CAMBRIDGE
COLLEGE OF HEALTHCARE & TECHNOLOGY

Diagnostic Medical Sonography Student Handbook

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Contents are subject to change with immediate notice.

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PLEASE NOTE: THE CLINICAL POLICIES & PROCEDURES HANDBOOK FOLLOWS THIS DOCUMENT

Cambridge College of Healthcare & Technology Mission Statement

Cambridge College of Healthcare & Technology is a private, academic and student-centered institution of higher education that is dedicated to providing excellent pedagogical teaching and hands on training to traditional and nontraditional students. With Cambridge's significant history, the emphasis on an outstanding student culture continues with focusing on in demand programs, dynamic curriculum, general education skills and a strong commitment to being a leader in the field of career-focused education.
Cambridge offers professional and career-focused curricula designed to cultivate students' successful learning and the ability to apply knowledge, think critically, and communicate effectively. Through comprehensive academic programs, innovative and contemporary in content and mode of delivery, students are exposed to skills essential to become a professional in the healthcare and technology fields. Because academic programs are professional and career focused, Cambridge responds to local, regional, national and global employment needs and supports current workforce trends. Cambridge's mission guides its strategic planning and decision making at all levels of the institution.

Diagnostic Medical Sonography Program Mission Statement

The mission of the Diagnostic Medical Sonography program is to provide a comprehensive education that will prepare students to become sonographers. The program is structured to provide intellectual stimulation and learning in the didactic and clinical settings using psychomotor, affective and cognitive domains. It is necessary to prepare students to assume the responsibilities of a sonographer, provide quality patient care and to contribute to their profession by a commitment to professional organizations and lifelong learning. These beliefs are the foundation of the sonography profession and are realized through commitment to the education of sonographers in the community.

Goals:

- "To Prepare competent entry-level abdominal 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"
- To Prepare competent entry-level ob/gyn sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains"

SLOs:

- Provide competent, safe practice of diagnostic medical sonography.
- Demonstrate professional behavior, theoretical knowledge and clinical performance.
- Possess the ability to maneuver various medical equipment to carryout safe medical sonography exams, while practicing safe and proper sonography ergonomics.
- Demonstrate practice that is consistent with the scope of practice and code of ethics.
- Display critical thinking and problem-solving skills.

Didactic Objectives:

Upon successful completion of the DMS program, the student will be able to:

1. Perform the tasks of a qualified entry-level sonographer with minimal supervision.
2. Possess the initiative to learn more about the field of ultrasound, to build higher professional standards and to pursue personal professional growth;
3. Be aware of his/her obligations to the patients, physicians, and medical facilities;
4. Be aware of the responsibilities of a sonographer;
5. Recognize and work satisfactorily in all areas of ultrasound; and

6. Be efficient and accurate in adjusting instrument controls and transducer selection.

Clinical Objectives:

1. Produce medical images of any given anatomical region with optimal diagnostic quality;
2. Perform the necessary diagnostic procedures with a minimal amount of discomfort to the patient; and
3. Apply didactic knowledge in the clinical setting under the guidance of the Clinical Instructor.

DMS Faculty & Staff

Bianca Paz Hamm, MBA, RDCS	Program Dean
Monique Alphonse, RDMS (AB,OBGYN), RVT	Clinical Coordinator (AB, OB/GYN), DMS Instructor
Carolyn Crawford, RDCS, CCT	Clinical Coordinator (ECHO)
Svatlana Bakhtiyarov, BS, RDMS (AB) (OB/GYN) RVT	Instructor (AB, OB/GYN, Vascular) Concentration Coordinator (AB, OB/GYN)
Amber Sklarew, RDMS(AB), RDCS	Instructor (AB, Echo)
Jesus Sanchez, BS, RDCS	Adjunct Instructor (Echo)
Evelyn Cole Sanders, MSHIA, RDMS (AB.OB/GYN,BR) RVT	Adjunct Instructor (OB/GYN)

Dress Code and Professional Appearance

Personal appearance is one of the first features upon which an employer evaluates a candidate for employment. Therefore, Cambridge College maintains a strict dress code for its students while on campus and on clinical rotations.

Classroom and Clinical Dress Code

UNIFORMS/SCRUBS

- Cambridge College's required scrubs
- Uniform clean and ironed
- White or black socks or hosiery are required
- White or black t-shirt under uniform scrub top
- For warmth a solid white lab coat over your scrubs or a long sleeved white T-shirt under your scrubs is acceptable, no sweatshirts/hoodies are permitted over scrubs
- Clean white/black sneakers, closed-toe white/black shoes or medical clogs

PERSONAL HYGIENE

- Clean, neatly groomed and free of all body odor including tobacco
- Clean and trimmed fingernails – no artificial nails, tips or wraps
- Clear or pastel nail polish may be worn
- Minimal jewelry- only two earrings per lobe
- No visible body piercing except for ear piercing
- No visible body art/tattoos **(covered in the classroom and clinical site)**
- Avoid perfumes, body sprays, scented oils, and aftershaves
- Mustaches/beards must be clean and neatly trimmed
- Hair is to be clean and neatly styled
- Hair below the neckline is to be tied back
- No alarming or extreme hair coloring (red, blue, purple etc.)

If a student is unable to abide by the personal hygiene policy, a medical doctor's note is needed.

OTHER

- Students must wear their identification badges at all time
- Student must carry a pen and pocket notepad at all times
- Excessive Jewelry is not permitted (for safety and health reasons)
- Holiday pins may not be worn
- Sunglasses are not to be worn inside buildings
- Hats are not permitted
- Hair wraps and bold hair accessories are not permitted

Any student reporting to a clinical site unshaven, in unclean scrubs, in dirty or soiled shoes, or not in complete uniform will **not** be allowed to remain in the clinical setting. The Clinical Site Instructor, Clinical Coordinator, and/or the Program Dean may use his/her professional judgment and has the right to remove any student if not in compliance with the dress code.

Students are required to wear only Cambridge-issued ceil blue scrubs. White lab coats are permitted. **Students are not permitted to wear sweatshirts, printed scrubs, or printed jackets.**

At the clinical site, if a student is required to change into sterile scrubs while working, the student must change back into uniform scrubs before leaving the facility. Property belonging to the clinical site must remain at the clinical site. This includes scrubs or any other materials.

Students are responsible for purchasing additional sets of scrubs if needed (ordered from the school). One set is included with tuition.

1st incident of not wearing uniform=written warning

2nd incident =removal from class or clinical site

3rd incident = dismissal from program

Students Returning to the DMS Program after an Extended Absence

Taking a leave of absence or returning to the DMS program after an extended absence will require complete course written exams and performing competency skills in the laboratory with DMS program official. The competency skills test must be completed before returning to the clinical setting and will be equal to their time in the program. If a student does not initially pass the competency exam(s), the Program Dean will schedule additional, but limited, time in the laboratory to work on the student's scanning skills. The student may also be required to audit classes. A plan of action will be decided on by the Program Dean, Clinical Coordinator and an Instructor who has taught the student. Depending on the situation, the student may also be asked to re-take a portion of the didactic or clinical program.

Funeral Leave

A student will be granted three (3) consecutive school days of funeral leave in the event of the death of immediate family members. The class time does not need to be made up, but the student is responsible for all instructional material presented during the absence. Clinical hours will need to be made up. Extended time will be granted under a Leave of Absence if necessary. (Please refer to the Leave of Absence Policy in the Institutional Catalog.)

Jury Duty

If a student is called for Jury Duty, he/she will be excused under the Leave of Absence policy if extended time is necessary. Proper documentation will be required.

Outside Employment

The student must not allow any employment to interfere with scheduled program hours nor will schedules be re-arranged to comply with a student's employment. A student will not receive time off from clinical experience for employment nor will a course examination/re-take examination be scheduled around employment obligations. Furthermore, duties completed as required by the student's employment will not count toward fulfillment of any required clinical competencies or clinical time. Program uniforms and ID badges cannot be worn for outside employment.

Professional Societies/Off-Campus Functions

Active participation in professional societies is encouraged. With prior approval from the Program Dean, a student will be allowed to attend national, state or local conventions, seminars and workshops. The student is responsible for expenses and all classroom work during the absence. Students are responsible for providing his/her own transportation to and from off-campus activities. All program and school functions are designated for the program students only. A student is not to bring other guests or arrange to meet others while on any program sanctioned trip or meeting.

Incomplete Semester

In the event a student is unable to complete a full semester of didactic and/or clinical courses, the student will be dropped from all semester courses (including clinical courses in semesters 3, 4, 5 & 6) and receive an F for all dropped clinical courses and appropriate grade for didactic courses according to the grading policy. i.e., the DMS track must be adhered to; students are not able to opt out of any one course (didactic or clinical).

Unforeseen School Closure

Any class or clinical hours missed due to holidays that do not fall on scheduled breaks, must be made up within the semester. Hours lost due to any unforeseen school closure must also be made up within the semester.

Pregnancy Policy

It is not required that a student declares her pregnancy; however, it is highly recommended. It shall be the responsibility of the student to notify the Program Dean and complete a pregnancy declaration statement. The student will be offered alternatives upon consultation with the Program Dean as follows:

1. Continue the program without modification or interruption.
2. Leave of Absence (LOA) (see LOA Policy in Institutional Catalog). Return to the program will be dependent upon space availability in the clinics and the student is NOT guaranteed any specific clinical site.
3. Withdrawal from clinical rotations with continued participation in didactic instruction. Upon her return to the clinical education courses, the student is NOT guaranteed any specific clinical site.

If a student becomes pregnant at any time during the training cycle, disclosure of pregnancy is optional on the part of the student. In any externship, a student may be exposed to patients with a variety of illnesses, diseases and/or bacteria. In addition, a student may be required to move or lift patients which could be physically demanding. All of the above mentioned offer a different degree of danger to the mother and/or fetus.

If the student chooses not to inform the program of her pregnancy, the program will not consider her pregnant and cannot exercise options that could protect the fetus. Declaration of pregnancy may be withdrawn in writing at any time by the student. A Voluntary Pregnancy Declaration Form is located on Page 38 of this Handbook.

Depending on the type of course, degree of difficulty, academic standing and length of time missed, the student may be required to re-take an entire course. Upon return, the student must complete all clinical rotations and/or competencies missed or not completed prior to and during her LOA. In addition, should the faculty deem it necessary, the student will be subject to evaluation of clinical competencies that were completed prior to the student's LOA.

The student will return to full-time status as soon as possible after delivery, but only on the express written permission of his/her physician. The student must complete ALL requirements for graduation upon return.

Glossary of Terms

- **Clinical Education:** The portion of the program conducted in a health care facility that provides the opportunity for students to translate theoretical and practical knowledge into cognitive, psychomotor, and affective skills necessary for patient care.

- **Competent:** The ability to successfully perform a series of designated ultrasound exams with indirect supervision and assume those duties and responsibilities according to course and clinical objectives.

- **Competency:** Identified ultrasound knowledge and skills a student must master to successfully complete program requirements.

- **Competency Evaluation:** The procedure by which a student's performance is evaluated according to prescribed standards. Competency evaluations consist of the knowledge, skills and affective behavior required of an entry-level sonographer.

- **Didactic Education:** The portion of the program presented and evaluated in a classroom setting.

- **Laboratory Practice:** The portion of the program conducted in a simulated or dedicated laboratory providing students the opportunity for practical application, practice and evaluation under the direct supervision of an instructor.

- **Direct Supervision:**

    1. The qualified sonographer reviews the requisition in relationship to the student's achievements and abilities;
    2. The qualified sonographer evaluates the patient's condition in relationship to the student's achievements and abilities;
    3. The qualified sonographer reviews transducer selection, control adjustments and anatomic findings; and
    4. The qualified sonographer reviews and approves the ultrasound exam.

- **Indirect Supervision** the supervision provided by a registered sonographer to be immediately available to assist the student at any level of achievement.

- **"Immediately available"** is interpreted as the presence of a registered sonographer adjacent to the room or location where the ultrasound examination is being performed.

Correlation of Didactic and Clinical Education

Didactic education is integrated into the laboratory and clinical curricula throughout the program with the student participating in a competency-based education system. Ultrasound procedures are studied in a didactic (classroom) setting followed by laboratory demonstration of the procedure. The student is then allowed to participate in laboratory practice. Once the student demonstrates the lab competency for a procedure with the course instructor, the student is eligible to perform the procedure in the clinical setting with direct supervision by a registered sonographer.

After performing the procedure several times without critical error under direct supervision, the student is eligible to demonstrate clinical competency with the Clinical Instructor. The student must demonstrate competency of the procedure while being evaluated based on pre-set standards. Once clinical competency has been demonstrated, the student may perform, at the discretion of the Clinical Instructor, the procedure with indirect supervision by a registered sonographer.

Tutoring

Instructors are available by appointment to students who feel they need additional assistance outside normal class hours. Tutoring assistance is available at no charge and we urge those who desire this service to take advantage of this assistance. Students should first contact their Instructor to determine an academic success plan. If further support is required, the instructor or the student should notify the Program Dean to arrange for tutoring. (See Request for Tutoring Form, Page 36)

Scanning Practice Outside of Scheduled Laboratory Time

Students are allowed to practice scanning in the lab outside of their scheduled lab time as long as an instructor is on campus. Those students bringing in volunteers from outside of Cambridge College must have the participant sign a waiver. (See Release of Liability Form, Page 37)

Graduation Requirements

An Associate in Science degree will be issued upon **successful** completion of all program courses to include:

- Fulfillment of all required laboratory and clinical competencies
- Final cumulative GPA (CGPA) is 2.00 or above
- Completion of 100% of the clinical externship hours
- 90% of didactic attendance
- Fulfillment of all financial obligations to Cambridge College
- Successfully pass the SPI (Sonography Principals & Instrumentation) registry exam via the ARDMS (American Registry for Diagnostic Medical Sonography)

The student is encouraged to review the ARDMS policy regarding Proof of Graduation and to sit for the ARDMS certification exam as soon as possible following graduation. It is the responsibility of the student to complete and mail the ARDMS application in a timely manner.

The student must have met all financial responsibilities to Cambridge College including any Federally-required Exit Interviews. All books on loan must be returned to the Program Dean or Cambridge Library, or monetary recompense will be made by the student.

Laboratory Courses

Laboratory demonstrations will be scheduled starting with the first core sonography courses. Students are encouraged to participate in all aspects of the scanning lab which includes hands-on learning. In the clinical setting, a student may observe or participate in an ultrasound study under the direct supervision of a Registered Sonographer. For a student to become eligible to work independently and with indirect supervision, a student must satisfactorily demonstrate the scheduled laboratory competencies. If the student is absent for the laboratory competency as scheduled, the student must complete the missed laboratory competency by the next scheduled class or receive a zero (0). All make-up laboratory competencies are subject to point deductions.

Mandatory competencies must be completed by the end of the semester in order for the student to advance and receive a final laboratory grade.

LAB COURSE # AND TITLE	PRIMARY OBJECTIVE(S)	FREQUENCY OF EVALUATION
DMS 1003 Sonographic Anatomy Lab	To correctly identify abdominal ultrasound anatomy and pass a General Abdominal AND Aorta competency test to advance.	Weekly observations by the instructor.
DMS 1002 Ultrasound Physics Lab	To correctly identify & manipulate ultrasound machine controls to achieve maximum image quality. Have an understanding of sound wave properties as it applies to the exam and pass an Equipment competency test to advance.	Weekly observations by the instructor.
DMS 2001 Abdominal Scanning Lab	Follow protocol to achieve completion of an abdominal ultrasound while recognizing normal vs. abnormal anatomy. As well, student must pass Renal, RUQ and Abdominal competency to advance.	Weekly observations by the instructor.
DMS 2003 OB/GYN Scanning Lab	Correctly identify, label and measure female organs and pregnancy growth stages with minimal assistance and pass a Pelvic and Transvaginal competency to advance.	Weekly observations by the instructor.
DMS 2002 Abdomen 2	Correctly identify normal and abnormal thyroid tissue; and become confident with testicular scanning protocol and measurements. Pass a Thyroid, Testicle competency tests to advance.	Weekly observations by the instructor.
DMS 2004 OBGYN 2	Correctly measure and identify a 2nd trimester pregnancy and pass a 2nd Trimester (phantom) competency to advance.	Weekly observations by the instructor.

LAB COURSE # AND TITLE	PRIMARY OBJECTIVES	FREQUENCY OF EVALUATION
DMS 2009 Introduction to Echo	Understand heart anatomy and recognize what is seen in long vs. short axis. Successfully pass a Basic Echo competency to advance.	Weekly observations by the instructor.
DMS 2006 Echo Pathology 1	Follow protocol to achieve the completion of a cardiac ultrasound while recognizing normal vs. abnormal anatomy. Successfully pass an Echocardiograph competency to advance.	Weekly observations by the instructor.
DMS 2007 Echo Pathology II	Follow protocol to achieve the completion of a cardiac ultrasound while recognizing normal vs. abnormal anatomy. Successfully pass an Echocardiograph competency to advance.	Weekly observations by the instructor.
DMS 2005 Introduction to Vascular	Identify and label carotid anatomy to include normal vs. abnormal. Identify and label upper & lower venous while using compression and color flow. Identify upper and lower arterial vessels using color & velocity flow and complete the Vascular competency to advance. Student has the option of completing the Carotid competency	Weekly observations by the instructor.

