior is influenced by the attitudes and values of an individual in relationship to carrying out one's duties and responsibilities.

Sonography students must be able to:

- Have a set of positive personal values and respect the values of others
- Apply principles of ethical decision-making in the health care setting.

If unable to meet these standards, please explain:

3. **SAFETY: OCCUPATIONAL HAZARDS AND INFECTIOUS DISEASE**

Sonography personnel may come into contact with potentially biohazardous materials, blood, and body fluids. These biohazardous materials have the potential of transmitting infectious disease such as hepatitis, HIV, and other blood diseases. ALL materials must be considered potentially infectious.

Sonography students also work with electrical equipment and electrically conductive materials. Accordingly, proper lab safety must be practiced at all times.

A student must be responsible for his/her own safety and practice universal precautions and electrical safety at all times.

If unable to meet these standards, please explain:
4. POLICIES AND PROCEDURES

The Sonography student is required to adhere to the policies and procedures of Lackawanna College, the Imaging Program, and all affiliate hospitals to which they are assigned.

If unable to meet these standards, please explain:

5. DUTIES OF A STUDENT

The Student Sonographer is a member of the allied health team who has a primary focus on the accurate completion of various ultrasound tests necessary for the diagnosis and treatment of clients with medical concerns.

Sonography requires working in potentially life-threatening situations with critically ill people. The field of Sonography relies heavily on a strong scientific and mathematics foundation.

A candidate for graduation from the Sonography Program must;

- Possess the ability to think and act calmly during emergency situations
- Observe Sonographers in the clinical setting to witness how they perform diagnostic examinations
- Provide proof of scientific and mathematical aptitude
- Render care to all individuals, of all cultures and religions, without prejudice or judgment
- Collect and process data for patient assessment
- Perform complete and diagnostically optimal ultrasound examinations on all patients
- Utilize information gained from the ultrasound examination to give a preliminary interpretation of the results, including abnormal findings, when applicable
- Complete ultrasound examinations in a reasonable amount of time

If unable to meet these standards, please explain:
6. ACADEMIC STANDARDS

All Sonography students must earn at least a score of an 82 or better in all courses to remain enrolled in the any Sonography Program.

If unable to meet these standards, please refer to 5A Grading Policies:
I, ________________________________ have read and understand the Technical and Academic Standards of a Sonography student.

_____ I believe that I am able to accomplish the Technical and Academic Standards and should be considered for admission to Program.

I

__________________________   _______________________
Signature                       Date

__________________________   _______________________
Witness                       Date

ACKNOWLEDGEMENT

I have received a copy of the Student Handbook and School Catalog. I have read these documents in their entirety, and have been given the opportunity to ask for explanation or clarification of any of the material contained therein.

I believe that I am willing and able to fulfill the obligations and responsibilities of a Sonography student as outlined in these documents.

Please print name on this line.

__________________________   _______________________
Signature of Student               Date
Sonography Ultrasound Clinical Practice Standards

Standards are designed to reflect behavior and performance levels expected in clinical practice for the Sonography Ultrasound Professional. These Clinical Practice Standards set forth the standards (principles) that are common to all of the specialties within the larger category of the diagnostic ultrasound profession. Individual specialties or subspecialties may adopt standards that extend or refine these general Standards and that better reflect the day to day practice of these specialties. Certification is considered the standard of practice in ultrasound. Individuals not yet certified may reference these Clinical Practice Standards to optimize patient care.

Section 1

Patient Information Assessment and Evaluation

Patient Education & Communication, Procedure Plan

STANDARD - Patient Information Assessment & Evaluation:

1.1 Information regarding the patient’s past and present health status is essential in providing appropriate diagnostic ultrasound information. Therefore, pertinent data regarding the patient’s medical history, including familial history as it relates to the diagnostic ultrasound procedure, should be collected whenever possible and evaluated to determine its relevance to the ultrasound examination.

The Diagnostic Ultrasound Professional:

1.1.1 Verifies patient identification and that the requested procedure correlates with the patient’s clinical history and presentation. In the event that the requested procedure does not correlate, either the interpreting physician or the referring physician will be notified.

1.1.2 Uses interviewing techniques to gather relevant information from the patient or patient’s representative and the patient’s medical records regarding the patient’s health status and medical history.