Lab Competencies

(Please see Forms following this Section)

Mandatory laboratory competencies to be completed before starting clinical rotation end of Semester 2:

- **Basic Echo (Intro to echo lab)**
- **General Abdomen (Sonographic anatomy lab final)**
- **Aorta (Sono Anatomy lab)**

Mandatory laboratory competencies to be completed before end of ABD 1 semester 3:

- **Equipment /Instrument Controls (US Physics lab)**
- **Kidney/Bladder (ABD 1 lab)**
- **RUQ (ABD 1 lab)**
- **Abdomen complete (ABD 1 lab final)**

Mandatory laboratory competencies to be completed before end of ABD 2, Semester 4:

- **Thyroid (ABD 2 class)**
- **Scrotal (ABD 2 class)**
- **Appendix (ABD 2 class)**

Mandatory laboratory competencies to be completed before the end of OB GYN Semesters 4 & 5:

- **Pelvic & Transvaginal (OB GYN 1 lab)**
- **Pelvic Lab final (OB GYN 1 lab)**
- **OB (2nd trimester phantom) (OB GYN 2 class)**

Mandatory laboratory competencies to be completed before the end of the Echo Pathology, Semester 4 & 5:

- **Adult Echocardiography I (Echo path 1 lab)**
- **Adult Echocardiography II (Echo path 2 lab)**

Mandatory laboratory competencies to be completed before the end of the Intro to Vascular, Semester 6:

- **General Vascular (Intro to Vascular lab)**
- **Abdominal Vascular (Intro to Vascular lab)**
- **Carotid (Intro to Vascular lab**

Cambridge College of Healthcare & Technology

Lab Competency Evaluation

Equipment

To be completed before end of semester in US Physics Lab

Student Name: _____ Date: _____

Name of Ultrasound Machine/System: _____

Student must score at least 80% to be acceptable (5 points for each “yes”, 0 points for each “no”)

Student exhibits proficiency in:

		YES	NO
1.	Power (On/Off)	_____	_____
2.	Annotation Keys (patient name, film labeling, etc.)	_____	_____
3.	Time-Gain Compensation Curve	_____	_____
4.	Overall Gain	_____	_____
5.	Transmit Zone	_____	_____
6.	Freeze and Print	_____	_____
7.	Sector vs. Linear Scan Shape	_____	_____
8.	Cine/Cineloop	_____	_____
9.	Magnification (RES, Zoom, etc.)	_____	_____
10.	Image Depth	_____	_____
11.	Calipers	_____	_____
12.	Applications and Functions (Abd/Ob packages, data pages, presets, etc.)	_____	_____
13.	Track Ball	_____	_____
14.	Dual Image	_____	_____
15.	Activate Doppler	_____	_____
16.	Activate Color Imaging	_____	_____

TRANSDUCER:

17.	Selecting Correct Transducer	_____	_____
18.	Changing Transducer	_____	_____
19.	Orientation of Transducer on Patient	_____	_____
20.	Cleaning/Re-Hanging Transducer (including proper care of cords)	_____	_____

(Add individual scores and divide by 20)

Total Score: _____

Comments by Instructor: _____

_____

Signature of Instructor: _____ Date: _____

Lab Competency Evaluation

Basic General Abdomen

To be completed in Lab

Student Name: _____ Date: _____

Machine # _____ Patient ID #_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	
• Properly sets up machine/room for exam/ provides a clean environment for patient (PRE / POST)	
• Properly inputs patient information	
• Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc.	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Makes the patient fell comfortable / Pillow & Climate	
• Respects the patient's right to privacy	
• Responds to patient needs/requests appropriately and respectfully / Professional Conduct	
• Selects the correct transducer(s) / Presets	
• Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
• Uses appropriate body mechanics when scanning and moving patient	
• Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
• Appropriately labeled all images with correct planes	
• Follows protocol	
• Utilizes universal precautions pre & post examination	
PANCREAS	
1. **Pancreas TRANS** with splenic vein	
2. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
LIVER	
3. Left Lobe – Caudate SAG with IVC / Ligamentum Venosum	
4. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
5. Right Lobe with Right Kidney SAG	

6. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
7. Right Lobe with Hepatic Veins TRANS	
8. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
RIGHT KIDNEY	
9. Kidney mid SAG with measurement	
10. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
11. Kidney mid pole TRANS with measurement	
12. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
GALLBLADDER	
13. GB SAG	
14. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
15. GB TRANS	
16. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
17. GB wall thickness Tran	
18. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
19. CBD with measurement	
20. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
SPLEEN	
21. Spleen SAG	
22. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
LEFT KIDNEY	
23. Kidney mid SAG with measurement	
24. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
25. Kidney mid pole TRANS with measurement	
26. Adjusts the proper physics instrumentation relating to each case including Depth, 2D gain, TGC, Focusing	
SCORE	

Student must obtain a minimum passing score of 75% to pass

Total Earned Score: _____/26

Instructor Comments:

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation

Basic ECHO

To be completed in lab

Student Name: _____ **Date:** _____

Machine # _____ **Patient ID #**_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	**---**
1. Properly sets up machine/room for exam/ provides a clean environment for patient	
2. Properly inputs patient information	
3. Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc.	
4. Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
5. Makes the patient feel comfortable / Pillow & Climate	
6. Properly connects patient to EKG leads	
7. Respects the patient's right to privacy	
8. Responds to the patient's needs/requests appropriately and respectfully / Professional Conduct	
9. Selects the correct transducer(s) / Presets	
10. Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
11. Uses appropriate body mechanics when scanning and moving patient	
12. Adjusts the proper physics instrumentation relating to each case including Depth, 2D Gain, TGC, Focusing	
13. Properly cleans transducer and readies room for next patient	
14. Utilizes universal precautions pre & post examination	
15. Completes all necessary paperwork and properly dismisses patient	
ECHOCARDIOGRAPHIC VIEWS	**---**
1. Documents at least one parasternal axis view	
2. Obtain RV inflow tract	
3. Obtain RV outflow tract	
4. Documents at least one short axis view	
5. Obtain Mitral valve level	

6. Obtain Mid papillary level	
7. Obtain Apex level	
8. Documents at least one apical view	
9. Obtain Apical 2 chambers	
10. Obtain Apical 3 chambers	
11. Obtain Apical 5 chambers	
12. Documents at least one subcostal view	
13. Obtain IVC	
14. Obtain Aorta	
15. Obtain Suprasternal Notch- descending AO	

(Student must obtain a minimum passing score of 75% to pass) Average Score: _____/30

Instructor Comments:

_____

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation

AORTA

To be completed in lab

Student Name: _____ **Date:** _____

Machine # _____ **Patient ID #**_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	**---**
• Properly sets up machine/room for exam/ provides a clean environment for patient	
• Properly inputs patient information	
• Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc.	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Makes the patient feel comfortable / Pillow & Climate	
• Respects the patient's right to privacy	
• Responds to the patient's needs/requests appropriately and respectfully / Professional Conduct	
• Selects the correct transducer(s) / Presets	
• Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
• Uses appropriate body mechanics when scanning and moving patient	
• Properly labels images	
• Utilizes universal precautions pre & post examination	
• Completes all necessary paperwork and properly dismisses patient	
• Properly cleans transducer and readies room for next patient	
AORTIC VIEWS	**---**
1. **Aorta proximal longitudinal, including Celiac axis and SMA**	
2. *Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements*	
3. **Aorta transverse image with celiac axis**	

4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. Aorta mid-segment longitudinal	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. Aorta mid-segment transverse	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. Aorta bifurcation longitudinal	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. Aorta bifurcation transverse	
***12.** Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements*	
SCORE	

(Student must obtain a minimum passing score of 75% to pass) **Total Earned Score**:_____/12

Instructor Comments:

_____

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation
KIDNEYS AND BLADDER
To be completed in lab

Student Name: _____ **Date:** _____

Machine # _____ Patient ID#_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	---
• Properly sets up machine (inputs patient information) /room for exam/ provides clean environment	
• Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc.	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Makes the patient feel comfortable / Pillow & Climate	
• Respects the patient's right to privacy	
• Responds to the patient's needs/requests appropriately and respectfully / Professional Conduct	
• Selects the correct transducer(s) / Presets	
• Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
• Uses appropriate body mechanics when scanning and moving patient	
• Properly labels all required images	
• Utilizes universal precautions pre & post examination	
• Completes all necessary paperwork and properly dismisses the patient	
• Properly cleans transducer and prepares room for next patient	
RIGHT KIDNEY	---
1. **Kidney midline/ long axis/ SAG**	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. **Kidney midline SAG with measurements**	

4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. **Kidney medial SAG**	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. **Kidney lateral SAG**	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. **Kidney midline SAG with Color**	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. **Kidney midline SAG with Color & Spectral PW Doppler of main renal artery**	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
13. **Kidney midline TRANS with and without a measurement (optional with color)**	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. **Kidney superior pole TRANS**	
16. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
17. **Kidney inferior pole TRANS**	
18. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
LEFT KIDNEY	---
1. Kidney midline/ long axis/ SAG	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. Kidney midline SAG with measurements	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. Kidney medial SAG	

6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. Kidney lateral SAG	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. Kidney midline SAG with Color	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. Kidney midline SAG with Color & Spectral PW Doppler	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
13. Kidney mid pole TRANS with and without a measurement (optional with color)	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. Kidney superior pole TRANS	
16. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
17. Kidney inferior pole TRANS	
18. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
BLADDER	
1. Bladder SAG	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. Bladder SAG with measurement	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. Bladder TRANS	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. Bladder TRANS with measurement	

8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. Bladder TRANS showing ureteral jets with color	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	

Student must obtain a passing score of 75% to pass (45points minimum) **Score: _____/46**

Instructor Comments:

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_____

Instructor Signature_____ Date_____

Lab Competency Evaluation
RUQ

To be completed in lab

Student Name: _____ **Date: _____**

Machine # _____ **Patient ID #_____**

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	---
• Properly sets up machine (inputs patient information) /room for exam/ provides a clean environment for patient	
• Introduces self to a patient and verifies patient name, addressing as Mr., Mrs., etc.	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Makes the patient feel comfortable / Pillow & Climate	
• Respects the patient's right to privacy	
• Responds to the patient's needs/requests appropriately and respectfully / Professional Conduct	
• Selects the correct transducer(s) / Presets	
• Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
• Uses appropriate body mechanics when scanning and moving patient	
• Properly labels all required images	
• Utilizes universal precautions pre & post examination	
• Completes all necessary paperwork and properly dismisses the patient	
• Properly cleans transducer and readies room for next patient	
PANCREAS	---
1. Pancreas TRANS with splenic vein	

2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. And #3 Pancreas head, body, and tail TRANS (take multiple pictures if needed)	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. Pancreas head, SAG	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. Pancreas neck SAG	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. Pancreas body SAG	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. Pancreas tail SAG	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
LIVER	**---**
1. Left Lobe – Lateral SAG	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. Left Lobe Medial SAG	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. Left Lobe with Aorta SAG	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. Left Lobe – Caudate SAG	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. Left Lobe with IVC SAG	

10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. Right lobe, Gallbladder, Main Lobar fissure, Portal vein	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
13. Right Lobe with Right Kidney SAG	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. Right Lobe with measurement SAG	
16. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
17. Right Lobe – Lateral SAG	
18. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
19. Left lobe and its lateral margin TRANS	
20. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
21. Left LOBE to include the ligamentum teres	
22. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
23. Porta Hepatis with MPV, HA, and CBD	
24. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
25. Right Lobe with Hepatic Veins TRANS	
26. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
27. Right lobe to include the right and left branches of the portal vein	
28. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
29. Right Lobe with right Kidney and Gallbladder TRANS	
30. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	

31. Right lobe with diaphragm	
32. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
RIGHT KIDNEY	**---**
1. Kidney midline/ long axis/ SAG	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. Kidney midline SAG with measurements	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. Kidney medial SAG	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. Kidney lateral SAG	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. Kidney midline SAG with Color	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. Kidney midline TRANS with and without a measurement (optional with color)	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
13. Kidney superior pole TRANS	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. Kidney inferior pole TRANS	
16. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
GALLBLADDER	**---**
1. GB SAG (including neck, body, and fundus) LLD	

2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. **GB TRANS NECK LLD**	
4. **GB TRANS BODY LLD**	
5. GB TRANS FUNDUS LLD	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. GB wall thickness TRANS	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. CBD with measurement	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. Supine SAG and TRANS (including neck, body, and fundus)	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	

Students must obtain a passing score of 75% to pass (64 points minimum) **Score: _____/72**

Instructor Comments: _____

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation
COMPLETE ABDOMEN
To be completed in lab

Student Name: _____ **Date: _____**

Machine #_____ **Patient ID #_____**

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	
• Properly sets up machine/room for exam/ provides a clean environment for a patient (PRE / POST)	
• Introduces self to a patient and verifies patient name, addressing as Mr., Mrs., etc.	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Makes the patient fell comfortable / Pillow & Climate	
• Respects the patient's right to privacy	
• Responds to patient needs/requests appropriately and respectfully / Professional Conduct	
• Selects the correct transducer(s) / Presets	
• Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
• Uses appropriate body mechanics when scanning and moving patient	
• Identifies & differentiates normal & abnormal anatomy	
• Appropriately labeled all images with correct planes	
• Follows protocol	
• Utilizes universal precautions pre & post examination	
PANCREAS	
1. Pancreas TRANS with splenic vein	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. And #3 Pancreas head, body, and tail TRANS (take multiple pictures if needed)	

4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. Pancreas head, SAG	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. Pancreas neck SAC	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. Pancreas body SAG	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. Pancreas tail SAG	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
LIVER	
1. **Left Lobe – Lateral SAG**	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. Left Lobe Medial SAG	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. **Left Lobe with Aorta SAG**	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. **Left Lobe – Caudate SAG**	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. **Left Lobe with IVC SAG**	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. **Right lobe, Gallbladder, Main Lobar fissure, Portal vein**	

12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
13. **Right Lobe with Right Kidney SAG**	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. **Right Lobe with measurement SAG**	
16. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
17. **Right Lobe – Lateral SAG**	
18. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
19. **Left lobe and its lateral margin TRANS**	
20. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
21. **Left LOBE to include the ligamentum teres**	
22. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
23. **Porta Hepatis with MPV, HA, and CBD**	
24. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
25. **Right Lobe with Hepatic Veins TRANS**	
26. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
27. **Right lobe to include the right and left branches of the portal vein**	
28. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
29. **Right Lobe with right Kidney and Gallbladder TRANS**	
30. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
31. **Right lobe with diaphragm**	
32. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	

GALLBLADDER	
1. **GB SAG - including neck, body, and fundus LLD**	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. **GB TRANS NECK LLD**	
4. GB TRANS BODY LLD	
5. GB TRANS FUNDUS LLD	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. **GB wall thickness TRANS**	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. **CBD with measurement**	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. **Supine GB SAG (including neck, body, and fundus)**	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
RIGHT KIDNEY	
1. **Kidney midline/ long axis/ SAG**	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. **Kidney midline SAG with measurements**	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. **Kidney medial SAG**	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. **Kidney lateral SAG**	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	

9. **Kidney midline SAG with Color**	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. **Kidney midline at hilumTRANS with and without a measurement (optional with color)**	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
13. **Kidney superior pole TRANS**	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. **Kidney inferior pole TRANS**	
16. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
SPLEEN	
1. Spleen SAG with measurements (two measurements)	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. Spleen TRANS with measurement (third measurement)	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. Spleen SAG with color flow	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. Spleen with Left Kidney	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
LEFT KIDNEY	
1. **Kidney midline/ long axis/ SAG**	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. **Kidney midline SAG with measurements**	

4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. **Kidney medial SAG**	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. **Kidney lateral SAG**	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. Kidney midline SAG with Color	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. **Kidney midline at hilum TRANS with and without a measurement (optional with color)**	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
13. **Kidney superior pole TRANS**	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. **Kidney inferior pole TRANS**	
16. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	

Students must obtain a passing score of 75% to pass (70 points minimum) **Score: _____/96**

Instructor comments: _____

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation

THYROID

To be completed in the Lab

Student Name: _____ **Date:** _____

Machine # _____ **Patient ID#** _____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	**---**
• Properly sets up machine (inputs patient information) /room for exam/ provides a clean environment for patient	
• Properly labels all required images	
• Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc.	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Makes the patient feel comfortable / Pillow & Climate	
• Respects the patient's right to privacy	
• Responds to the patient's needs/requests appropriately and respectfully / Professional Conduct	
• Selects the correct transducer(s) / Presets	
• Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
• Uses appropriate body mechanics when scanning and moving patient	
• Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
• Utilizes universal precautions pre & post examination	
• Completes all necessary paperwork and properly dismisses patient	
• Properly cleans transducer and readies room for next patient	
THYROID VIEWS	**---**
1. **Rt. Thyroid SAG** without measurements	

2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. **Rt. Thyroid SAG** with measurements	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. **Rt. Thyroid SAG** with color Doppler	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. **Rt. Thyroid Mid TRV** without measurements	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. **Rt. Thyroid Mid TRV** with measurements	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. **Lt. Thyroid SAG** without measurements	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
13. **Lt. Thyroid SAG** with measurements	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. Lt. Thyroid SAG with color Doppler	
16. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
17. **Lt. Thyroid Mid TRV** without measurements	
18. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	

19. **Lt. Thyroid Mid TRV** with measurements	
20. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
21. Isthmus	
22. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
SCORE	

(Student must obtain a passing score of 75% to pass) **Average Score: _____/22**

Instructor comments: _____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation

SCROTAL

To be completed in lab

Student Name: _____ **Date:** _____

Machine # _____ **Patient ID#** _____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	**---**
• Properly sets up machine (inputs patient information) /room for exam/ provides a clean environment for patient	
• Properly labels all required images	
• Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc.	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Makes the patient feel comfortable / Pillow & Climate	
• Respects the patient's right to privacy	
• Responds to the patient's needs/requests appropriately and respectfully / Professional Conduct	
• Selects the correct transducer(s) / Presets	
• Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
• Uses appropriate body mechanics when scanning and moving patient	
• Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
• Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
• Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
• Utilizes universal precautions pre & post examination	
• Completes all necessary paperwork and properly dismisses patient	
• Properly cleans transducer and readies room for next patient	
TESTICLE VIEWS	**---**

1. **Rt Testicle Sag** without measurement	
2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. **Rt Testicle Sag** with measurement	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. **Rt Testicle TRV** without measurement	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. **Rt Testicle TRV** with measurement	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. **Right and Left Testicles TRV** in single convex view	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. **Rt Epidydmus Head** dual image with measurements	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
SCORE	

(Student must obtain a passing score of 75% to pass) Average Score: _____/12

Instructor Comments: _____

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation

Gastrointestinal Tract/Appendix

To be completed in lab

Student Name: _____ **Date: _____**

Machine # _____ **Patient ID#_____**

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	
• Properly sets up machine/room for exam/ provides a clean environment for patient (PRE / POST)	
• Obtains medical history on patient	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Makes the patient feel comfortable / Pillow & Climate	
• Respects the patient's right to privacy	
• Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
• Selects the correct transducer(s) / Presets	
• Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
• Uses appropriate body mechanics when scanning and moving patient	
• Identifies & Differentiates normal & abnormal anatomy	
• Appropriately labeled all images with correct planes	
• Follows protocol	
• Utilizes universal precautions pre & post examination	
Gastrointestinal Tract Protocol	
1. RLQ - McBurney's Point **Appendix Area**	

2. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
3. RLQ - McBurney's Point **Show the landmarks – CECUM, PSOAS MUSCLE, ILIAC VESSELS** (take more than one picture if needed)	
4. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
5. Stomach/antrum anterior to the Pancreas	
6. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
7. Gastroesophageal Junction with Aorta	
8. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
9. Small bowel wall thickness (showing distinct layers)	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
SCORE	

(Student must obtain a passing score of 75% to pass) Average Score: _____/10

InstructorComments_____

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation

PELVIC & TRANSVAGINAL (OB/GYN))

To be completed in lab

Student Name: _____ Date: _____

Machine # _____ Patient ID#_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	**---**
Properly sets up machine (inputs patient information) /room for exam/ provides a clean environment for patient	
Properly labels all required images	
Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc.	
Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
Makes the patient feel comfortable / Pillow & Climate	
Respects the patient's right to privacy	
Responds to the patient's needs/requests appropriately and respectfully / Professional Conduct	
Selects the correct transducer(s) / Presets	
Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
Uses appropriate body mechanics when scanning and moving patient	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Utilizes universal precautions pre & post examination	
Completes all necessary paperwork and properly dismisses patient	
Properly cleans transducer and readies room for next patient	
TRANSVAGINAL VIEWS	**---**
Documents one longitudinal image of uterus	
Documents one transverse image of uterus	
Documents one longitudinal image of endometrium with measurement	
Documents one image of either ovary	

Average Score: _____/20

(Student must obtain a passing score of 75% to pass)

Instructor Comments: _____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation

PELVIC

To be completed in lab

Student Name: _____ **Date: _____**

Machine #_____ **Patient ID#_____**

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	**---**
Properly sets up machine (inputs patient information) /room for exam/ provides a clean environment for patient	
Properly labels all required images	
Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc.	
Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
Makes the patient feel comfortable / Pillow & Climate	
Respects the patient's right to privacy	
Responds to the patient's needs/requests appropriately and respectfully / Professional Conduct	
Selects the correct transducer(s) / Presets	
Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
Uses appropriate body mechanics when scanning and moving patient	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Utilizes universal precautions pre & post examination	
Completes all necessary paperwork and properly dismisses patient	
Properly cleans transducer and readies room for next patient	
UTERUS	**---**
Uterus SAG midline	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus SAG midline with measurement	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Endometrium SAG with measurement	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus SAG lateral right	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus SAG lateral left	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
TRANS Vagina	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	

TRANS Cervix	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus TRANS inferior	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus TRANS mid with measurement	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus TRANS superior	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
RIGHT OVARY	---
Ovary SAG	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary SAG with measurements	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary TRANS	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary TRANS with measurement	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary with Color	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
LEFT OVARY	---
Ovary SAG	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary SAG with measurements	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary TRANS	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary TRANS with measurement	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary with Color	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
SAG RT ADNEXA	
SAG LEFT ADNEXA	

Average Score: _____/57

(Student must obtain a passing score of 75% to pass)

Instructor Comments: _____

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation

2nd or 3rd TRIMESTER OB (phantom)

To be completed in lab

Student Name: _____ **Date:** _____

Machine # _ _____ **Patient ID#**_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	**---**
Properly sets up machine (inputs patient information) /room for exam/ provides a clean environment for patient	
Properly labels all required images	
Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc.	
Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
Makes the patient feel comfortable / Pillow & Climate	
Respects the patient's right to privacy	
Responds to the patient's needs/requests appropriately and respectfully / Professional Conduct	
Selects the correct transducer(s) / Presets	
Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
Uses appropriate body mechanics when scanning and moving patient	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Utilizes universal precautions pre & post examination	
Completes all necessary paperwork and properly dismisses patient	
Properly cleans transducer and readies room for next patient	
UTERUS	**---**
Documents fetal presentation/position	
Documents longitudinal image of cervix	
Documents amniotic fluid index	
Documents M-mode tracing (or Doppler) of fetal heart beat	
Documents placental location	
Able to obtain proper measurement of BPD,HC, AC and Femur length	

Average Score: _____/22

(Student must obtain a passing score of 75% to pass)

Instructor Comments: _____

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation
Adult Echocardiograph I

To be completed in Lab

Student Name: _____ **Date: _____**

Machine # _____ **Patient ID#_____**

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	-------
1. Introduces themselves to the patient	
2. Properly sets up machine/room for exam/ provides a clean environment for patient	
3. Obtains and evaluates patient information	
4. Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc	
5. Responds to patient needs/requests appropriately and respectfully / Professional Conduct	
6. Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
7. Makes the patient feel comfortable / Pillow & Climate	
8. Respects the patient's right to privacy	
9. Properly connects patient to EKG leads	
10. Labels the images correctly, including patient information & exam annotation	
11. Adjusts the proper physics instrumentation relating to each case including Depth, 2D Gain, TGC, Focusing, Color gain, Magnification, Field of View, Power, & Measurements	
12. Identifies & Differentiates normal & abnormal anatomy	
13. Follows protocol	
14. Uses appropriate body mechanics when scanning and moving patient	
15. Utilizes universal precautions pre & post examination, properly cleans transducer and readies room for next patient	
Paraternal long Views	------
1. Obtains PLAX of LV cineloop	
2. Zoom on AV & MV cineloop	
3. Properly places color on the MV & AV (adjusts color gain/scale) cineloop	
4. Obtains AV M-mode and correctly measures (Ao Root, ACS, LA) - (Use the AO/LA package)	
5. Obtains MV M-mode and correctly measures (D-E, E-F, EPSS)	
6. Obtains LV M-mode and correctly measures Diastole & Systole with EF% - (Use the RV/LV Package, LV study)	
7. Measure RV/ LV 2D measurement Diastole & Systole with EF% - calculate EF in systole and Diastole	
8. Obtains 2D measurements of the LVOT diameter - (Measure when the valve is open)	

Student Name:	------
9. Obtains 2D measurements of the aortic root - Caliper the Sinus of Valsalva, Sinotubular junction & Ascending aorta. valve is closed	
10. Obtains Parasternal Long-Axis of the RVIT (Cine Loop)	
11. Properly places color over the TV (adjusts color box, color gain/scale) cineloop	
12. Obtains TV Doppler (CW) ONLY measure TR if seen and obtain RVSP cineloop	
13. Obtains RVOT view (Cine Loop)	
14. Properly places color over the PV (adjusts color box, color gain/scale) (Cine Loop)	
15. Obtains (CW) of Pulmonic Valve (cineloop) and measure PR PHT slope if seen	
Parasternal Short Axis Views	-------
16. Obtains Parasternal Short-Axis of the Aortic Valve cineloop	
17. Properly Magnifies (Zoom) the AV (Color AOV in Cine Loop)	
18. In the SAX AO view color the PV (adjusts color box, color gain/scale) cineloop	
19. Measure RVOT diameter (Use dimensions' package, then RVOT diameter)	
20. PW the RVOT. - (Use the pulmonic valve package, pick RVOT trace) cineloop	
21. CW Pulmonic Valve - Trace PV velocity - (Use the pulmonic valve package, pick PV trace)	
22. In the SAX AO view / Places Color over TV cineloop	
23. Obtain CW Tricuspid Valve (cineloop) ONLY measure TR if seen and obtain RVSP	
24. Obtains Parasternal Short-Axis of the MV (Cine Loop)	
24. Obtains Parasternal Short-Axis of the LV (Papillary level) (Cine Loop)	
Apical Views	-------
25. Obtains Apical Four-Chamber (Cine Loop)	
26. Properly places color on the MV cineloop	
27. Obtains PW at MV leaflet tips. Cineloop - Measure E/A velocity & Deceleration slope	
28. Obtains CW through MV Cineloop Measures PHT, Mean PG	
29. Obtains CW through MV for Assessment of MR cineloop (show MR spectral waveform) Student Name:	_____
30. In the Apical Four-Chamber / Properly places color on the TV cineloop (adjusts color gain/scale)	

Student name:	
31. Obtains PW at TV leaflet tips cineloop - Measure E/A velocity & Deceleration slope	
32. Obtains CW through TV cineloop. Measures PHT, Mean PG	
33. Perform RVSP if seen (Use tricuspid valve package, then TR max + RAP)	
34. Obtains Apical Five Chamber (Cine Loop)	
35. Properly places color on the AV cineloop (adjusts color gain/scale)	
36. Obtains PW above Aortic valve for LVOT velocity cineloop - Measures LVOT velocity	
37. Obtains CW through the Aortic valve cineloop for AV velocity. Measures AV velocity.	
38. Obtains Apical Two-Chamber (Color MV in Cine Loop)	
39. Obtains Apical Three-Chamber (Cine Loop)	
40. Properly places color on AV & MV (adjusts color gain/scale)	
41. Obtains Subcostal Four-Chamber	
42. Properly places color on the Interatrial Septum and Interventricular Septum	
43. Obtains IVC (Cine Loop)	
44. Properly places color on IVC & Hepatic veins (adjusts color gain/scale)	
45. Performs sniff test on IVC	
46. Obtains Abdominal Aorta view	
47. Properly places color on Abdominal Aorta (adjusts color gain/scale)	
48. Obtain Aorta from Suprasternal notch cineloop	
49. Shows 2D image of Aortic Branches cineloop	
50 . Places Color over Ascending & Descending Aorta (Cine Loop)	

(Student must obtain a passing score of 75% to pass) **Score: _____/65**

Instructor comments: _____

_____

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Instructor Signature: _____ Date: _____

Lab Competency Evaluation
Adult Echocardiograph II
To be completed in Lab

Student Name: _____ **Date:** _____

Machine # _____ **Patient ID#**_____

Performance Objectives	
1. Properly sets up machine/room for exam/ provides a clean environment for patient	
2. Obtains and evaluates patient information	
3. Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc	
4. Responds to patient needs/requests appropriately and respectfully / Professional Conduct	
5. Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
6. Makes the patient feel comfortable / Pillow & Climate	
7. Respects the patient's right to privacy	
8. Properly connects patient to EKG leads	
9. Labels the images correctly, including patient information & exam annotation	
10. Adjusts the proper physics instrumentation relating to each case including Depth, 2D Gain, TGC, Focusing, Color gain, Magnification, Field of View, Power, & Measurements	
11. Identifies & Differentiates normal & abnormal anatomy	
12. Follows protocol	
13. Uses appropriate body mechanics when scanning and moving patient	
14. Utilizes universal precautions pre & post examination, properly cleans transducer and readies room for next patient	
15. Selects the correct transducer(s) / Presets	
ECHO PROTOCOL	
Parasternal Long Axis	----------
1. Obtains PLAX of LV cineloop	
2. Zoom on AV & MV cineloop	
3. Properly places color on the MV & AV (adjusts color gain/scale) cineloop	
4. Obtains AV M-mode and correctly measures (Ao Root, ACS, LA)	
5. Obtains MV M-mode and correctly measures (D-E, E-F, EPSS)	
6. Obtains LV M-mode and correctly measures Diastole & Systole with EF%	
7. In a PSL Measure RV/ LV 2D measurement Diastole & Systole with EF%	
8. Obtains 2D measurements of the LVOT diameter	
9. Obtains 2D measurements of the aortic root	
10. Obtains Parasternal Long-Axis of the RVIT (Cine Loop)	

Student Name:	---------
11. Obtain CW of tricuspid valve (cineloop) and measure TR if seen and obtain RVSP	
12. Obtains RVOT view (Cine Loop)	
13. Properly places color over the PV (adjusts color box, color gain/scale) (Cine Loop)	
14. Obtains CW of pulmonic valve cineloop and measure PR PHT slope if seen	
Parasternal Short Axis	---------
15. Obtains Parasternal Short-Axis of the Aortic Valve cineloop	
16. Properly Magnifies (Zoom) the AV (Color AOV in Cine Loop)	
17. In the SAX AO view / Properly places color over the PV cineloop	
18. Measure RVOT diameter in the PSX view	
19. PW RVOT and Trace RVOT velocity cineloop	
20. CW through PV. Cineloop - Trace PV velocity / PVA noted	
21. In the SAX AO view cineloop / Places Color over TV	
22. Obtain CW of TV Doppler cineloop and measure TR if seen and obtain RVSP	
23. Obtains Parasternal Short-Axis of the MV (Cine Loop)	
24. Obtains Parasternal Short-Axis of the LV (Papillary level) (Cine Loop)	
Apical Views	---------
25. Obtains Apical Four-Chamber (Cine Loop)	
26. Properly places color on the MV cineloop (adjusts color gain/scale)	
27. Obtains PW at MV leaflet tips. Cineloop Measure E/A velocity & Deceleration slope	
28. Obtains CW through MV cineloop. Measure PHT, Mean PG with MVA noted	
29. Obtains CW through MV cineloop for Assessment of MR (show MR spectral waveform)	
31. Obtains pulmonary vein flow in the Apical 4 view. Place PW sample volume in pulmonary vein. Cineloop Doppler Waveform and measure.	
32. Obtains Tissue Doppler of septal and lateral wall in the Apical 4 chamber view. Use mitral valve package measure (e')	
33. In the Apical Four-Chamber / Properly places color on the TV cineloop (adjusts gain/scale)	
34. Obtains PW at TV leaflet tips. cineloop Measure E/A velocity & Decel slope forward flow	
35. Obtains CW through TV. Cineloop Measure PHT, Mean PG with TVA noted	
36. Assessment of RVSP if seen (Use tricuspid valve package, then TR max + RAP)	

Student Name:	----------
37. Obtains TAPSE M mode measurement. Use caliper to measure systolic excursion	
38. Obtains Apical Five Chamber (Cine Loop)	
39. Properly places color on the AV cineloop (adjusts color gain/scale)	
40. Obtains PW above Aortic valve for LVOT velocity. cineloop Measures LVOT velocity	
41. Obtains CW through the Aortic valve for AV velocity. Measures AV velocity. Measures Aortic regurgitation (if seen) using CW. Use the Aortic package / AR PHT slope	
42. Obtains Apical Two-Chamber in 2D (cineloop) and in Color (Cine Loop)	
43. Obtains Apical Three-Chamber (Cine Loop)	
44. Properly places color on AV & MV (cineloop) (adjusts color gain/scale)	
Subcoastal	----------
45. Obtains Subcostal Four-Chamber (cineloop)	
46. Properly places color on the Interatrial Septum and Interventricular Septum cineloop	
47. Obtains IVC (Cine Loop)	
48. Properly places color on IVC & Hepatic veins cineloop (adjusts color gain/scale)	
49. Performs sniff test on IVC in M-Mode and record	
50. Obtains Abdominal Aorta view cineloop	
51. Properly places color on Descending Aorta cineloop (adjusts color gain/scale)	
52. Obtain Aorta from Suprasternal notch (Cine Loop)	
53. Places Color over Ascending & Descending Aorta (Cine Loop)	

(Student must obtain a passing score of 75% to pass) **Score: _____/68**

Instructor comments: _____

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Instructor Signature: _____ Date: _____

Lab Competency Evaluation

General Vascular

To be completed in lab

Student Name: _____ **Date:** _____

Machine # _____ **Patient ID#**_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	---
• Respects the patient's right to privacy	
• Makes the patient feel comfortable	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Uses appropriate body mechanics when scanning and moving patient	
• Properly sets up machine (inputs patient information) /room for exam/ provides a clean environment for patient	
• Selects the correct transducer preset	
• Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
• Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
• Properly labels all required images	
• Utilizes universal precautions pre & post examination (gloves, hand washing)	
• Properly cleans transducer and readies room for the next patient	
PERFORM THE EXAMINATION OF THE FOLLOWING VESSELS	**Points Earned**
1. **CCA distal** segment with BULB in the view color sample	
2. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
3. **CCA distal** segment with BULB in the view spectral flow with angle correction, a sample is taken 2-3 cm proximal to the bulb	
4. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
5. **ICA proximal to mid-segment** color sample	
6. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering,	

spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
7. **ICA mid-segment** spectral flow with angle correction	
8. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
9. **Subclavian artery** proximal color sample	
10. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
11. **Subclavian artery** proximal spectral flow with angle correction	
12. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
13. **Brachial artery mid-segment** color sample	
14. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
15. **Brachial artery mid-segment** spectral flow with angle correction	
16. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
17. **Jugular vein dual image** without and with compression	
18. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
19. **Jugular vein** spectral Doppler sample	
20. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
21. **Subclavian vein** color sample	
22. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
23. **Subclavian vein** spectral Doppler	
24. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
25. **Brachial veins mid-segment dual image** without and with compression	

26. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
27. **Brachial vein** spectral flow with augmentation	
28. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
29. **Femoral artery and Profunda femoral artery bifurcation** color doppler sample	
30. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
31. **Femoral artery proximal** spectral sample with angle correction	
32. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
33. **Femoral vein and Profunda femoral vein junction** color sample	
34. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
35. **Femoral vein** spectral flow with augmentation	
36. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
37. **Popliteal vein proximal** segment dual image without and with compression	
38. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
39. **Popliteal vein proximal** segment spectral flow with augmentation	
40. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
SCORE	

(Student must obtain a passing score of 75% to pass) Total Earned Score: _____/40

Instructor Comments: _____

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation

CAROTID DOPPLER EXAMINATION

To be completed in lab

Student Name: _____ **Date:** _____

Machine # _____ Patient ID#_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	**---**
• Respects the patient's right to **privacy**	
• Makes the **patient feel comfortable**	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Uses appropriate body mechanics when scanning and moving patient	
• Properly sets up machine (inputs patient information) /room for exam/ provides a clean environment for patient	
• Selects the correct transducer **preset**	
• Adjusts the proper physics instrumentation relating to **each image** including **depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers**	
• Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
• **Properly labels all required images**	
• Utilizes universal precautions pre & post examination (**gloves**, hand washing)	
• Properly cleans transducer and readies room for the next patient	
CAROTID UNILATERAL PROTOCOL	**Points earned**
1. **CCA distal** segment with BULB in the view B-mode	
2. **CCA distal** segment with BULB in the view color sample	

3. **CCA distal** segment with BULB in the view spectral flow with angle correction, a sample is taken 2-3 cm proximal to the bulb	
4. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers (for each image taken; 3 points)	
5. **ICA proximal** to mid-segment in B-mode	
6. **ICA proximal** to mid-segment color sample	
7. **ICA mid-segment** spectral flow with angle correction	
8. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers (for each image taken; 3 points)	
9. **ECA proximal** segment in B-mode	
10. **ECA proximal** segment color sample	
11. **ECA proximal** segment spectral flow with angle correction	
12. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers (for each image taken; 3 points)	
13. **VA** color sample	
14. **VA** spectral flow	
15. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers (for each image taken; 2 points)	
SCORE	

(Student must obtain a passing score of 75% to pass) Total Earned Score: _____/15

Instructor Comments: _____

_____

Instructor Signature: _____ Date: _____

Lab Competency Evaluation

Abdominal Vascular Doppler Assessment

To be completed in lab

Student Name: _____ **Date:** _____

Machine # _____ Patient ID#_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	**---**
• Respects the patient's right to **privacy**	
• Makes the **patient feel comfortable**	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Uses appropriate body mechanics when scanning and moving patient	
• Properly sets up machine (inputs patient information) /room for exam/ provides a clean environment for patient	
• Selects the correct transducer **preset**	
• Adjusts the proper physics instrumentation relating to **each image** including **depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers**	
• Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
• **Properly labels all required images**	
• Utilizes universal precautions pre & post examination (**gloves**, hand washing)	
• Properly **cleans transducer** and readies room for the next patient	
ABDOMINAL VESSELS DOPPLER EXAM	**Points earned**
1. **Celiac Axis and SMA** long view in B-mode	
2. **Celiac Axis and SMA** long view with a color	
3. **Celiac Axis** spectral Doppler sample with angle correction	

4. **SMA proximal** segment spectral Doppler sample with angle correction	
5. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers **(for each image taken;** 4 points)	
6. **Main Portal Vein at Porta Hepatis** in B-mode	
7. **MPV and Hepatic artery** with color (take more than one picture if needed)	
8. **MPV** spectral Doppler sample with angle correction	
9. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers **(for each image taken;** 3 points**)**	
10. **HA** spectral Doppler sample with angle correction 11. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers	
12. **Hepatic veins** transversely (right, mid, and left) within the liver in B-mode	
13. **Hepatic veins** with color	
14. **Hepatic vein (either right, left or mid)** spectral Doppler with angle correction	
15. Adjusts the proper physics instrumentation relating to each image including depth, gain, TGC, color Doppler gain, scale and sample window steering, spectral Doppler gain, scale and angle correction, measurements with properly placed calipers **(for each image taken;** 3 points**)**	
SCORE	

(Student must obtain a passing score of 75% to pass) **Total Earned Score:**: _____/15

Instructor Comments: _____

_____

Instructor Signature: _____ Date: _____

Code of Ethics for the Profession of Diagnostic Medical Sonography

Approved by SDMS Board of Directors, December 6, 2006

PREAMBLE

The goal of this Code of Ethics is to promote excellence in patient care by fostering responsibility and accountability among Diagnostic Medical Sonographers. In so doing, the integrity of the profession will be maintained.

OBJECTIVES

1. To create and encourage an environment where professional and ethical issues are discussed and addressed.
2. To help the individual diagnostic medical sonographer identify ethical issues.
3. To provide guidelines for individual diagnostic medical sonographers regarding ethical behavior.

PRINCIPLES

Principle I: In order to promote patient well-being, the diagnostic medical sonographer shall:

A. Provide information to the patient about the purpose of the sonography procedure and respond to the patient's questions and concerns.
B. Respect the patient's autonomy 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 by thoroughly explaining the examination, patient positioning and implementing proper draping techniques.
E. Maintain confidentiality of acquired patient information, and follow national patient privacy regulations as required by the "Health Insurance Portability and Accountability Act of 1996 (HIPAA)."
F. Promote patient safety during the provision of sonography procedures and while the patient is in the care of the diagnostic medical sonographer.

Principle II: To promote the highest level of competent practice, diagnostic medical sonographers shall:

A. Obtain appropriate diagnostic medical sonography education and clinical skills to ensure competence.
B. Achieve and maintain specialty specific sonography credentials. Sonography credentials must be awarded by a national sonography credentialing body that is accredited by a national organization which accredits credentialing bodies, i.e., the National Commission for Certifying Agencies (NCCA); http://www.noca.org/ncca/ncca.htm or the International Organization for Standardization (ISO); http://www.iso.org/iso/en/ISOOnline.frontpage.
C. Uphold professional standards by adhering to defined technical protocols and diagnostic criteria established by peer review.
D. Acknowledge personal and legal limits, practice within the defined scope of practice, and assume responsibility for his/her actions.
E. Maintain continued competence through lifelong learning, which includes continuing education, acquisition of specialty specific credentials and re-credentialing.
F. Perform medically indicated ultrasound studies, ordered by a licensed physician or their designated health care provider.
G. Protect patients and/or study subjects by adhering to oversight and approval of investigational procedures, including documented informed consent.
H. H. Refrain from the use of any substances that may alter judgment or skill and thereby compromise patient care.
I. I. Be accountable and participate in regular assessment and review of equipment, procedures, protocols, and results. This can be accomplished through facility accreditation.