1.1.3 Assesses the patient’s ability to tolerate procedures.

1.1.4 Evaluates any contra-indications to the procedure, such as medications, insufficient patient preparation or the patient’s inability or unwillingness to tolerate the procedure.
**STANDARD - Patient Education and Communication:**

1.2 Effective communication and education are necessary to establish a positive relationship with the patient and/or the patient’s representative, and to elicit patient cooperation and understanding of expectations.

*The Diagnostic Ultrasound Professional:*

1.2.1 Communicates with the patient in a manner appropriate to the patient’s ability to understand. Presents explanations and instructions in a manner which can be easily understood by the patient and other health care providers.

1.2.2 Explains the examination procedure to the patient and responds to patient questions and concerns.

1.2.3 Refers specific diagnostic, treatment or prognosis questions to the patient’s physician.

**STANDARD - Analysis and Determination of Procedure Plan for Conducting the Diagnostic Examination**

1.3 The most appropriate procedure plan\(^1\) seeks to optimize patient safety and comfort, diagnostic ultrasound quality and efficient use of resources, while achieving the diagnostic objective of the examination.

*The Diagnostic Ultrasound Professional:*

1.3.1 Analyzes the previously gathered information and develops a procedure plan for the diagnostic procedure. Each procedure plan is based on age appropriate and gender appropriate considerations and actions.

1.3.2 Uses independent professional judgment to adapt the procedure plan to optimize examination results. Performs the ultrasound or vascular technology procedure under general\(^2\) or direct\(^3\) supervision, as defined by the procedure.

1.3.3 Consults appropriate medical personnel, when necessary, in order to optimize examination results.

1.3.4 Confers with the interpreting physician, when appropriate, to determine if contrast media administration will enhance image quality and provide additional diagnostic information.
1.3.5 Uses appropriate technique for intravenous line insertion and contrast media administration when the use of contrast is required.

1.3.6 Determines the need for accessory equipment.

1.3.7 Determines the need for additional personnel to assist in the examination.

1.3.8 Acquires prior written approval from the medical director for contrast media injection.

**STANDARD - Implementation of the Procedure Plan**

1.4 Quality patient care is provided through the safe and accurate implementation of a deliberate procedure plan.

*The Diagnostic Ultrasound Professional:*

1.4.1 Implements a procedure plan that falls within established protocols.

1.4.2 Elicits the cooperation of the patient in order to carry out the procedure plan.

1.4.3 Modifies the procedure plan according to the patient’s disease process or condition.

1.4.4 Uses accessory equipment, when appropriate.

1.4.5 Modifies the procedure plan, as required, according to the physical circumstances under which the procedure must be performed (i.e., operating room, ultrasound laboratory, patient’s bedside, emergency room.)

1.4.6 Assesses and monitors the patient’s physical and mental status during the examination.

1.4.7 Modifies the procedure plan according to changes in the patient’s clinical status during the procedure.

1.4.8 Administers first aid, or provides life support in emergency situations, as required by employer policy.

1.4.9 Performs basic patient care tasks, as needed.

1.4.10 Requests the assistance of additional personnel, when warranted.

1.4.11 Recognizes sonographic characteristics of normal and abnormal tissues, structures and blood flow; adjusts scanning technique to optimize image quality and spectral waveform characteristics.

1.4.12 Analyzes sonographic findings throughout the course of the examination so that a comprehensive exam is completed and sufficient data is provided to the physician to direct patient management and render a final diagnosis.

1.4.13 Performs measurements and calculations according to laboratory protocol.

1.4.14 Strives to minimize patient exposure to acoustic energy without compromising examination quality or completeness.
STANDARD - Evaluation of the Diagnostic Examination Results

1.5 Careful evaluation of examination results in the context of the procedure plan is important in order to determine whether the procedure plan goals have been met.