Code of Ethics (Continued)

Principle III: To promote professional integrity and public trust, the diagnostic medical sonographer shall:

A. Be truthful and promote appropriate communications with patients and colleagues.
B. Respect the rights of patients, colleagues and yourself.
C. Avoid conflicts of interest and situations that exploit others or misrepresent information.
D. Accurately represent his/her experience, education and credentialing.
E. Promote equitable access to care.
F. Collaborate with professional colleagues to create an environment that promotes communication and respect.
G. Communicate and collaborate with others to promote ethical practice.
H. Engage in ethical billing practices.
I. Engage only in legal arrangements in the medical industry.
J. Report deviations from the Code of Ethics to institutional leadership for internal sanctions, local intervention and/or criminal prosecution. The Code of Ethics can serve as a valuable tool to develop local policies and procedures.

Request for Tutoring

Student Name (Please print): _____

Course Number and Name: _____

I request tutoring in the above course so that I may improve my grades. I understand that any tutoring given will be offered during a regular school day, before or after regular class hours. I further understand that the amount of hours of tutoring will be based on the discretion of the Program Dean and availability of the person offering the tutoring.

Tutoring is offered to students at no additional charge.

_____

Student Signature **Date**

_____

Tutoring Instructor Signature **Date**

460 Altamonte Drive, 3rd Floor
Altamonte Springs, FL 32701
(P) 407-265-8383 (F) 407-265-8384

5673 Peachtree Dunwoody Rd, Suite 450
Atlanta, GA 30342
(P) 404/255/4500 (F) 404-255-4503

5150 Linton Blvd, Suite 340
Delray Beach, FL 33484
(P) 561-381-4990 (F) 561-381-4992

RELEASE OF LIABILITY

In exchange for participation in the activity of laboratory ultrasound scanning for persons not enrolled in Cambridge College of Healthcare & Technology, I agree for myself

_____ (print student name) and

_____ (print participant name and relation) to the following:

1. The student is allowed to bring only ONE person at a time from outside the institution for scanning practice.
2. No one under the age of 18 will be allowed into the scanning lab by the student.
3. The student must adhere to the lab schedule and use the scanning lab only with permission and when it is not in use by other instructors.
4. The purpose of scanning the participant is for educational practice ONLY and NO diagnosis will be attempted by any student, instructor or faculty member.
5. NO pictures or videos are to be taken during the scanning practice session.
6. Any violation of this policy will result in corrective action of the offending student with possible suspension or elimination from the Sonography program.
7. The participant will not hold Cambridge College or any of its employees liable in the event of an accidental injury or event while on the premises of the Institution and agrees to pay for all costs incurred as the result of such injuries.

I have read this document and understand it entirely. I further understand that by signing this waiver, I will adhere to the document contents and waive any and all legal rights.

Date of Practice: _____

Date Signed: _____

Student Signature: _____

Participant Signature: _____

Witness Signature: _____

VOLUNTARY PREGNANCY DECLARATION

Declaration of pregnancy is VOLUNTARY. Although not required, a pregnant student is encouraged to inform the Program Dean immediately using this form once the pregnancy has been confirmed. If the student chooses not to inform the program of her pregnancy, the program will not consider her pregnancy and cannot exercise options that could protect the fetus. Declaration of pregnancy may be withdrawn at any time, in writing, by the student.

For a student who voluntarily discloses pregnancy, the Program Dean will discuss with the student the various options available.

I, _____, wish to declare my pregnancy. At this date I am _____ month(s) pregnant. During my clinical externship, I may be exposed to patient with a variety of illnesses, diseases and/or bacteria. In addition, I may be required to move or lift patients which could be physically demanding. All of the above mentioned offer a different degree of danger to the mother and/or fetus. I understand the potential hazards involved by remaining in the Diagnostic Medical Sonography Program. I wish to select the following option:

_____ Continue as a student without any interruption in the program.

_____ Leave of absence. Return to the program will be dependent upon space availability in the clinics and the student is NOT guaranteed any specific clinical site.

_____ Withdrawal from the clinical rotations with continued participation in didactic instruction.

Upon return to the clinical education courses, the student is NOT guaranteed any specific clinical site. Dependent on the type of course, degree of difficulty of the course, academic standing and length of time missed due to pregnancy, the student may be required to re-take an entire course. Upon return the student must complete all clinical rotations and/or competencies missed or not completed prior to and during her maternity leave. In addition, should the faculty deem it necessary, the student will be subject to evaluation of clinical competencies completed prior to her time on LOA. The student will return to full-time status as soon as possible after delivery, but only on the express written permission of her physician.

The student must complete ALL requirements for graduation upon her return.

Student's printed name: _____ Date: _____

Student's signature: _____ Date: _____

Program Dean's printed name: _____ Date: _____

Program Dean's signature: _____ Date: _____

DIAGNOSTIC MEDICAL SONOGRAPHY

STUDENT HANDBOOK & CLINICAL ACKNOWLEDGEMENT

I, the undersigned, have read, fully understand and agree to comply with the policies, regulations, procedures, protocols and rules stated in the Cambridge DMS Student & Clinical Handbook.

I accept the responsibility to abide by the policies, regulations, procedures and protocols stated within this handbook. I understand involvement in any infraction of any of these policies, regulation, procedures and protocols could lead to a disciplinary action.

NAME (print): _____

SIGNATURE: _____

DATE: _____

Programmatic Accreditation

Altamonte Springs, Florida Campus

Atlanta, Georgia Campus

Delray Beach, Florida Campus

Miami Gardens, Florida Campus

The Diagnostic Medical Sonography program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of JRCDMS Committee on Accreditation.

CAAHEP
9355 – 113th ST N
#7709
Seminole FL 33775
Phone# 727-210-2350
caahep.org

JRCDMS
6021 University Blvd
Suite 500
Ellicott City, MD 21043
Phone# 443-973-3251
JRCDMS.org

Safety in Private Spaces Act

Please be advised that on October 18, 2023, the State Board of Education approved new Rule 6E-7.001, Florida Administrative Code (F.A.C.), Designation of Restrooms and Changing Facilities in Private Postsecondary Educational Institutions. It is the responsibility as a licensed college or university (as defined in Section 1005.02(4), Florida Statutes (F.S.)), or an institution not under the jurisdiction or purview of the commission as identified in Section 1005.06(b)-(f), F.S., to review and be acquainted with the new rule and with Section 553.865, F.S., the Safety in Private Spaces Act, which the new rule implements. As of July 1, 2023, all CIE-licensed colleges and universities and institutions not under the jurisdiction or purview of the commission as identified in Section 1005.06(b)-(f), F.S., must ensure that (a) restrooms are designated for exclusive use by males or females, as defined in Section 553.865 (3), F.S., or that there is a unisex restroom; and (b) that changing facilities are designated for exclusive use by males or females, as defined in Section 553.865 (3), F.S., or that there is a unisex changing facility. (1) Purpose. The purpose of this rule is to provide requirements regarding restroom and changing facilities at colleges and universities licensed by the Commission for Independent Education and at institutions not under the jurisdiction or purview of the commission, as identified in s. 1005.06 (1)(b)-(f), Florida Statutes (F.S.) pursuant to s. 553.865, F.S. (2) Compliance. **Colleges and universities licensed by the Commission for Independent Education, and institutions not under the jurisdiction or purview of the commission, as identified in s. 1005.06(1)(b)-(f), F.S., must comply with all applicable requirements of s. 553.865, F.S., and update policies and procedures pertaining to the use of restrooms and changing facilities by males or females based on biological sex at birth.**

Conduct

- Students in violation of the Safety in Private Spaces Act Rule 6E-7.001 may be suspended while the violation is reviewed by College Review Committee. Once reviewed the decision is final, binding and conclusive

If you have any question, more detailed information about the new law and rule can be found on the Florida Legislature's website at leg.state.fl.us and the Commission's website at www.fldoe.org/policy/cie.

CAMBRIDGE
COLLEGE OF HEALTHCARE & TECHNOLOGY

Clinical Rotation

Policies and Procedures Handbook

Student Name:_____

Created on 1/2012 **Revised 8/16; 12/16; 10/17; 3/18; 9/18; 3/19, 9/19, 12/19, 2/20, 3/21, 6/21, 9/21, 11/21, 1/22, 6/22, 7/22, 8/22, 1/23, 5/23, 1/24, 3/24**

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FORMS

CLINICAL COMPETENCY EVALUATION FORMS

CLINICAL ROTATION POLICIES AND PROCEDURES

The Clinical Rotation is an integral part of the DMS Program. The clinical component gives hands-on training and; therefore, should be treated as a full time job. The training you receive is a method of using the knowledge you gained in the classroom and lab and putting it to practical use in a real clinical setting. The benefit accrued through this experience is immeasurable in terms of future success. Students are required to pass all required clinical competencies for graduation.

Upon successful completion of the Diagnostic Medical Sonography program, the student will be able to:

1. Interact appropriately with patients, physicians, and staff.
2. Identify the pertinent clinical questions and the goal of the examination.
3. Recognize significant clinical information and historical facts from the patient and the medical records, which may impact the diagnostic examination.
4. Evaluate 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.
5. Select the correct transducer type and frequency for examination(s) being performed.
6. Properly adjust instrument controls including exam presets, scale size, focal zone(s), overall gain, time gain compensation, and frame rate to optimize image quality.
7. Demonstrate knowledge and understanding of Doppler ultrasound principles, spectral analysis, and color flow imaging relevant to specialty being assessed.
8. Demonstrate knowledge and understanding of physiology, pathology, and pathophysiology relevant to specialty being assessed.
9. Demonstrate the ability to perform sonographic examinations of the appropriate organs and areas of interest according to professional and employing institution protocols.
10. Recognize, identify and document abnormal sonographic patterns of disease processes, pathology and pathophysiology of the organs and areas of interest. Modify the scanning protocol based on the sonographic findings and the differential diagnosis.
11. Perform related measurements from sonographic images or data.
12. Utilize appropriate recording devices to obtain pertinent documentation of examination findings.

Clinical Competencies: Students will perform exam competencies after demonstration of proper patient care, equipment manipulation, scan procedure, and required sonographic anatomy skills in lab. **Clinical Competencies must be completed at a clinical site with a clinical site instructor registered in the specialty of the competency.**

COURSE # AND TITLE	PRIMARY OBJECTIVE(S) Observation/Degree of Participation	FREQUENCY OF EVALUATION
DMS 2010 Clinical Rotation I	Practice producing quality diagnostic ultrasound images with minimal supervision; Competency completion of equipment and patient care; *The student may observe or participate in an exam with direct supervision from a registered sonographer until a competency is completed in the clinical setting. The student may then perform the exam independently and with indirect supervision at the clinical instructor's discretion.*	Clinical evaluation and performance evaluation forms are to be filled out by the clinical instructor. These are to be returned to the class instructor by the student.
DMS 2011 Clinical Rotation II	Continue practice of producing quality diagnostic ultrasound images with minimal supervision; Apply didactic knowledge in the clinical setting under the guidance of the clinical instructor; Complete competencies in equipment and a choice of seven from the list, as well as a choice of one from the pathology competency list. *The student may observe or participate in an exam with direct supervision from a registered sonographer until a competency is completed in the clinical setting. The student may then perform the exam independently and with indirect supervision at the clinical instructor's discretion.*	Clinical evaluation and performance evaluation forms are to be filled out by the clinical instructor. These are to be returned to the class instructor by the student.
DMS 2012 Clinical Rotation III	Perform necessary diagnostic procedures with a minimal amount of discomfort to the patient; Be aware of obligations to patients, physicians and medical facilities, as well as the responsibilities of a sonographer; Complete competencies in equipment and a choice of seven from the list, as well as a choice of one from the pathology competency list. *The student may observe or participate in an exam with direct supervision from a registered sonographer until a competency is completed in the clinical setting. The student may then perform the exam independently and with indirect supervision at the clinical instructor's discretion.*	Clinical evaluation and performance evaluation forms are to be filled out by the clinical instructor. These are to be returned to the class instructor by the student.
CONTINUED ON NEXT PAGE		

DMS 2013 Clinical Rotation IV	Produce medical images of any given anatomical region with optimal diagnostic quality; Perform the tasks of a qualified entry-level sonographer with minimal supervision and possess the incentive to learn more about the field of ultrasound to build higher professional standards, and pursue personal and professional growth; Recognize and work satisfactorily in all areas of ultrasound; and be efficient and accurate in adjusting instrument controls and transducer selections. Complete competencies in equipment and a choice of six from the competency list, and one from the pathology competency list. *The student may observe or participate in an exam with direct supervision from a registered sonographer until a competency is completed in the clinical setting. The student may then perform the exam independently and with indirect supervision at the clinical instructor's discretion.*	Weekly observations by the instructor.

Clinical Rotation Deadline

- In Clinical Rotation I, all students must complete Equipment and Patient Care Competencies.
- In Clinical Rotation II, all students must complete Equipment, patient care, and choice of 7 from the competency list, as well as a choice of 1 from the pathology competency list.
- In Clinical Rotation III, all students must complete Equipment, patient care, and choice of 7 from the competency list, as well as a choice of 1 from the pathology competency list.
- In Clinical Rotation IV, all students must complete Equipment, patient care, and choice of 6 from the competency list, as well as a choice of 1 from the pathology competency list.
- By the completion of Clinical Rotation IV (1,088 hours), students will have scanned a minimum of:

10 Complete Abdomen	2 Renal	2 Testicular	3 Biophysical Profile
2 Non-cardiac Chest	10 Echo	2 Aorta	2 IVC
2 Thyroid	5 OB (2^{nd}/3^{rd} Trimester)	5 Transvaginal	2 Spleen
5 OB (1^{st} Trimester)	10 Right Upper Quadrant	10 Pelvic	

Students must complete ALL of the competencies listed below, as well as all pathology competencies (other than optional) by the end of the rotation IV:

Competency List

Renal
Aorta
RUQ
IVC
Spleen
Abdominal
Echo—1 Parasternal Views only (Refer to page 39)
Echo—2 Parasternal Short axis views only (Refer to page 40)
Echo—3 Apical and Subcostal Views only (Refer to page 41)
Echo—4 Suprasternal Notch views only (Refer to page 42)
Complete Echo (Refer to page 37-38)
Thyroid
Pelvic
Biophysical Profile
1^{st} trimester
2^{nd}/3^{rd} Trimester
Testicular
Transvaginal (Endovaginal)
Non-Cardiac Chest
Patient Care (1, 2, 3, 4)
Equipment (1, 2, 3, 4)
Sterile/Guided Procedures

Pathology Competency List

Abdomen
Echo—(Adult Cardiac Pathologies)
Gyn

Optional Competencies:

Carotid

ATTENDANCE

Students must attend 100% of their clinical hours. If a student misses any clinical time, arrangements must be made for make-up time. Students will be considered incomplete until the Clinical Site Instructor has certified all required hours. Students will not be allowed to graduate if they have not performed at minimum **1,088** clinical hours. **Days or times may not be changed by the student without permission from a Cambridge Clinical Coordinator**. If the student must be absent from the clinical site, the Program Dean or Clinical Coordinator and the Clinical Site Instructor must be informed by the student at least 30 minutes in advance.

In the event a student is unable to complete a full semester of didactic and/or clinical courses, the student will be dropped from all semester courses (including clinical courses in semesters 3, 4, 5 & 6) and receive an F for all dropped clinical courses and appropriate grade for didactic courses according to the grading policy. i.e., The DMS track must be adhered to; students are not able to opt out of any one course (didactic or clinical).

A Clinical Warning will be issued for each absence in a semester without documentation (i.e. doctor's note for the specific dates, jury duty, LOA, FMLA, approved by the Program Dean). Student must provide written documentation within 24 hours of any absence.

1st unexcused absence = Written warning by the Clinical Coordinator
2nd unexcused absence = Written warning by the Clinical Coordinator
3rd unexcused absence = Failure of rotation and loss of hours earned in that rotation

STUDENT HEALTH RECORDS

A physical examination is required of each student before being allowed into the clinical site. Any injuries occurring while in the clinical affiliate should be immediately reported to the Clinical Coordinator or Program Dean (See Incident Report Form).

METHOD OF EVALUATION

Each month, student's performance and progress will be evaluated by the Clinical Site Instructor(s), Clinical Coordinator, and/or the Program Dean. It is the responsibility of the student to submit these forms to maintain their clinical status.

(All Forms are located in this Clinical Handbook)

- **Daily Log Form**
- **Department Orientation Checklist**
- **Weekly Clinical Attendance Form**
- **Clinical Evaluation Form**
- **Protocol Proficiency/Competency Evaluation Forms**

(Forms located in CORE)

- **Clinical Instructor Evaluation**
- **Clinical Site Evaluation**

STUDENTS ARE ADVISED TO KEEP ORIGINALS AND AN EXTRA COPY OF ALL FORMS

GRADING

Clinical evaluation forms and clinical proficiency/competency protocols will be graded as follows:

Attendance	**30%**
Clinical Documents (Daily Log, Orientation Department, Clinical Site Evaluation, Clinical Instructor Evaluation, Clinical Evaluation)	**25%**
Clinical Competencies (Determined based on Semester)	**30%**
Clinical Conference	**15%**

CORE SYSTEM

Cambridge utilizes an online student time recording service called Core, which contain all forms found in the DMS Handbook. The Core system is used by each student to record daily clinical attendance at their respective sites, track competencies and complete clinical site and instructor evaluations. Clinical Supervisors and Instructors use the same system to complete the required monthly and end-of-semester evaluations. It is also used by the DMS faculty to maintain accurate records of each student's accomplishments in the clinical setting.

The instructions for using this system this will be provided during the Clinical Orientation. **Students will not be allowed to start their clinical education unless they have registered for CORE first.**

Any attempts by a student to clock in or out for another student will not be tolerated. Altering time or manipulation of the CORE system is a violation of our Student conduct Policy and will result in automatic removal from the program. This infraction will be handled formally through the Program Dean.

CHANGES TO POLICIES

Cambridge College reserves the right to update and/or change any of the rules, regulations, policies, and contents of this Handbook. The student, didactic faculty, and clinical staff will immediately be informed in writing of any such changes.

NEEDLE STICK POLICY

The following procedures apply to students who have had significant contact from a contaminated needle or who have had contamination to an open wound or mucous membrane by saliva, blood or any other bodily fluids.

Procedure:

A. Cleanse wound thoroughly with soap and water, or appropriate substance for tissue cleaning.

B. Report incident to appropriate person for documentation. Complete the appropriate Incident Report form (available in this Handbook).

C. Obtain patient's (source of exposure) permission for blood sample to be drawn for Hepatitis B Surface Antigen (HBsAg), Hepatitis C Antibody (Anti-HCV), and Antibody to Human Immunodeficiency Virus (Anti-HIV). Sample is to be submitted to lab using appropriate paperwork and usual process for the facility (e.g. at hospital, Anti-HIV lab slip will need to be signed by a physician and the patient). Be certain you understand how this information can be retrieved.

D. The student should have her/his blood drawn as soon as possible for HBsAg, Antibody to Hepatitis B Surface Antigen (Anti-HBs), Hepatitis C Antibody, and Anti-HIV. If the student has had a documented seroconversion following a Hepatitis B vaccination series, the HBsAg and Anti-HBs are not needed. The student may go to the nearest emergency department in the hospital or visit their own private healthcare provider.

E. If the source is Anti-HIV negative, further follow up is at the discretion of the student and the student's physician. If the patient to whom the student was exposed is shown to be Anti-HIV positive, repeat student testing at six weeks, three, six, and 12 months from the initial exposure is recommended. If these are done in the Emergency Department as a result of student-related activity, there will be no charge for the follow-up testing. If the student does not utilize emergency service, any charges will be the responsibility of the student.

F. Any student who seroconverts his or her Anti-HIV or HBsAg will be referred by the Program Dean for appropriate follow-up care. Florida law mandates that results of the Anti-HIV test remain confidential; only the student, his or her physician and the Program Dean will know the test results. The student's physician or the Program Dean may inform others of the student's Anti-HIV test result only after counseling and obtaining written permission from the student.

G. If the patient to whom the student was exposed is shown to be HBsAg negative, no further Hepatitis B testing or therapy is needed. If the patient to whom the student was exposed is HBsAg positive, but the student is also HBsAg positive or the student is Anti-HBs positive (either from prior disease or as a result of Hepatitis B vaccination series), no further Hepatitis B testing or therapy is needed. If the patient to whom the student was exposed is shown to be HBsAg positive and the student is both HBsAg negative and Anti-HBs negative, the student should receive one dose of Hepatitis B Immune Globulin, (.06 ml/kg intramuscularly) as soon as possible within 72 hours after exposure, and begin a Hepatitis B vaccination but has a negative Anti-HBs test result, the student should receive HBIG and one does of Hepatitis B vaccine.

H. In accidental exposure to blood from a patient with Hepatitis C, the student should have an HCV-PCR in two to three weeks from post-exposure. The student should also follow-up for Hepatitis C serology at six weeks, three months, six months and one year.

I. Prophylaxis has been utilized by needle stick recipients in an attempt to decrease their risk of development of HIV infection. Before the student utilizes this form of therapy, several points should be considered. This risk of transmission of HIV per episode of percutaneous exposure to HIV-infected blood is, on the average approximately 0.4%. Anti-HIV seroconversion in a needle stick recipient has been documented despite use of prophylaxis.

Drugs used for HIV prophylaxis have multiple possible side effects. Please contact Student Health Service prior to discontinuing any prophylaxis medications to ensure it is indeed the medication responsible for the symptoms. If the student voluntarily elects to seek independent evaluation for any incident related to a needle stick outside the confines of the facility selected for treatment by the school, these costs will be the responsibility of the student.

STUDENT EXPECTATIONS AT CLINICAL SITES

Ultrasound students of Cambridge College are expected to do a share of the work at the clinical site. The technologists will show you how to perform your responsibilities in your first week.

Daily Responsibilities:

1. Fill gel bottles.
2. Ensure that linen cabinets are always stocked.
3. Check supplies on tech report sheets and restock/make copies when necessary.
4. Retrieve outpatients from the waiting room and bring them to the ultrasound room.
5. Enter patient information into the ultrasound system.
6. Transport patients to/from ER, holding area, etc.
7. Walk outpatients back to waiting room or out of hospital.
8. Always introduce yourself to patients.
9. Familiarize yourself with locations and names of supplies.
10. Observe sterile technique and know the name so that you can be of assistance during procedures.
11. Be on hand during procedures to assist the technologist and physician during procedures and exams.
12. Assist the technologist during portable examinations (moving furniture in patient rooms, pushing machines, holding doors, etc).
13. Maintain supplies in cabinets.
14. Test cidex each morning and make sure that the log is always up to date.
15. Gain confidence in filling out tech report sheets (filling in measurements and descriptions).
16. Familiarize yourself with the computer (you will be shown how) and be able to check patients in and out and look up previous reports.
17. Help in the department when you see that help is needed.
18. Answer the telephone: “Ultrasound, this is _____” when needed.

KEYS TO SUCCEED AT CLINICAL SITE

1. Refrain from taking or copying any educational material from extern site regardless if the sonographer says it is alright.
2. Refrain from discussing yours or anyone else’s personal issues.
3. Refrain from discussing job placement or wages.
4. Do not get involved with office politics i.e., listening to or sharing gossip.
5. Refrain from asking your instructors if you can scan now, and above all, don’t be a know it all.
6. If the patient asks a question let the sonographer answer the patient.
7. Always keep your books with you and look up anything of which you are unsure. If you are unable to answer a question, look it up and then get back to the instructor.
8. No matter how nice and easy going your instructor is they are not your buddies. They will tell us if you are not doing your job and if they want you removed from the site.
9. Always dress professionally and be clean and neat.
10. Ask if there is anything you can do to help within the department. Most importantly be punctual, be professional, and stay motivated at all times! Remember, this is your job even though you are not getting paid!

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Rules and Expectations Agreement

1. **DO NOT** question the technologist, point at the screen, or ask sensitive questions in front of a patient. Any questions you have can be answered after the exam is completed.

2. **DO NOT** relay any diagnosis/results to the patients.

3. Always accept the probe when it is offered to you.

4. Always do what the technologist requests and fulfill Daily Responsibilities.

5. Scanning time is a privilege, **NOT A RIGHT**.

6. Realize that ultrasound is subjective, each technologist will scan differently, and you will develop your own methods over time.

7. One student in the room with technologist at a time.

8. Do not enter a room once an exam has begun.

9. The clinical setting is about patient care. The technologist will determine when it is appropriate for you to scan and the opportunity will be offered to you.

10. If you are not assisting and only observing an exam or a procedure please stay out of the way. During a procedure stay in a corner away from activity and during exams, do not crowd the technologist. **If the tech moves and bumps into you, you are too close!**

11. Remember that the more you help out in the department the more time you are saving for the technologist! By helping you are making time for your education!

By signing below, I acknowledge that I have read and understood what is expected of me in my clinical rotations as a student of Cambridge College. I understand that if I do not follow rules and meet expectations it will be reflected in my monthly evaluations.

_____ _____
Print Name Date

_____
Signature

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Clinical Agreement

1. Student must be available from 7 a.m. – 11 p.m., for clinical rotations and will comply with all standards of professional appearance and behavior.

2. Student is scheduled to complete **1,088** clinical hours.

3. Student must notify Cambridge College in the event that any injury occurs at the clinical site and, when able, complete and submit an incident report to the Clinical Coordinator or Program Dean within 24 hours.

4. Student must contact clinical coordinator(s) via email concerning any clinical issues, concerns or discrepancies that may arise during assigned clinical shifts (day, evening and weekend shifts). Clinical coordinators will reply on a case by case basis for messages received during evening and weekend shifts.

5. Student must submit attendance records by time and day requested. All unexcused absences will result in a zero (0) for that day. All excused and unexcused absences will require makeup hours to achieve 100% attendance. In addition, a Clinical grade of zero (0) will be given for any time submitted on CORE after the required due date and the hours will have to be re-done within the grading period. Failure to submit the attendance by the required deadline will result in the following actions:

   1st offense = Written warning by the Clinical Coordinator
   2nd offense = Student will be removed from clinical site; re-entry will be determined by the Clinical Coordinator; hours will not be counted and may jeopardize the student's clinical grade.

6. Student must notify the Clinical Site Instructor **and** Clinical Coordinator of their absence at least 30 minutes prior to reporting time. Two (2) absences in a semester without documentation of mitigating circumstances (i.e. doctor's note for the specific dates, jury duty, LOA, FMLA, approved by the Program Dean) will constitute a documented Clinical Warning from the Clinical Coordinator/Program Dean. Student must provide written documentation within 24 hours of the absence. If the student has a third unexcused absence within the same semester, the student will fail the clinical rotation.

   1st unexcused absence = Written warning by the Clinical Coordinator
   2nd unexcused absence = Written warning by Clinical Coordinator
   3rd unexcused absence = Failure of rotation and loss of hours earned in that rotation

7. Student must make up missed clinical hours whether absence is excused or unexcused. Being held from clinical rotation due to Bursar or Financial aid reasons are considered unexcused absences and must be made up with in the grading period.

8. Forging of documents or submitting false information, will not be tolerated. Altering of time in CORE in any way is a violation of our Student Conduct policy. Altering or Falsifying time will be

an automatic removal from the program. This infraction will be handled formally through the Program Dean.

9. Student must remain at the clinical site during assigned clinical hours. Under no circumstances is the student to leave early without contacting the Clinical Site Instructor and the Clinical Coordinator at Cambridge College.

1st offense = Written warning by the Clinical Coordinator
2nd offense = Written warning by Clinical Coordinator
3rd offense = Failure of rotation and loss of hours earned in that rotation

10. Student must understand that during the Clinical Rotation there will be no monetary compensation and that there is no contract to hire.

11. Derogatory comments made by a student about Cambridge College at a clinical site will not be tolerated and may be grounds for dismissal from the program. All concerns must be addressed properly to the Clinical Coordinator. If issues are not resolved, follow the Grievance Policy in the Institutional Catalog.

12. Should a situation occur at the clinical site that requires the student to be removed from the clinical site, per the student's or the Clinical Site Instructor's request, the student will be removed. The student is NOT guaranteed immediate reassignment to a new clinical site. If the circumstance for clinical site termination was due to negligence on the student's behalf, depending on the severity, the following actions will be taken:

1st clinical site termination = handled formally through the office of the Program Dean
2nd clinical site termination (if applicable) = Removal from the program

13. Clinical locations will range from 1 to 100 miles North, South, East and West of the Cambridge campus. Students may not modify their clinical assignment without written approval by the Clinical Coordinator and or by the Program Dean. Commuting to any one of the locations will be necessary for the student. During clinical rotation, there will be no compensation for driving expenses. Based upon clinical site availability and in an attempt to provide the student with a well-rounded experience, students will be required to complete their rotations at more than one clinical site. In general, clinical hours will be during the day. However, some rotations may require evening, night, or weekend hours.

14. Each site has rules and regulations for students in their facility. You must abide by these rules. Failure to do so may result in removal from the program. (see Student Conduct Policy)

15. If a student has a contact at a facility they would like to attend, the student must provide the name of the facility, phone number, and contact name (if known) to the Clinical Coordinator. Upon Cambridge obtaining a signed affiliation from that facility, the student will be scheduled to do a clinical rotation at that facility. Under no circumstances is a student to negotiate a clinical affiliation with a facility on their own.

16. Students recognize that:

A. in the performance of a clinical rotation, students are acting as a representative of and for Cambridge,
B. failure to perform his or her duties in connection with a clinical rotation in a professional and responsible manner in all respects may endanger the health and life of other human beings and will cause potentially irreparable damage to the reputation and standing of Cambridge College and

C. a student's failure to perform its duties in connection with a clinical rotation in a professional and responsible manner in all respects may result in Cambridge College being unable to place future students at the clinical site.

D. For all of the foregoing reasons, Cambridge reserves the sole and absolute right to withhold a clinical site from any student in the event that Cambridge believes that withholding of said clinical site is in the best interests of Cambridge. Students shall have no recourse of any nature whatsoever against Cambridge College in the event that it decides not to grant a student a clinical rotation other than a student's right to appeal the decision to the Student & Academic Affairs Committee whose decision shall be final, binding and conclusive in all respects. Cambridge College has sole and absolute judgment.

17. Clinical affiliates, at their sole discretion, may dismiss students due to tobacco odor.

18. Student agrees to allow clinical site to share information with Cambridge College, including competencies, evaluations, attendance, etc.

19. Student may be selected for random drug testing upon request of clinical externship and/or Cambridge College officials at the student's expense. Student will be held from clinical externship until results are returned. Their future will be determined by the Program Dean.

20. Any class or clinical hours missed due to holidays that do not fall on scheduled breaks, must be made up within the semester. Hours lost due to any unforeseen school closure must also be made up within the semester.

Student Name: _____

Student Signature: _____

Date Signed: _____

Updated 12/2019aba

Cambridge College of Healthcare & Technology

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Department Orientation Checklist

THIS FORM MUST BE RETURNED TO THE CAMBRIDGE CLINICAL COORDINATOR WITHIN THE FIRST WEEK OF ROTATION. This checklist is to familiarize you with the functions of an Ultrasound Department. As you are introduced to each area, you and the Clinical Instructor will initial the line indicating completion.

Clinical Site Orientation	**Students Initial**	**Clinical Instructor**
Tour of the Department		
Clinical hours of operation		
Phone number of contact person in case of absence or tardiness		
Restricted areas of department & hospital		
Lunch period		
Locker or secure place for your belongings and records		
Fire Exits		
Fire Alarms/Extinguishers and Procedures		
Oxygen Tanks		
Emergency Call Buttons		
Crash Cart		
Review of Hospital plans for codes		
Patient Bill of Rights		
HIPAA		
Supply storage and Cleaning instructions		
Standard Precautions/Infection Control		
Department Policy and Procedure Manual Review and know location for each manual		
Fire, Electrical and Chemical Hazards		
Department Dress Code		
Incident Reporting		

Cambridge College Policies		
Incident Report		
Dress Code Policy		
Communication Devices Policy		
Evaluation forms (monthly, competencies, weekly, end of term)		

Student Name_____ Signature:_____

Date:_____ Clinical Instructor Signature_____

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Confidentiality Statement

The undersigned hereby acknowledges his/her responsibility under applicable federal law and the agreement between Cambridge College of Healthcare & Technology ("School") and _____ ("Facility"), to keep confidential any information regarding Facility patients, as well as all confidential information of Facility. The undersigned agrees, under penalty of law, not to reveal to any person or persons except authorized clinical staff and associated personnel any specific information regarding any patient and further agrees not to reveal to any third party any confidential information of Facility, except as required by law or as authorized by Facility.

Statement of Responsibility

For, and in consideration of, the benefit provided to undersigned in the form of experience in evaluation and treatment at _____ ("Facility"), the undersigned and his/her heirs, successors and/or assigns do hereby covenant and agree to assume all risks and be solely responsible for any injury or loss sustained by the undersigned while participating in the program operated by Cambridge College of Healthcare & Technology ("School") at the Facility unless such injury or loss arises solely out of Facility's gross negligence or willful misconduct.

_____
Student Printed Name

_____
Student Signature

Date: _____

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HBV Vaccine Declination Acknowledgement

I understand that due to my occupational exposure to blood or other potentially infectious material, I may be at risk of acquiring the Hepatitis B virus (HBV) infection. I have been advised by Cambridge College to be vaccinated with the Hepatitis B vaccine; however, I decline the Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease.

If, in the future, I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series.

Student Printed Name: _____

Student Signature: _____

Date: _____

Comments:

_____

_____

_____

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COMMUNICABLE DISEASES

Cambridge College is deeply concerned about the health and well-being of its students, faculty and staff. As an institution of higher learning, we pride ourselves on the advanced training that we provide our students in allied health professions. A reality of working in the health care sector – or with those who do – is the possibility of exposure to a variety of potential health risks. These include, but are not limited to: communicable diseases (such as tuberculosis, HIV, AIDS, various forms of hepatitis, measles, mumps, rubella. There is also a possibility of contracting diseases through human waste and or body fluids.

Health risks are one of the reasons that Cambridge College's programs include classrooms and clinical instruction in the handling of patients with infectious or communicable diseases. This includes preventative and protection measures (termed "Standard Precautions") to be used, as well as proper methods for disposing of and handling medical waste. It's imperative that students pay close attention to these procedures, as they protect you and those around you.

If you suspect you may have been exposed to a communicable disease, it's imperative that you seek prompt medical attention. If the exposure occurs at an externship/clinical site or on Cambridge College of Healthcare & Technology campus, you should notify Cambridge College of Healthcare & Technology of the incident. If the facility in which the incident occurred does not have a procedure in place for testing and treatment, go to the nearest hospital of clinic and seek care there.

If a student does not have health insurance, a claim may be submitted through Cambridge. The liability insurance company reviews each incident case by case and will then determine if a student will be reimbursed for testing related to suspected or actual exposure to communicable diseases during clinical instruction. Any student who suspects exposure to a communicable disease in the course of their educational training must contact the Program Dean and complete an incident report as soon as possible after the occurrence.

ACKNOWLEDGEMENT

I acknowledge that I have read and fully understand that Cambridge College of Healthcare & Technology Policy on Student Exposure to Communicable Diseases and will follow the procedures outlined in the policy; as well as the training and policies provided to me regarding Universal Precautions and other safety or protective measures regarding infectious or communicable diseases.

Printed Name: _____ Date: _____

Signature: _____ ☐ Student ☐Employee

Printed Name of Witness: _____Date: _____

Signature of Witness: _____Program: _____

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Clinical Forms Agreement

This Clinical Handbook is your guide to be successful not only in your studies here at Cambridge College but also in your career as a Sonographer. This guide clearly states the rules and regulations concerning submission of clinical hours, logs, and evaluations. The DMS department has also gone over the handbook during the Intro to Clinical Course. Below is a summary of each document and when it is due.

- **CORE:** Students have two options when clocking in/out within this system in order to receive credit for their clinical hours on assigned clinical days:
  - Students must use a computer located on site at their clinical site or,
  - Students must clock in and clock out using their cell phone (GPS locator must be activated for mobile clock in/out, no exceptions).
    - To receive full credit of hours, GPS location must be within 2 miles of assigned clinical location. Any GPS location marked outside the 2 miles range will be denied. In order to receive credit after such events occur, you must submit a signed timesheet. There will be a limit of three (3) occurrences, and on the fourth your hours will not be accepted.
  - Failure to comply with this policy will lead to a deduction in clinical hours.

- **Hours** MUST be documented on CORE by the end of business day every Monday. Any hours not submitted by this deadline will not count toward your total. No excuses. Any issues while using CORE to document clinical attendance must be reported to your Clinical Coordinator.

- **Clinical Evaluations**: Adhere to the due dates posted on the home page in Core and the announcement page on Blackboard in the Clinical rotation course. You must have ALL (4) clinical evaluations in your clinical file before you may graduate. Not turning in evaluations when due could result in disciplinary action.

- **Daily Logs**: Daily logs are due weekly on Sunday by 11:00pm. All daily logs must be in your clinical file before you may graduate. Not turning in logs in a timely manner could result in disciplinary action.

- **Clinical site evaluation:** Check on Blackboard and Core for posted due date

- **Clinical instructor evaluation:** Check on Blackboard and Core for posted due date

- **Department orientation:** Check on Blackboard and Core for posted due date

- **Competencies**: Competencies are due upon completion. All pertinent competencies must be in your clinical file before you may graduate. Not turning in competencies in a timely manner could result in a disciplinary action.

By signing below, you acknowledge that you understand the above information and will adhere to the deadlines and rules set forth.

_____ _____
Student Signature Date

_____ _____
Clinical Coordinator Signature Program Dean Signature

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FAX

Attn: DMS Clinical Coordinator
FAX # (561) 634-2006

Student Name: _____ Date: _____

Class: _____ Rotation Start Date: _____

RE: Clinical Hours and Paperwork Number of Pages: _____

Date of last report submitted:
_____

Previous hours total:
_____

Current month ending:
_____

Current month hours:
_____

=

TOTAL WEEKLY HOURS: _____

Please check off the following and attach:

- ☐ Clinical evaluation
- ☐ Weekly attendance log
- ☐ Other _____
- ☐ Other _____
- ☐ Other _____

Cambridge College

Diagnostic Ultrasound Program

Weekly Time Form

Attention: DMS Clinical Coordinators

FAX # (561) 634-2006 or E-mail at Carolyn.crawford@cambridgehealth.edu or monique.alphonse@cambridgehealth.edu

Student Name:				
Clinical Site:				
Day/Date	**Time In**	**Tech Initials**	**Time Out**	**Tech Initials**
Sunday:				
Monday:				
Tuesday:				
Wednesday:				
Thursday:				
Friday:				
Saturday:				
Total # of Hours:				

_____ _____

Clinical Site Instructor Print Name **Date**

_____ _____

Clinical Site Instructor Signature **Date**

_____ _____

Student Signature **Date**

**** COMPLETED TIME FORM MUST BE FAXED OR EMAILED TO YOUR CLINICAL COORDINATOR(S) BY END OF BUSINESS DAY, MONDAY. NO EXCEPTIONS! ****

Diagnostic Ultrasound Program
Weekly MAKE-UP Time Form

Attention: DMS Clinical Coordinators

FAX # (561) 634-2006 or E-mail at Carolyn.crawford@cambridgehealth.edu or monique.alphonse@cambridgehealth.edu

Student Name:				
Clinical Site:				
Day/Date	**Time In**	**Tech Initials**	**Time Out**	**Tech Initials**
Sunday:				
Monday:				
Tuesday:				
Wednesday:				
Thursday:				
Friday:				
Saturday:				
Total # of Hours:				

_____ _____

Clinical Site Instructor Print Name **Date**

_____ _____

Student Signature **Date**

**** COMPLETED TIME FORM MUST BE FAXED OR EMAILED TO YOUR CLINICAL COORDINATOR(S) BY END OF BUSINESS DAY, MONDAY. NO EXCEPTIONS! ****

DAILY Clinical Exam Log

To be filled out for EVERY patient, EVERY day. Due at the end of each month.