_The Diagnostic Ultrasound Professional:_

1.5.1 Establishes that the examination, as performed, complies with applicable protocols and guidelines.8
1.5.2 Identifies any exceptions to the expected outcome.9
1.5.3 Documents any exceptions clearly, concisely and completely. When necessary, develops a revised procedure plan in order to achieve the intended outcome.
1.5.4 Initiates additional scanning techniques or administers contrast agents as indicated by the examination and according to established laboratory policy and procedures under state law.
1.5.5 Notifies an appropriate health provider when immediate medical attention is necessary, based on procedural findings and patient conditions.
1.5.6 Evaluates the patient’s physical and mental status prior to discharge from the Diagnostic Ultrasound Professional.
1.5.7 Upon assessment of the examination findings, recognizes the need for an urgent rather than routine report and takes appropriate action.
1.5.8 Provides a written or oral summary of preliminary findings to the physician.

STANDARD - Documentation

1.6 Clear and precise documentation is necessary for continuity of care, accuracy of care and quality assurance.

_The Diagnostic Ultrasound Professional:_

1.6.1 Documents diagnostic and patient data in the appropriate record, according to the policy and procedure of the facility.
1.6.2 Ensures that the documentation is timely, accurate, concise and complete.
1.6.3 Documents any exceptions from the established protocols and procedures.
1.6.4 Records diagnostic images and data for use by the interpreting physician in rendering a diagnosis and for archival purposes.

1.6.5 Provides an oral or written summary of preliminary findings to the interpreting physician.

Section 2

Quality Assurance Performance Standards

STANDARD - Implementation of Quality Assurance

2.1 Implementation of a quality assurance action plan is imperative for quality diagnostic procedures and patient care.

*The Diagnostic Ultrasound Professional:*

2.1.1 Obtains assistance appropriate personnel to implement the quality assurance action plan.
2.1.2 Implements the quality assurance action plan.

STANDARD - Assessment of Equipment, Procedures and the Work Environment

2.2 The planning and provision of safe and effective medical service relies on the collection of pertinent information about equipment, procedures and the work environment.

*The Diagnostic Ultrasound Professional:*

2.2.1 Strives to maintain a safe workplace environment.
2.2.2 Performs equipment quality assurance procedures, as required, to determine that equipment operates at an acceptable performance level.
2.2.3 Seeks to ensure that each work site in which the Diagnostic Ultrasound Professional conducts patient examinations has in place a policy manual that addresses environmental safety, equipment maintenance standards and equipment operation standards and that this policy manual is reviewed and revised on a regular basis. Knows, understands and implements the policies set forth in the work site policy manual.
STANDARD - Analysis and Determination of a Quality Assurance Plan

2.3 The Diagnostic Ultrasound Professional uses quality assurance and continuous quality improvement methods to assess and evaluate all aspects of ultrasound practice.

The Diagnostic Ultrasound Professional:

2.3.1 Strives to become knowledgeable about the theory and practice of quality assurance and continuous quality improvement methods and procedures as they are applied in the clinical environment. Works with all concerned parties to implement such methods and procedures with the objective of continuously improving the quality of ultrasound diagnostic services.

2.3.2 Compares quality assurance results to established and acceptable values.

2.3.3 Works with all concerned parties to formulate and implement an action plan.

STANDARD - Outcomes Measurement

2.4 Outcomes assessment is an integral part of the ongoing quality assurance plan to enhance diagnostic services.

The Diagnostic Ultrasound Professional:

2.4.1 Based on outcomes assessment, determines whether the performance, of equipment and materials is in accordance with established guidelines and protocols.

2.4.2 Based on outcomes assessment, determines whether the diagnostic information provided as a result of the ultrasound examination correlates with other diagnostic testing or procedures performed on the same patient.

2.4.3 Based on outcomes assessment, determines that each test achieves the same outcome when performed by different Diagnostic Ultrasound Professionals.

2.4.4 Develops and implements an action plan when outcome measurement results are not within currently accepted tolerances.

2.4.5 Is knowledgeable of, or works with the medical director to develop, written diagnostic ultrasound procedure protocols that meet or exceed established guidelines.
STANDARD - Documentation

2.5 Documentation provides evidence of quality assurance activities designed to enhance the safety of patients, the public, and health care providers, during diagnostic ultrasound procedures.

The Diagnostic Ultrasound Professional:

2.5.1 Maintains documentation regarding quality assurance activities, procedures, and results, in accordance with the established laboratory policies and protocols.
2.5.2 Provides timely, concise, accurate and complete documentation of quality assurance activities.
2.5.3 Adheres to the established quality assurance performance standards.