* Assist **(A)** = Aiding the Technologist with the exam or procedure in any way
* Perform **(P)** = Completing any part of the exam or procedure
* Indicate percentage of how much you scanned per exam. Example 25%, 50%, 75% or 100%
* Use the rating scale to specify level of difficulty per exam

    1= No difficulty 2= Technically difficult 3= Patient Body Habitus difficulty

* Brief description of findings (ex: Obesity, patient cooperation, bowel gas, etc.)

Student Name: _____

Date	Type of Exam	Clinical Findings	A	P	%	Level of Difficulty

Cambridge College of Healthcare & Technology

Clinical Evaluation Form

(To be filled out by Clinical Site Instructor; due at the end of the semester)

Student: _____ Clinical Site Instructor: _____

Clinical Site: _____ Month: _____

0=Unsatisfactory 1= Needs Improvement 2= Average (Satisfactory) 3= Above Average 4= Excellent (Proficient)

		Score
CONDUCT	Attendance and Punctuality	
	Dresses appropriately and is well-groomed	
	Interacts appropriately with patients and coworkers	
	Complies with facility policies and procedures	
	Shows evidence of motivation and initiative	
	Accepts constructive criticism	
THEORETICAL KNOWLEDGE	Demonstrates knowledge of physics and its applications	
	Exhibits knowledge of tomographic anatomy	
	Exhibits knowledge of medical terminology	
	Exhibits knowledge of normal limits for measurements of various structures	
	Exhibits knowledge of various pathological processes	
CLINICAL PERFORMANCE	Performs general administrative duties accurately	
	Obtains pertinent medical history, clinical data and other diagnostic test results relating to examination	
	Selects proper transducers and equipment settings for diagnostic studies	
	Recognizes normal versus abnormal anatomy	
	Takes representative anatomical pictures	
	Properly labels and develops film	
	Maintains the exam and observation log daily	
	OVERALL SCORE (Add individual scores and divide by 18)	

***Students counseled for scores below a 2.** **Total Score _____**

Clinical Instructor's Signature_____ Date_____

Additional Remarks: _____

Office Use Only

PASS/FAIL Clinical Coordinator_____

PATIENT CARE COMPETENCY EVALUATION

To be completed in Clinical Rotation I, II, III, IV

Student Name: _____ Date: _____

Clinical Rotation:_____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Performance Objectives	Score
Section 1	
Understands ALARA and minimizes patient exposure to acoustic energy	
Identifies and differentiates normal and abnormal anatomy	
Demonstrates knowledge of sterile techniques	
Demonstrates knowledge of protocols regarding the handling and disposal of hazardous wastes	
Practices patient safety by washing hands and cleaning equipment between patients	
Section 1 Overall Score	
Section 2	
Understands proper infection control and utilizes universal precautions	
Uses appropriate body mechanics when moving patients and equipment	
Positions patients properly and safely for each exam	
Anticipates and responds to the needs of patients	
Understands proper physics instrumentation relating to each case, including depth, gain, TGC, focusing, magnification, field of view, power and measurements	
Section 2 Overall Score	
Section 3	
Interacts with patients and staff in a professional manner, both written and orally	
Respects the patient's Right to Privacy	
Complies with HIPAA policies regarding confidentiality and properly maintains clinical records	
Retains knowledge of previously learned protocols, procedures, etc.	
Follows protocol relating to invasive procedures such as biopsies and cyst aspirations	
Section 3 Overall Score	
Section 4	
Comprehends and correctly uses medical terminology, abbreviations, symbols, etc.	
Obtains and evaluates pertinent patient history and physical signs and symptoms. Understands how this information might impact diagnostic examination	
Seeks guidance as needed; Review data from current and previous exams and communicate with physicians and/or other staff with oral or written summary of findings	
Section 4 Overall Score	

(Add individual scores and divide by 18) Total Average Score: _____

(Student must obtain a minimum average score of 2 to pass)

Instructor Comments: _____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name*:* _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

EQUIPMENT COMPETENCY EVALUATION

To be completed in all Clinical Rotations (I, II, III, IV) on Ultrasound Machines/Systems

Student Name: _____ **Date:** _____

Name of Ultrasound Machine/System: _____ **Clinical Rotation:**_____

Student must score at least 80% to be acceptable (5 points for each "yes", 0 points for each "no")

Student exhibits proficiency in:

		YES	NO
1.	Power (On/Off)	_____	_____
2.	Annotation Keys (patient name, film labeling, etc.)	_____	_____
3.	Time-Gain Compensation Curve	_____	_____
4.	Overall Gain	_____	_____
5.	Transmit Zone	_____	_____
6.	Freeze and Print	_____	_____
7.	Sector vs. Linear Scan Shape	_____	_____
8.	Cine/Cineloop	_____	_____
9.	Magnification (RES, Zoom, etc.)	_____	_____
10.	Image Depth	_____	_____
11.	Calipers	_____	_____
12.	Applications and Functions (Abd/Ob packages, data pages, presets, etc.)	_____	_____
13.	Track Ball	_____	_____
14.	Dual Image	_____	_____
15.	Activate Doppler	_____	_____
16.	Activate Color Imaging	_____	_____
	TRANSDUCER:		
17.	Selecting Correct Transducer	_____	_____
18.	Changing Transducer	_____	_____
19.	Orientation of Transducer on Patient	_____	_____
20.	Cleaning/Re-Hanging Transducer (including proper care of cords)	_____	_____

(Add individual scores and divide by 20)

Total Score: _____

Comments by Instructor:

_____

_____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

ABDOMEN COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date: _____**

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of the Liver- Left lobe (medial and lateral) imaged in multiple planes	
Able to obtain images of the Liver- Right lobe (anterior and posterior) imaged in multiple planes	
Able to obtain images of the Liver- Caudate lobe (lig. venosum)	
Able to obtain images of the Right Kidney and Hepatorenal space, sagittal and transverse views with proper measurements	
Able to obtain images of the Hepatic veins and IVC	
Able to obtain images of the Gallbladder- fundus/body/neck, sagittal and transverse views	
Able to obtain images of the Portal vein (at the level of Porta Hepatis)	
Able to obtain images of the CHD/CBD with pertinent and proper measurements	
Able to obtain images of the Pancreas- imaged in multiple planes	
Able to obtain images of the Spleen- imaged in multiple planes	
Able to obtain images of the Left Kidney- imaged in multiple planes with proper measurements	
Labels all images appropriately	
Able to identify abnormal pathology	
Understands and utilizes Doppler technique when needed	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Able to obtain images of the Pleural Space, locate McBurney's Point, Sonographic Guided Procedure (assistance)	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 24)	

(Student must obtain a minimum average score of 2 to pass) Average Score: _____

Student Signature: _____ Date: _____
Clinical Site Instructor Signature: _____
Clinical Site Instructor Print Name: _____ Date: _____
Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)
Clinical Coordinator Signature: _____ Date: _____

NON-CARDIAC CHEST COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ _____ Date: _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of Right Pleural area with diaphragm	
Able to obtain images of Left Pleural area with diaphragm	
Visualized and documented fluid above Right diaphragm (if applicable)	
Visualized and documented fluid above Left diaphragm (if applicable)	
Volume measure of Right diaphragm fluid (if applicable)	
Volume measure of Left diaphragm fluid (if applicable)	
Labels all images appropriately	
Able to identify abnormal pathology	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 17 or appropriate number if non-applicable applies)	

Average Score: _____

(Student must obtain a minimum average score of 2 to pass)

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name*:* _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

Cambridge College of Healthcare & Technology

RENAL COMPTENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of Long Rt. Kidney lateral	
Able to obtain images of Long Rt. Kidney Mid (with/without measurements)	
Able to obtain images of Long Rt. Kidney Medial	
Able to obtain images of Trans Rt. Kidney Superior	
Able to obtain images of Trans Rt. Kidney Mid (Hilum) (with and without measurements)	
Able to obtain images of Trans Rt. Kidney Inferior	
Able to obtain images of Long Lt. Kidney Lateral	
Able to obtain images of Long Lt. Kidney Mid (with and without measurements)	
Able to obtain images of Long Lt. Kidney Medial	
Able to obtain images of Trans Lt. Kidney Superior	
Able to obtain images of Trans Lt. Kidney Mid (Hilum) (with and without measurements)	
Able to obtain images of Trans Lt. Kidney Inferior	
Able to obtain images of Bladder	
Labels all images appropriately	
Able to identify abnormal pathology	
Understands and utilizes Doppler technique when needed	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 24)	

(Student must obtain a minimum average score of 2 to pass) Average Score: _____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____ Date:_____

Clinical Site Instructor Print Name*:* _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

AORTA COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of Long Aorta Proximal (with and without measurements)	
Able to obtain images of Long Aorta Mid (with/without measurements)	
Able to obtain images of Long Rt. Aorta Distal (with and without measurements)	
Able to obtain images of Trans Aorta Proximal (with and without measurements)	
Able to obtain images of Trans Aorta Mid (with and without measurements)	
Able to obtain images of Trans Aorta Distal (with and without measurements)	
Able to obtain images of Bifurcation	
Able to obtain images of Long and Trans Celiac Trunk and SMA	
Understands and utilizes Doppler technique when needed	
Labels all images appropriately	
Able to identify abnormal pathology	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 20)	

Average Score: _____

(Student must obtain a minimum average score of 2 to pass)

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

IVC COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ ___Date: _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Hepatic segment IVC PROX longitudinal	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
IVC and Hepatic veins transverse view	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
IVC and Hepatic veins transverse view with color Doppler	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
IVC MID at the level of the Right Renal Artery longitudinal	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
IVC MID transversely at the level of Left Renal Vein	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
IVC DIST longitudinal	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
IVC DIST transversely with Aorta identified	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Process for reporting of critical findings	
(Add individual scores and divide by 15 or appropriate number if non-applicable applies)	

(Student must obtain a minimum average score of 2 to pass) Average Score: _____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

THYROID COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of Long Rt. Thyroid Lateral	
Able to obtain images of Long Rt. Thyroid Mid (with and without measurements)	
Able to obtain images of Long Rt. Thyroid Medial	
Able to obtain images of Trans Rt. Thyroid Superior	
Able to obtain images of Trans Rt. Thyroid Mid (with and without measurements)	
Able to obtain images of Trans Rt. Thyroid Inferior	
Able to obtain images of Long Lt. Thyroid Lateral	
Able to obtain images of Long Lt. Thyroid Mid (with and without measurements)	
Able to obtain images of Long Lt. Thyroid Medial	
Able to obtain images of Trans Lt. Thyroid Superior	
Able to obtain images of Trans Lt. Thyroid Mid (with and without measurements)	
Able to obtain images of Trans Lt. Thyroid Inferior	
Able to obtain images of isthmus	
Able to obtain Doppler images as needed	
Labels all images appropriately	
Able to identify abnormal pathology	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 25)	

(Student must obtain a minimum average score of 2 to pass) Average Score: ___

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name*:* _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

TESTICULAR COMPETENCY EVALUATION
MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of Long Rt. Testicle Lateral	
Able to obtain images of Long Rt. Testicle Mid (with and without measurements)	
Able to obtain images of Long Rt. Testicle Medial	
Able to obtain images of Trans Rt. Testicle Superior	
Able to obtain images of Trans Rt. Testicle Mid (with and without measurements)	
Able to obtain images of Trans Rt. Testicle Inferior	
Able to obtain images of Rt. Epididymis	
Able to obtain images of Long Lt. Testicle Lateral	
Able to obtain images of Long Lt. Testicle Mid (with and without measurements)	
Able to obtain images of Long Lt. Testicle Medial	
Able to obtain images of Trans Lt. Testicle Superior	
Able to obtain images of Trans Lt. Testicle Mid (with and without measurements)	
Able to obtain images of Trans Lt. Testicle Inferior	
Able to obtain images of Lt. Epididymis	
Able to evaluate for varicocele	
Able to obtain Trans image of both testicle together with and without Color Doppler	
Able to obtain Doppler images as needed	
Labels all images appropriately	
Able to identify abnormal pathology	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 28)	

(Student must obtain a minimum average score of 2 to pass) Average Score: _____

Student Signature: _____ Date: _____
Clinical Site Instr Print Name: _____ Date: _____
Clinical Site Instr Signature: _____
Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)
Clinical Coordinator Signature: _____ Date: _____

PELVIC COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement 2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of Long Uterus Midline (with and without measurements)	
Able to obtain images of Long Rt. Uterus	
Able to obtain images of Long Rt. Adnexa	
Able to obtain images of Long Lt. Uterus	
Able to obtain images of Long Lt. Adnexa	
Able to obtain images of endometrium with and without measurements	
Able to obtain images of Trans Vaginal Canal	
Able to obtain images of Trans Cervix	
Able to obtain images of Trans Uterus Inferior	
Able to obtain images of Trans Uterus Mid (with and without measurements)	
Able to obtain images of Trans Uterus Superior	
Able to obtain images of Long Rt. Ovary (with and without measurements)	
Able to obtain images of Trans Rt. Ovary (with and without measurements)	
Able to obtain images of Long Lt. Ovary (with and without measurements)	
Able to obtain images of Trans Lt. Ovary (with and without measurements)	
Able to obtain images of Sag and Trans Posterior and anterior cul-de-sac	
Able to obtain Doppler images as needed	
Labels all images appropriately	
Able to identify abnormal pathology	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Process for reporting of critical findings	

(Student must obtain a minimum average score of 2 to pass) (Add individual scores and divide by 28) Average Score: _____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

CAMBRIDGE

ENDOVAGINAL COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: ____ **Date:** _______________

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement 2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of Long Uterus Midline (with and without measurements)	
Able to obtain images of Long Rt. Uterus	
Able to obtain images of Long Rt. Adnexa	
Able to obtain images of Long Lt. Uterus	
Able to obtain images of Long Lt. Adnexa	
Able to obtain images of endometrium with and without measurements	
Able to obtain images of Trans Uterus Inferior	
Able to obtain images of Trans Uterus Mid (with and without measurements)	
Able to obtain images of Trans Uterus Superior	
Able to obtain images of Long Rt. Ovary (with and without measurements)	
Able to obtain images of Trans Rt. Ovary (with and without measurements)	
Able to obtain images of Long Lt. Ovary (with and without measurements)	
Able to obtain images of Trans Lt. Ovary (with and without measurements)	
Able to obtain images of Sag and Trans Posterior and anterior cul-de-sac	
Able to obtain Doppler images as needed	
Labels all images appropriately	
Able to identify abnormal pathology	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Process for reporting of critical findings	

(Student must obtain a minimum average score of 2 to pass) (Add individual scores and divide by 26) Average Score: ________

Student Signature: ____ Date: _____________

Clinical Site Instructor Signature: _________________________________

Clinical Site Instructor Print Name*:* ______________________________ Date: _____________

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: ___________________________________ Date: _____________

2ND AND 3RD TRIMESTER OB COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Page 1

Student Name: _____ **Date: _____**

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of the Maternal Adnexa Right and Left	
Determines number of fetal gestations	
Determines fetal viability	
Determines fetal presentation	
Evaluates placental location and size	
Evaluates placental grade	
Able to obtain images of Cervix (with and without measurements)	
Able to obtain images of 3-Vessel cord	
Able to obtain images of Cord insertion (fetal abdomen and placenta)	
Able to obtain images of fetal Stomach	
Able to obtain images of fetal Bladder	
Able to obtain images of fetal Kidneys	
Able to obtain images of fetal hands	
Able to obtain images of fetal feet	
Able to properly measure Amniotic Fluid Index	
Able to obtain proper measurement of BPD	
Able to obtain proper measurement of HC	
Able to obtain proper measurement of AC	
Able to obtain proper measurement of Femur length	
Able to obtain images of Lateral ventricles and measure as needed	
Able to obtain images of Cerebellum and measure as needed	
Able to obtain images of Cisterna Magna and measure as needed	
Able to obtain images of Nuchal fold and measure as needed	

2ND AND 3RD TRIMESTER OB COMPETENCY EVALUATION

MUST BE COMPLETED at CLINICAL SITE

Page 2

Performance Objectives	Score
Able to obtain images of 4-chamber heart	
Able to obtain images of the LVOT and RVOT	
Able to Assess fetal heart rate with Doppler M-Mode	
Able to obtain images of fetal Cervical spine- sagittal and transverse views	
Able to obtain images of fetal Thoracic spine- sagittal and transverse views	
Able to obtain images of fetal Lumbar spine- sagittal and transverse views	
Able to obtain images of fetal Sacral spine- sagittal and transverse views	
Able to obtain images of fetal profile	
Able to obtain images of fetal nose and lips	
Labels all images appropriately	
Able to identify abnormal pathology	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Able to obtain images of fetal thoracic cavity (including lungs & heart)	
Evaluates Heart size and position	
Able to obtain 3VV or 3VTV heart views	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 46)	

Average Score: _____

(Student must obtain a minimum average score of 2 to pass)

Student Signature: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name*:* _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

1ST TRIMESTER COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement 2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of Long Uterus Midline (with and without measurement)	
Able to obtain images of Long Rt Uterus	
Able to obtain images of Long Lt Uterus	
Able to obtain images of Trans Uterus Inferior	
Able to obtain images of Trans Uterus Mid (with and without measurements)	
Able to obtain images of Trans Uterus Superior	
Determines number of fetal gestations	
Determines fetal viability	
Evaluates placental location as necessary	
Able to obtain images of Cervix (with and without measurements)	
Able to obtain images of the gestational sac	
Able to obtain images of yolk sac	
Able to obtain images of fetal pole	
Able to obtain proper measurements of CRL	
Able to evaluate subchorionic area for hemorrhages	
Able to obtain images of ovaries with and without measurements	
Able to obtain identify corpus luteum	
Able to obtain the Maternal Adnexa Right and Left	
Able to evaluate fetal heart rate with M-mode	
Able to obtain images of Nuchal translucency and measure as needed	
Labels all images appropriately	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Able to identify abnormal pathology	
Able to obtain images of Anterior/Posterior cul-de-sac (pelvic spaces)	
Process for reporting of critical findings	
(Add individual scores and divide by 32)	

(Student must obtain a minimum average score of 2 to pass) Average Score: _____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

BIOPHYSICAL PROFILE COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ Date: _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Recognizes and identifies normal & abnormal anatomy	
Gross Body Movement	
Fetal Tone	
Amniotic Fluid Index	
Fetal Breathing Movement	
Fetal Heart Rate Measurement by M-Mode	
Labels all images appropriately	
Able to identify abnormal pathology	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 17)	

(Student must obtain a minimum average score of 2 to pass)

Average Score: _____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____

CAROTID (*OPTIONAL*) COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date: _____**