Section 3

Professional Performance Standards

STANDARD - Quality of Care

3.1 All patients expect and deserve excellent care during the ultrasound examination.

The Diagnostic Ultrasound Professional:

3.1.1 Works in partnership with other health care professionals to provide the best medical care possible for all patients.
3.1.2 Obtains and maintains appropriate professional credentials.  
3.1.3 Adheres to the standards, policies, and procedures adopted by the profession and regulated by law.
3.1.4 Provides the best possible diagnostic exam for each patient by applying professional judgment and discretion.
3.1.5 Anticipates and responds to the needs of the patient.
3.1.6 Participates in quality assurance programs.
3.1.7 Stays current with required continuing medical education (CME) in order to stay abreast of changes in the field of diagnostic ultrasound and to maintain professional credentials.

STANDARD - Self-Assessment

3.2 Self-assessment is an essential component in professional growth and development. Self-assessment involves evaluation of personal performance, knowledge and skills.
The Diagnostic Ultrasound Professional:

3.2.1 Recognizes personal strengths and uses them to benefit patients, coworkers, and the profession.
3.2.2 Performs diagnostic procedures only after receiving appropriate education and supervised clinical experience.
3.2.3 Recognizes and takes advantage of educational opportunities, including improvement in technical and problem-solving skills and personal growth.

STANDARD - Education

3.3 Advancements in medical science and technology occur very rapidly, requiring an ongoing commitment to professional education.

The Diagnostic Ultrasound Professional:

3.3.1 Maintains professional credentials that are specifically related to the currently practiced discipline(s).
3.3.2 Participates in continuing education activities through professional societies and organizations, to enhance knowledge, skills and performance.

STANDARD - Collaboration

3.4 Quality patient care is provided when all members of the health care team communicate and collaborate efficiently.

The Diagnostic Ultrasound Professional:

3.4.1 Promotes a positive and collaborative atmosphere with all members of the health care team.
3.4.2 Effectively communicates with all members of the health care team regarding the welfare of the patient.
3.4.3 Shares knowledge and expertise with colleagues, patients, students, and all members of the health care team.
STANDARD - Ethics

3.5 All decisions made and actions taken on behalf of the patient adhere to the Code of Ethics upon which the accepted professional standards are based.

The Diagnostic Ultrasound Professional:

3.5.1 Adheres to the accepted professional ethical standards as defined by the Code of Ethics.
3.5.2 Is accountable for professional judgments and decisions, as outlined in the professional standard of ethics.
3.5.3 Provides patient care with bias toward none and equal respect for all.
3.5.4 Respects and promotes patients rights.
3.5.5 Provides patient care with respect for patient dignity and needs.
3.5.6 Acts as a patient advocate supporting patient rights.
3.5.7 Adheres to the established professional performance standards of practice.

1 Procedure Plan: A plan for conducting the ultrasound or related examination. The procedure plan must take into account the skills and knowledge of the Diagnostic Ultrasound Professional, the condition and history of the patient, the objectives of the examination, the diagnostic criteria, the capabilities of available ultrasound and related equipment and a wide range of other factors.

2 General Supervision: the minimal level of physician supervision; physician is not required to be present in the office suite when the ultrasound procedure is performed.

3 Direct Supervision: physician must be present in office suite when ultrasound exam or vascular procedure is performed.

4 Accessory equipment: Equipment which extends or modifies the function of the ultrasound scanning device, or which provides ancillary or complimentary diagnostic information (i.e. non-ultrasound testing equipment.

5 Note: Approval of individuals for contrast media injection and IV line insertion requires that the individual have obtained education and training for this function and have demonstrated competency. The Diagnostic Ultrasound Professional is encouraged to obtain continuing medical education related to the materials being injected and the procedures being performed.

6 Protocols: A standardized description of the elements of a task, procedure or process; a detailed plan of a procedure.
7 **Examination results**: The ultrasound images, data and measurements which results from the examination process.

8 **Guideline**: A written document which provides suggestions (guidance) on how to accomplish a particular task, procedure or process on how to respond to specified circumstances.

9 **Expected outcome**: The expected information and data which was anticipated to have resulted from the examination.