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of Long/Trans Rt. Common Carotid Proximal (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Rt. Common Carotid Mid (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Rt. Common Carotid Distal (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Rt. Carotid Bulb (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Rt. Carotid Bifurcation (with/without color flow)	
Able to obtain images of Long/Trans Rt. ICA Proximal (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Rt. ICA Distal (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Rt. ECA (with/without color flow and PW Doppler)	
Able to obtain images of Rt. Vertebral (with color flow and PW Doppler)	
Able to obtain images of Long/Trans Lt. Common Carotid Proximal (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Lt. Common Carotid Mid (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Lt. Common Carotid Distal (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Lt. Carotid Bulb (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Lt. Carotid Bifurcation (with/without color flow)	
Able to obtain images of Long/Trans Lt. ICA Proximal (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Lt. ICA Distal (with/without color flow and PW Doppler)	
Able to obtain images of Long/Trans Lt. ECA (with/without color flow and PW Doppler)	
Able to obtain images of Lt. Vertebral (with color flow and PW Doppler)	
Shows a thorough understanding of Doppler physics and technique, including how to control angle, gate, scale, etc.	
Labels all images appropriately	
Able to identify abnormal pathology	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 29)	

(Student must obtain a minimum average score of 2 to pass) Average Score: ____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name*:* _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

COMPLETE ECHO COMPETENCY EVALUATION

Page 1

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates normal anatomy, acoustical artifacts from pathology and compensates to correct artifacts	
Process for reporting of critical findings	
Identifies normal vs. abnormal anatomy and relational structures	
Differentiation of normal from pathological/disease process	
Parasternal Long Axis Views	
2D left heart (loop)	
2D measurements of the IVS, PW & FS (still image)	
Zoom MV (loop)	
Zoom LVOT and AV (loop)	
Measure LVOT diameter (still image)	
Measure ascending aorta diameter (still image)	
M-mode measurements of AO & LA (still image) (Optional)	
M-mode MV. No measurements (still image) (Optional)	
M-mode LV. No measurements (still image) (Optional)	
2D RV inflow view (loop)	
2D RV outflow view (loop)	
Color Doppler MV (loop)	
Color Doppler AV (loop)	
Color Doppler RV inflow TV (loop)	
CW Doppler TV. Measure TR (still image)	
Color Doppler RV outflow PV (loop)	
CW Doppler PV. Measure end diastolic PI gradient (still image)	
PW Doppler PV. Measure peak gradient (still image)	
Parasternal Short Axis Views	
2D aortic valve level (loop)	
Zoom AV for cusp identification (loop)	
2D mitral valve level (loop)	
2D mid papillary level (loop)	

Complete Echo Competency Page – 2 -	
2D apical LV level (loop)	
Color Doppler AV level (loop)	
Color Doppler TV (loop)	
CW Doppler TR peak gradient (still image)	
Color Doppler PV (loop)	
Color Doppler MV (loop)	
Color Doppler atrial septum (loop)	
Apical 4 Chamber	
2D (loop)	
2D Zoom of LV (loop)	
Color Doppler and PW Doppler right upper pulmonary vein (Optional)	
Color Doppler and PW Doppler MV (loop and still image)	
Obtain Tissue Doppler (TDI) of the MV	
Color Doppler IVS and IAS (loops)	
Color Doppler and CW Doppler of TV (loop & still image)	
Apical 5 Chamber	
2D (loop)	
Color Doppler and PW Doppler AV/LVOT (loop and still image)	
Color Doppler and CW Doppler of AV (loop & still image)	
CW Doppler AV. Measure peak gradient (still image)	
Apical 2 Chamber	
2D (loop)	
2D Zoom of LV (loop)	
Color Doppler of MV	
Apical 3 Chambers	
2D (loop)	
Color Doppler MV/AV. (loop)	
Subcostal Views	
2D (loop)	
Color Doppler of IAS and IVS (loop)	
Obtain non-imaging CW Doppler (pedoff)	
2D IVC assess size and reactivity	
Suprasternal Notch	
2D long axis. (loop) (Optional)	
Color Doppler of descending AO (Optional)	
PW Doppler descending AO (Optional)	
Finalize examination for permanent storage	
Contrast-enhanced echocardiography-(Observe)	

(Student must obtain a minimum average score of 2 to pass) Average Score: _____

Student Signature: _____ Date: _____
Clinical Site Instructor Signature: _____
Clinical Site Instructor Print Name*:* _____ Date: _____
Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)
Clinical Coordinator Signature: _____ Date: _____

ECHO 1 COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Process for reporting of critical findings	
Identifies normal vs. abnormal anatomy and relational structures	
Differentiation of normal from pathological/disease process	
Parasternal Long Axis Views	
2D left heart (loop)	
2D measurements of the IVS, PW & FS (still image)	
Zoom MV (loop)	
Zoom LVOT and AV (loop)	
Measure LVOT diameter (still image)	
Measure ascending aorta diameter (still image)	
M-mode measurements of AO & LA (still image) (Optional)	
M-mode MV. No measurements (still image) (Optional)	
M-mode LV. No measurements (still image) (Optional)	
2D RV inflow view (loop)	
2D RV outflow view (loop)	
Color Doppler MV (loop)	
Color Doppler AV (loop)	
Color Doppler RV inflow TV (loop)	
CW Doppler TV. Measure TR (still image)	
Color Doppler RV outflow PV (loop)	
CW Doppler PV. Measure end diastolic PI gradient (still image)	
PW Doppler PV. Measure peak gradient (still image)	
Finalize examination for permanent storage	

(Student must obtain a minimum average score of 2 to pass Average Score: _____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

ECHO 2 COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates normal anatomy, acoustical artifacts from pathology and compensates to correct artifacts	
Process for reporting of critical findings	
Identifies normal vs. abnormal anatomy and relational structures	
Differentiation of normal from pathological/disease process	
Parasternal Short Axis Views	
2D aortic valve level (loop)	
Zoom AV for cusp identification (loop)	
2D mitral valve level (loop)	
2D mid papillary level (loop)	
2D apical LV level (loop)	
Color Doppler AV level (loop)	
Color Doppler TV (loop)	
CW Doppler TR peak gradient (still image)	
Color Doppler PV (loop)	
Color Doppler MV (loop)	
Color Doppler atrial septum (loop)	
Finalize examination for permanent storage	

Average Score: _____

(Student must obtain a minimum average score of 2 to pass)

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

ECHO 3 COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement 2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates normal anatomy, acoustical artifacts from pathology and compensates to correct artifacts	
Process for reporting of critical findings	
Identifies normal vs. abnormal anatomy and relational structures	
Differentiation of normal from pathological/disease process	
Apical 4 Chamber	
2D (loop)	
2D Zoom of LV (loop)	
Color Doppler and PW Doppler right upper pulmonary vein (Optional)	
Color Doppler and PW Doppler MV (loop and still image)	
Color Doppler IVS and IAS (loops)	
Color Doppler and CW Doppler of TV (loop & still image)	
Apical 5 Chamber	
2D (loop)	
Color Doppler and PW Doppler AV/LVOT (loop and still image)	
Color Doppler and CW Doppler of AV (loop & still image)	
CW Doppler AV. Measure peak gradient (still image)	
Apical 2 Chamber	
2D (loop)	
2D Zoom of LV (loop)	
Color Doppler of MV	
Apical 3 Chambers	
2D (loop)	
Color Doppler MV/AV. (loop)	
Subcostal Views	
2D (loop)	
Color Doppler of IAS and IVS (loop)	
2D IVC assess size and reactivity	
Finalize examination for permanent storage	

Student must obtain a minimum average score of 2 to pass) Average Score: _____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

ECHO 4 COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	
Obtains proper medical history on patient	**Score**
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates normal anatomy, acoustical artifacts from pathology and compensates to correct artifacts	
Process for reporting of critical findings	
Identifies normal vs. abnormal anatomy and relational structures	
Differentiation of normal from pathological/disease process	
Suprasternal Notch	
2D long axis. (loop) (Optional)	
Color Doppler of descending AO (Optional)	
PW Doppler descending AO (Optional)	
Finalize examination for permanent storage	

(Student must obtain a minimum average score of 2 to pass) Average Score: _____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

RIGHT UPPER QUADRANT/LIMITED STUDY COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date: _____**

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objective	**Score**
Obtain proper medical history on patient	
Explain the procedure to the patient	
Selects proper transducer and scanning technique for exams being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Able to obtain images of the Liver- Left lobe (medial and lateral) imaged in multiple planes	
Able to obtain images of the Liver -Right lobe (anterior and posterior) imaged in multiple planes	
Able to obtain images of the Liver- Caudate lobe (ligament of venosum)	
Able to obtain images of the Liver and Right kidney	
Able to obtain images of the Hepatic veins	
Able to obtain images of the Gallbladder-fundus/body/neck, sagittal and transverse views	
Able to obtain images of the Portal vein at the level of Porta Hepatis	
Able to obtain images of the CHD/CBD with pertinent and proper measurements	
Able to obtain images of the Pancreas in transverse	
Able to obtain image Sag Head of the Pancreas	
Labels all images appropriately	
Able to identify abnormal pathology	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 21)	

Average Score: _____

(Student must obtain a minimum average score of 2 to pass)

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name*:* _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

SPLEEN COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ ___Date: _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement 2=Average 3=Above Average 4=Excellent

Difficulty of Case: 1=Easy 2=Medium 3=Difficult	
Patient Size: 1=Thin, 2 = Medium, 3 = Obese	
Patient cooperation: 1= Very, 2 = Medium, 3 = Uncooperative	
Patient Anatomy: 1 = Normal Anatomy, 2 = Some Variation, 3 = Major Anomalies	
Performance Objectives	**Score**
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Spleen SAG with measurements (two measurements)	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, focusing, magnification, field of view, power, measurements	
Spleen TRANS with measurement (third measurement)	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, focusing, magnification, field of view, power, measurements	
Spleen SAG with color flow	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, focusing, magnification, field of view, power, measurements	
Spleen with Left Kidney	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, focusing, magnification, field of view, power, measurements	
Process for reporting of critical findings	
(Add individual scores and divide by 15 or appropriate number if non-applicable applies)	

(Student must obtain a minimum average score of 2 to pass) Average Score: _____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name*:* _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

PATHOLOGY COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE
USE FOR ABDOMEN OR GYN PATHOLOGY

Specify organ scanned: _____

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Performance Objectives	Score
Obtains proper medical history on patient	
Explains the procedure to the patient	
Selects proper transducer and scanning technique for exam being performed	
Understands and utilizes proper ergonomics when positioning patient and equipment	
Adjusts instrument controls, depth, focal zone, etc. for optimal image quality	
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts	
Labels all images appropriately	
Standard precautions utilized	
Able to use medical history and data from current exam to provide a written/oral summary for the interpreting physician	
Proper measurement(s) obtained	
Color flow documented	
Able to identify abnormal pathology / was any pathology overlooked	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 14)	

(Student must obtain a minimum average score of 2 to pass) Average Score: _____

STUDENT MUST COMPLETE THIS SECTION

Description of Finding(s)

_____

_____

_____

Student Signature: _____ Date: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

ADULT CARDIAC PATHOLOGIES COMPETENCY EVALUATION

MUST BE COMPLETED AT CLINICAL SITE

Student Name: _____ **Date:** _____

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement 2=Average 3=Above Average 4=Excellent

Performance Objectives	**Score**	
Systolic Dysfunction	--	***Clinical Instructor Name*** ***Credential*** ***Date***
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements		**CI Name** ***RCS/RDCS*** **Date:**
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts Proper measurement(s) obtained		**CI Name** ***RCS/RDCS*** **Date:**
Process for reporting of critical findings/ Finalize examination for permanent storage		**CI Name** ***RCS/RDCS*** **Date:**
Identifies normal vs. abnormal anatomy and relational structures		**CI Name** ***RCS/RDCS*** **Date:**
Differentiation of normal from pathological/disease process		**CI Name** ***RCS/RDCS*** **Date:**
Diastolic Dysfunction	--	***Clinical Instructor Name*** ***Credential*** ***Date***
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements		**CI Name** ***RCS/RDCS*** **Date:**
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts Proper measurement(s) obtained		**CI Name** ***RCS/RDCS*** **Date:**
Process for reporting of critical findings/ Finalize examination for permanent storage		**CI Name** ***RCS/RDCS*** **Date:**
Identifies normal vs. abnormal anatomy and relational structures		**CI Name** ***RCS/RDCS*** **Date:**
Differentiation of normal from pathological/disease process		**CI Name** ***RCS/RDCS*** **Date:**
Aortic Valve or Aortic Root Pathology	--	***Clinical Instructor Name*** ***Credential*** ***Date***
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements		**CI Name** ***RCS/RDCS*** **Date:**
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts Proper measurement(s) obtained		**CI Name** ***RCS/RDCS*** **Date:**
Process for reporting of critical findings/ Finalize examination for permanent storage		**CI Name** ***RCS/RDCS*** **Date:**
Identifies normal vs. abnormal anatomy and relational structures		**CI Name** ***RCS/RDCS*** **Date:**
Differentiation of normal from pathological/disease process		**CI Name** ***RCS/RDCS*** **Date:**
Mitral Valve Pathology	--	***Clinical Instructor Name*** ***Credential*** ***Date***
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements		**CI Name** ***RCS/RDCS*** **Date:**
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts Proper measurement(s) obtained		**CI Name** ***RCS/RDCS*** **Date:**
Process for reporting of critical findings/ Finalize examination for permanent storage		**CI Name** ***RCS/RDCS*** **Date:**
Identifies normal vs. abnormal anatomy and relational structures		**CI Name** ***RCS/RDCS*** **Date:**
Differentiation of normal from pathological/disease process		**CI Name** ***RCS/RDCS*** **Date:**

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------ADULT CARDIAC PATHOLOGIES COMPETENCY EVALUATION Cont.-----

Right Heart Pathology	--	***Clinical Instructor Name*** ***Credential*** ***Date***
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements		**CI Name** ***RCS/RDCS*** **Date:**
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts Proper measurement(s) obtained		**CI Name** ***RCS/RDCS*** **Date:**
Process for reporting of critical findings/ Finalize examination for permanent storage		**CI Name** ***RCS/RDCS*** **Date:**
Identifies normal vs. abnormal anatomy and relational structures		**CI Name** ***RCS/RDCS*** **Date:**
Differentiation of normal from pathological/disease process		**CI Name** ***RCS/RDCS*** **Date:**
Cardiomyopathy	--	***Clinical Instructor Name*** ***RCS/RDCS*** ***Date***
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements		**CI Name** ***RCS/RDCS*** **Date:**
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts Proper measurement(s) obtained		**CI Name** ***RCS/RDCS*** **Date:**
Process for reporting of critical findings/ Finalize examination for permanent storage		**CI Name** ***RCS/RDCS*** **Date:**
Identifies normal vs. abnormal anatomy and relational structures		**CI Name** ***RCS/RDCS*** **Date:**
Differentiation of normal from pathological/disease process		**CI Name** ***RCS/RDCS*** **Date:**
Pericardial Pathology	--	***Clinical Instructor Name*** ***RCS/RDCS*** ***Date***
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements		**CI Name** ***RCS/RDCS*** **Date:**
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts Proper measurement(s) obtained		**CI Name** ***RCS/RDCS*** **Date:**
Process for reporting of critical findings/ Finalize examination for permanent storage		**CI Name** ***RCS/RDCS*** **Date:**
Identifies normal vs. abnormal anatomy and relational structures		**CI Name** ***RCS/RDCS*** **Date:**
Differentiation of normal from pathological/disease process		**CI Name** ***RCS/RDCS*** **Date:**
Prosthetic Pathology	--	***Clinical Instructor Name*** ***RCS/RDCS*** ***Date***
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements		**CI Name** ***RCS/RDCS*** **Date:**
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts Proper measurement(s) obtained		**CI Name** ***RCS/RDCS*** **Date:**
Process for reporting of critical findings/ Finalize examination for permanent storage		**CI Name** ***RCS/RDCS*** **Date:**
Identifies normal vs. abnormal anatomy and relational structures		**CI Name** ***RCS/RDCS*** **Date:**
Differentiation of normal from pathological/disease process		**CI Name** ***RCS/RDCS*** **Date:**
Coronary Artery Disease	--	***Clinical Instructor Name*** ***RCS/RDCS*** ***Date***
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements		**CI Name** ***RCS/RDCS*** **Date:**
Recognizes and differentiates acoustical artifacts from pathology and compensates to correct artifacts Proper measurement(s) obtained		**CI Name** ***RCS/RDCS*** **Date:**
Process for reporting of critical findings/ Finalize examination for permanent storage		**CI Name** ***RCS/RDCS*** **Date:**
Identifies normal vs. abnormal anatomy and relational structures		**CI Name** ***RCS/RDCS*** **Date:**
Differentiation of normal from pathological/disease process		**CI Name** ***RCS/RDCS*** **Date:**

(Student must obtain a minimum average score of 2 to pass) Average Score: _____

Student Signature:_____ Date: _____

Clinical Coordinator Signature: _____ Date: _____

STERILE/GUIDED PROCEDURES COMPETENCY EVALUATION

To be completed at Clinical Site

Student Name: _____ **Date: _____**

Scoring: N/A=Not applicable 0=Unsatisfactory 1=Needs Improvement
2=Average 3=Above Average 4=Excellent

Performance Objectives	Score
Student has participated in multiple sterile procedures to accurately be graded	
Discussed the Role of the Sonographer with the supervising Technologist	
Read and Verified the Clinical Information & Examination to be performed with supervising Technologist	
Accurately prepared/maintained room for sterile procedure	
Accurately set up Ultrasound machine for examination	
Used proper patient identification protocol pre and post procedure specific to facility guidelines	
Obtained appropriate patient history	
Explained and Obtained the Informed Consent Form from the patient	
Accurately explained the Procedure to the patient	
Called a "Time-Out" prior to exam beginning (Understands why that is done)	
Insured patient safety and comfort while respecting patient's modesty	
Properly cleans room and equipment after procedure	
Communicated appropriately with the Supervising Technologist and/or the Physician	
Ability to perform Transducer Guidance throughout the procedure	
Clear and confident communication demonstrated throughout the procedure	
Finalize examination for permanent storage	
Process for reporting of critical findings	
(Add individual scores and divide by 17)	

Average Score: _____

(Student must obtain a minimum average score of 2 to pass)

Instructor Comments:

_____

_____

Student Signature: _____

Clinical Site Instructor Signature: _____

Clinical Site Instructor Print Name: _____ Date: _____

Clinical Site Instructor Credentials: o CCI (RCS) o RDCS (AE) o RDMS (AB) o RDMS (OB/GYN)

Clinical Coordinator Signature: _____ Date: _____

Cambridge College of Healthcare & Technology
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Delray Beach, FL 33484
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Clinical Conference

To show student progression in the DMS curriculum, students will be required to attend scheduled Clinical Conferences throughout the program. Students will be expected to be prepared to scan organs in which they have previously completed competency efficiency in the laboratory. Students should keep their skills sharp in all modalities and practice in the lab prior to the scheduled clinical conference day. Students will scan Abdomen, Pelvic and Echocardiography protocols**. There are no make ups and missed clinical conference will result in a zero for a grade.**

Exit Exams

Three Exit Exams will be part of the graduation requirements. During Clinical IV (last semester) each student will scan one complete Echocardiogram exam, one Complete Abdominal exam and one female Pelvis exam. Each exam should be completed within the time allotted. Student must score a 75% or higher on each exam. If they fail any exam, they will not receive their diploma. Tutoring will be offered to any student who cannot pass. Student must retake and pass any failed exam(s) in order to receive their diploma.