10 **Exceptions**: Any elements of the examination protocol that were not performed; the Diagnostic Ultrasound Professional must document exceptions in the written summary of examination findings.

11 **Outcome Assessment**: Assessment of an action, process or procedure based on the ultimate outcome of that action, process or procedure. In this case, the term refers to assessment of the outcome of the diagnostic test (the results of the test or the diagnosis) in comparison to other sources of information (i.e. other types of diagnostic testing) which can be used to assess the validity of the conclusions reached on the basis of the ultrasound examination.

12 **Guidelines**: (Relevant to the development of diagnostic procedure protocols): Professional organizations, including the American Institute of Ultrasound in Medicine, the American College of Radiology, the American College of Obstetrics and Gynecology, the American Society of Echocardiography, the Society of Diagnostic Medical Sonography and the Society of Vascular Technology have published guidelines for clinical ultrasound procedures.

13 **Professional Credentials**: Competency based ultrasound credentials awarded by a National Commission for Certifying Agencies (NCCA) accredited certification body; an example is the American Registry of Diagnostic Medical Technologists (ARDMS).

14 **Standards**: Statements of the minimum behavioral or performance levels that are acceptable. Something established by authority as a rule for the measure of quantity or quality.

15 **Policies**: Written statements indicating what actions are to be taken when specific criteria are encountered. A definite course or method of action selected from among alternatives and in light of given conditions to guide and determine present and future decisions.

16 **Procedures**: Written guidelines that state how a task is to be accomplished, the specific steps to be taken, or how a policy is to be executed.
**Code of Ethics:** Document defining the expected professional standard of conduct for Diagnostic Ultrasound Professionals; published by the Sonography Coalition and included in the appendix.

**Endorsed by:**
- Society of Diagnostic Medical Sonography
- American Institute of Ultrasound Medicine
- American Society of Echocardiography
- Canadian Society of Diagnostic Medical Technologists
- Society of Vascular Technology

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**Society of Diagnostic Medical Sonography (SDMS)**

*(www.sdms.org)*

**Position Statement**

**Code of Ethics for the Profession of Diagnostic Medical Ultrasound**

**PREAMBLE**

The goal of this code of ethics is to promote excellence in patient care by fostering responsibility and accountability and thereby help to ensure the integrity of professionals involved in all aspects of diagnostic medical ultrasound.

**OBJECTIVES**

To create an environment where professional and ethical issues are discussed

To help the individual practitioner identify ethical issues

To provide guidelines for individual practitioners regarding ethical behavior

**PRINCIPLES**

**Principle I: In order to promote patient well-being, professionals shall:**

A. Provide information about the procedure and the reason it is being done. Respond to patient's concerns and questions.

B. Respect the patient's self-determination and the right to refuse the procedure.

C. Recognize the patient's individuality and provide care in a non-judgmental and non-discriminatory manner.
D. Promote the privacy, dignity and comfort of the patient and his/her family.

E. Protect the confidentiality of acquired patient information.

F. Strive to ensure patient safety.

**Principle II: To promote the highest level of competent practice, professionals shall:**

A. Obtain the appropriate education and skills to ensure competence.

B. Practice according to published and recognized standards.

D. Work to achieve and maintain appropriate credentials.

E. Acknowledge personal limits and not practice beyond their capability and skills.

F. Perform only those procedures that are medically indicated, restricting practice to validated and appropriate tests. For research studies, follow established research protocol, obtaining (and documenting) informed patient consent as needed.

G. Ensure the completeness of examinations and the timely communication of important information.

H. Strive for excellence and continued competence through continuing education.

I. Perform ongoing quality assurance.

J. NOT compromise patient care by the use of substances that may alter judgement or skill.

**Principle III: To promote professional integrity and public trust, the professional shall:**

A. Be truthful and promote honesty in interactions with patients, colleagues and the public.

B. Accurately represent their level of competence, education and certification.

C. Avoid situations which may constitute a conflict of interest.

D. Maintain appropriate personal boundaries with patients including avoidance of inappropriate conduct, be it verbal or nonverbal.

E. Promote cooperative relationships within the profession and with other members of the health care community.
F. Avoid situations which exploit others for financial gain or misrepresent information to obtain reimbursement.

G. Promote equitable access to care.