SEE EXIT EXAM FORMS FOLLOWING THIS PAGE

Echo - Clinical Conference I

Student Name: _____ **Date: _____**
Machine # _____ **Patient ID#_____**

Performance Objectives	
Properly sets up machine/room for exam/ provides a clean environment for patient	
Obtains and evaluates patient information	
Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc	
Responds to patient needs/requests appropriately and respectfully / Professional Conduct	
Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
Makes the patient feel comfortable / Pillow & Climate	
Respects the patient's right to privacy	
Properly connects patient to EKG leads	
Labels the images correctly, including patient information & exam annotation	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Identifies & Differentiates normal & abnormal anatomy	
Follows protocol	
Uses appropriate body mechanics when scanning and moving patient	
Utilizes universal precautions pre & post examination	
Selects the correct transducer(s) / Presets	
Controls transducer properly/demonstrates hand-eye coordination/properly adjusts instrument controls	
PARASTERNAL LONG AXIS VIEWS	---------
Obtains PLAX of LV	
Properly places color on the MV & AV (adjusts color gain/scale)	
Obtains AV M-mode and correctly measures (Ao Root, ACS, LA)	
Obtains MV M-mode and correctly measures (D-E, E-F, EPSS)	
Obtains LV M-mode and correctly measures (EF% 55% - 68%) may vary if pathology is noted	
Obtains 2D measurements of Ao Root & LVOT diameter	
Obtains Parasternal Long-Axis of the RVIT	
Properly places color on the TV (adjusts color gain/scale)	
Obtains Parasternal Long-Axis of the RVOT	
Properly places color on the PV and MPA (adjusts color gain/scale)	
Obtains Parasternal Short-Axis of the Aortic Valve	
Properly Magnifies (Zoom) the AV	
Properly places color on the PV, AV, TV (adjusts color gain/scale)	

PARASTERNAL SHORT AXIS VIEWS	----------
Obtains Parasternal Short-Axis of the MV	
Obtains Parasternal Short-Axis of the LV	
APICAL VIEWS	----------
Obtains Apical Four-Chamber	
Properly places color on the MV (adjusts color gain/scale)	
Properly places color on the TV (adjusts color gain/scale)	
Obtained Apical Five Chamber	
Properly places color on the AV (adjusts color gain/scale)	
Obtained Apical Two-Chamber	
Properly places color on the MV (adjusts color gain/scale)	
Obtained Apical Three-Chamber	
Properly places color on AV & MV (adjusts color gain/scale)	
SUBCOSTAL VIEWS	----------
Obtained Subcostal Four-Chamber	

(Time allotted: 40 minutes)

Average Score: _____/41

Clinical Coordinator: _____

ECHO CLINICAL CONFERENCE II

Student Name: _____ Date: _____
Machine #_____ Patient ID#_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	**---**
1. Properly sets up machine/room for exam/ provides a clean environment for patient	
2. Properly sets up machine/room for exam/ provides a clean environment for patient	
3. Obtains and evaluates patient information	
4. Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc	
5. Responds to patient needs/requests appropriately and respectfully / Professional Conduct	
6. Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
7. Makes the patient feel comfortable / Pillow & Climate	
8. Respects the patient's right to privacy	
9. Properly connects patient to EKG leads	
10. Labels the images correctly, including patient information & exam annotation	
11. Adjusts the proper physics instrumentation relating to each case including Depth, 2D Gain, TGC, Focusing, Color gain, Magnification, Field of View, Power, & Measurements	
12. Identifies & Differentiates normal & abnormal anatomy	
13. Follows protocol	
14. Uses appropriate body mechanics when scanning and moving patient	
15. Utilizes universal precautions pre & post examination, properly cleans transducer and readies room for next patient	
Selects the correct transducer(s) / Presets	
1. Obtains PLAX of LV	
2. Zoom on AV & MV	
3. Properly places color on the MV & AV (adjusts color gain/scale)	
4. Obtains AV M-mode and correctly measures (Ao Root, ACS, LA) (Use the AO/LA measurement package)	
5. Obtains MV M-mode and correctly measures (D-E, E-F, EPSS) (Use the MV measurement package. Pick the D-E measurement, then follow E-F slope. Pick the EPSS measurement)	
6. Obtains LV M-mode and correctly measures Diastole & Systole with EF% (Use the RV/LV Package, pick LV study)	
7. Measure RV/ LV 2D measurement Diastole & Systole with EF% (Use the RV/LV Package, measure RV & LV during diastole, then systole)	
8. Obtains 2D measurements of the LVOT diameter (Use the dimension's package, then pick LVOT diameter. Measure when the valve is open)	
9. Obtains 2D measurements of the aortic root (There is no package on the machine. Caliper the Sinus of Valsalva, Sinotubular junction & Ascending aorta when the valve is closed)	

10. Obtains Parasternal Long-Axis of the RVIT (Cine Loop)	
11. Properly places color over the TV (adjusts color box, color gain/scale)	
12. Obtains TV Doppler (CW) ONLY measure TR if seen and obtain RVSP (Use tricuspid valve package, then TR max + RAP)	
13. Obtains RVOT view (Cine Loop)	
14. Properly places color over the PV (adjusts color box, color gain/scale) (Cine Loop)	
15. Obtains PV Doppler (CW) ONLY measure PR PHT slope if seen (Use the pulmonic package, then PR PHT measurement to measure the PR slope)	
16. Obtains Parasternal Short-Axis of the Aortic Valve	
17. Properly Magnifies (Zoom) the AV (Color AOV in Cine Loop)	
18. In the SAX AO view / Properly places color over the PV (adjusts color box, color gain/scale)	
19. Measure RVOT diameter (Use dimensions' package, then RVOT diameter) (You can use color flow to help outline the RVOT)	
20. PW RVOT. Trace RVOT velocity (Use the pulmonic valve package, pick RVOT trace)	
21. CW through PV. Trace PV velocity / PVA noted (Use the pulmonic valve package, pick PV trace)	
22. In the SAX AO view / Places Color over TV	
23. Obtains TV Doppler (CW) ONLY measure TR if seen and obtain RVSP (Use tricuspid valve package, then TR max + RAP)	
24. Obtains Parasternal Short-Axis of the MV (Cine Loop)	
25. Obtains Parasternal Short-Axis of the LV (Papillary level) (Cine Loop)	
26. Obtains Apical Four-Chamber (Cine Loop)	
27. Properly places color on the MV (adjusts color gain/scale)	
28. Obtains PW at MV leaflet tips. Measure E/A velocity & Deceleration slope (Use the MV package, pick the E/A ratio. Measure peak of E wave, Deceleration slope & peak the A wave)	
29. Obtains CW through MV. Measures PHT, Mean PG with MVA noted (Use the Mitral valve package, pick MV trace, trace the E and A wave. Pick the MV PHT package. Measure the PHT slope)	
30. Obtains CW through MV for Assessment of MR (show MR spectral waveform)	
31. In the Apical Four-Chamber / Properly places color on the TV (adjusts color gain/scale)	
32. Obtains PW at TV leaflet tips. Measure E/A velocity & Deceleration slope (Use the TV package, pick the E/A ratio. Measure peak of E wave, Deceleration slope & peak the A wave)	
33. Obtains CW through TV. Measures PHT, Mean PG with TVA noted (Use the Tricuspid valve package, pick TV trace, trace the E and A wave. Pick the TV PHT package. Measure the PHT slope)	
34. Assessment of RVSP if seen (Use tricuspid valve package, then TR max + RAP)	
35. Obtains Apical Five Chamber (Cine Loop)	
36. Properly places color on the AV (adjusts color gain/scale)	
37. Obtains PW above Aortic valve for LVOT velocity. Measures LVOT velocity (Use the Aortic valve package. Pick LVOT trace)	
38. Obtains CW through the Aortic valve for AV velocity. Measures AV velocity. AVA noted	

(Use the Aortic valve package. Pick AV trace)	
39. Obtains Apical Two-Chamber (Color MV in Cine Loop)	
40. Obtains Apical Three-Chamber (Cine Loop)	
41. Properly places color on AV & MV (adjusts color gain/scale)	
42. Obtains Subcostal Four-Chamber	
43. Properly places color on the Interatrial Septum and Interventricular Septum	
44. Obtains IVC (Cine Loop)	
45. Properly places color on IVC & Hepatic veins (adjusts color gain/scale)	
46. Performs sniff test on IVC	
47. Obtains Abdominal Aorta view	
48. Properly places color on Abdominal Aorta (adjusts color gain/scale)	
49. Obtain Aorta from Suprasternal notch	
50. Places Color over Ascending & Descending Aorta (Cine Loop)	

(Time allotted: 60 minutes)

Average Score: _____/65

Clinical Coordinator signature: _____

ECHO CLINICAL CONFERENCE III

Student Name: _____ Date: _____
Machine #_____ Patient ID#_____

Performance Objectives	
1. Properly sets up machine/room for exam/ provides a clean environment for patient	
2. Obtains and evaluates patient information	
3. Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc	
4. Responds to patient needs/requests appropriately and respectfully / Professional Conduct	
5. Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
6. Makes the patient feel comfortable / Pillow & Climate	
7. Respects the patient's right to privacy	
8. Properly connects patient to EKG leads	
9. Labels the images correctly, including patient information & exam annotation	
10. Adjusts the proper physics instrumentation relating to each case including Depth, 2D Gain, TGC, Focusing, Color gain, Magnification, Field of View, Power, & Measurements	
11. Identifies & Differentiates normal & abnormal anatomy	
12. Follows protocol	
13. Uses appropriate body mechanics when scanning and moving patient	
14. Utilizes universal precautions pre & post examination, properly cleans transducer and readies room for next patient	
15. Selects the correct transducer(s) / Presets	
ECHO PROTOCOL	
1. Obtains PLAX of LV	
2. Zoom on AV & MV	
3. Properly places color on the MV & AV (adjusts color gain/scale)	
4. Obtains AV M-mode and correctly measures (Ao Root, ACS, LA) (Use the AO/LA measurement package)	
5. Obtains MV M-mode and correctly measures (D-E, E-F, EPSS) (Use the MV measurement package. Pick the D-E measurement, then follow E-F slope. Pick the EPSS measurement)	
6. Obtains LV M-mode and correctly measures Diastole & Systole with EF% (Use the RV/LV Package, pick LV study)	
7. Measure RV/ LV 2D measurement Diastole & Systole with EF% (Use the RV/LV Package, measure RV & LV during diastole, then systole)	
8. Obtains 2D measurements of the LVOT diameter (Use the dimension's package, then pick LVOT diameter. Measure when the valve is open)	
9. Obtains 2D measurements of the aortic root (There is no package on the machine. Caliper the Sinus of Valsalva, Sinotubular junction & Ascending aorta when the valve is closed)	

10. Obtains Parasternal Long-Axis of the RVIT (Cine Loop)	
11. Properly places color over the TV (adjusts color box, color gain/scale)	
12. Obtains TV Doppler (CW) ONLY measure TR if seen and obtain RVSP (Use tricuspid valve package, then TR max + RAP)	
13. Obtains RVOT view (Cine Loop)	
14. Properly places color over the PV (adjusts color box, color gain/scale) (Cine Loop)	
15. Obtains PV Doppler (CW) ONLY measure PR PHT slope if seen (Use the pulmonic package, then PR PHT measurement to measure the PR slope)	
16. Obtains Parasternal Short-Axis of the Aortic Valve	
17. Properly Magnifies (Zoom) the AV (Color AOV in Cine Loop)	
18. In the SAX AO view / Properly places color over the PV (adjusts color box, color gain/scale)	
19. Measure RVOT diameter (Use dimensions' package, then RVOT diameter) (You can use color flow to help outline the RVOT)	
20. PW RVOT. Trace RVOT velocity (Use the pulmonic valve package, pick RVOT trace)	
21. CW through PV. Trace PV velocity / PVA noted (Use the pulmonic valve package, pick PV trace)	
22. In the SAX AO view / Places Color over TV	
23. Obtains TV Doppler (CW) ONLY measure TR if seen and obtain RVSP (Use tricuspid valve package, then TR max + RAP)	
24. Obtains Parasternal Short-Axis of the MV (Cine Loop)	
25. Obtains Parasternal Short-Axis of the LV (Papillary level) (Cine Loop)	
26. Obtains Apical Four-Chamber (Cine Loop)	
27. Properly places color on the MV (adjusts color gain/scale)	
28. Obtains PW at MV leaflet tips. Measure E/A velocity & Deceleration slope (Use the MV package, pick the E/A ratio. Measure peak of E wave, Deceleration slope & peak the A wave)	
29. Obtains CW through MV. Measures PHT, Mean PG with MVA noted (Use the Mitral valve package, pick MV trace, trace the E and A wave. Pick the MV PHT package. Measure the PHT slope)	
30. Obtains CW through MV for Assessment of MR (show MR spectral waveform)	
31. Obtains pulmonary vein flow in the Apical 4 or 5 chamber view. Place PW sample volume in pulmonary vein	
32. Obtains Tissue Doppler of septal and lateral wall in the Apical 4 chamber view. Use mitral valve package measure e' wave	
33. In the Apical Four-Chamber / Properly places color on the TV (adjusts color gain/scale)	
34. Obtains PW at TV leaflet tips. Measure E/A velocity & Deceleration slope (Use the TV package, pick the E/A ratio. Measure peak of E wave, Deceleration slope & peak the A wave)	
35. Obtains CW through TV. Measures PHT, Mean PG with TVA noted (Use the Tricuspid valve package, pick TV trace, trace the E and A wave. Pick the MV PHT package. Measure the PHT slope)	
36. Assessment of RVSP if seen (Use tricuspid valve package, then TR max + RAP)	
37. Obtains TAPSE M mode measurement. Use the Apical 4 chamber view, Place M-mode cursor between the RV free wall and the lateral annulus of the TV. Use caliper to measure systolic excursion	

38. Obtains Apical Five Chamber (Cine Loop)	
39. Properly places color on the AV (adjusts color gain/scale)	
40. Obtains PW above Aortic valve for LVOT velocity. Measures LVOT velocity (Use the Aortic valve package. Pick LVOT trace)	
41. Obtains CW through the Aortic valve for AV velocity. Measures AV velocity. AVA noted (Use the Aortic valve package. Pick AV trace)	
Measures Aortic regurgitation (if seen) using CW. Use the Aortic package / AR PHT slope	
42. Obtains Apical Two-Chamber in 2D and in Color (Cine Loop)	
43. Obtains Apical Three-Chamber (Cine Loop)	
44. Properly places color on AV & MV (adjusts color gain/scale)	
45. Obtains Subcostal Four-Chamber	
46. Properly places color on the Interatrial Septum and Interventricular Septum	
47. Obtains IVC (Cine Loop)	
48. Properly places color on IVC & Hepatic veins (adjusts color gain/scale)	
49. Performs sniff test on IVC	
50. Obtains Abdominal Aorta view	
51. Properly places color on Descending Aorta (adjusts color gain/scale)	
52. Obtain Aorta from Suprasternal notch (Cine Loop)	
53. Places Color over Ascending & Descending Aorta (Cine Loop)	

(Time allotted: 60 minutes)

Average Score: _____/68

Clinical Coordinator signature: _____

ECHO EXIT EXAM

Student Name: _____ Date: _____
Machine #_____ Patient ID#_____

Performance Objectives	
1. Properly sets up machine/room for exam/ provides a clean environment for patient	
2. Obtains and evaluates patient information	
3. Introduces self to patient and verifies patient name, addressing as Mr., Mrs., etc	
4. Responds to patient needs/requests appropriately and respectfully / Professional Conduct	
5. Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
6. Makes the patient feel comfortable / Pillow & Climate	
7. Respects the patient's right to privacy	
8. Properly connects patient to EKG leads	
9. Labels the images correctly, including patient information & exam annotation	
10. Adjusts the proper physics instrumentation relating to each case including Depth, 2D Gain, TGC, Focusing, Color gain, Magnification, Field of View, Power, & Measurements	
11. Identifies & Differentiates normal & abnormal anatomy	
12. Follows protocol	
13. Uses appropriate body mechanics when scanning and moving patient	
14. Utilizes universal precautions pre & post examination, properly cleans transducer and readies room for next patient	
15. Selects the correct transducer(s) / Presets	
ECHO PROTOCOL	
1. Obtains PLAX of LV	
2. Zoom on AV & MV	
3. Properly places color on the MV & AV (adjusts color gain/scale)	
4. Obtains AV M-mode and correctly measures (Ao Root, ACS, LA) (Use the AO/LA measurement package)	
5. Obtains MV M-mode and correctly measures (D-E, E-F, EPSS) (Use the MV measurement package. Pick the D-E measurement, then follow E-F slope. Pick the EPSS measurement)	
6. Obtains LV M-mode and correctly measures Diastole & Systole with EF% (Use the RV/LV Package, pick LV study)	
7. Measure RV/ LV 2D measurement Diastole & Systole with EF% (Use the RV/LV Package, measure RV & LV during diastole, then systole)	
8. Obtains 2D measurements of the LVOT diameter (Use the dimension's package, then pick LVOT diameter. Measure when the valve is open)	
9. Obtains 2D measurements of the aortic root (There is no package on the machine. Caliper the Sinus of Valsalva, Sinotubular junction & Ascending aorta when the valve is closed)	

10. Obtains Parasternal Long-Axis of the RVIT (Cine Loop)	
11. Properly places color over the TV (adjusts color box, color gain/scale)	
12. Obtains TV Doppler (CW) ONLY measure TR if seen and obtain RVSP (Use tricuspid valve package, then TR max + RAP)	
13. Obtains RVOT view (Cine Loop)	
14. Properly places color over the PV (adjusts color box, color gain/scale) (Cine Loop)	
15. Obtains PV Doppler (CW) ONLY measure PR PHT slope if seen (Use the pulmonic package, then PR PHT measurement to measure the PR slope)	
16. Obtains Parasternal Short-Axis of the Aortic Valve	
17. Properly Magnifies (Zoom) the AV (Color AOV in Cine Loop)	
18. In the SAX AO view / Properly places color over the PV (adjusts color box, color gain/scale)	
19. Measure RVOT diameter (Use dimensions' package, then RVOT diameter) (You can use color flow to help outline the RVOT)	
20. PW RVOT. Trace RVOT velocity (Use the pulmonic valve package, pick RVOT trace)	
21. CW through PV. Trace PV velocity / PVA noted (Use the pulmonic valve package, pick PV trace)	
22. In the SAX AO view / Places Color over TV	
23. Obtains TV Doppler (CW) ONLY measure TR if seen and obtain RVSP (Use tricuspid valve package, then TR max + RAP)	
24. Obtains Parasternal Short-Axis of the MV (Cine Loop)	
25. Obtains Parasternal Short-Axis of the LV (Papillary level) (Cine Loop)	
26. Obtains Apical Four-Chamber (Cine Loop)	
27. Properly places color on the MV (adjusts color gain/scale)	
28. Obtains PW at MV leaflet tips. Measure E/A velocity & Deceleration slope (Use the MV package, pick the E/A ratio. Measure peak of E wave, Deceleration slope & peak the A wave)	
29. Obtains CW through MV. Measures PHT, Mean PG with MVA noted (Use the Mitral valve package, pick MV trace, trace the E and A wave. Pick the MV PHT package. Measure the PHT slope)	
30. Obtains CW through MV for Assessment of MR (show MR spectral waveform)	
31. Obtains pulmonary vein flow in the Apical 4 or 5 chamber view. Place PW sample volume in pulmonary vein	
32. Obtains Tissue Doppler of septal and lateral wall in the Apical 4 chamber view. Use mitral valve package measure e' wave	
33. In the Apical Four-Chamber / Properly places color on the TV (adjusts color gain/scale)	
34. Obtains PW at TV leaflet tips. Measure E/A velocity & Deceleration slope (Use the TV package, pick the E/A ratio. Measure peak of E wave, Deceleration slope & peak the A wave)	
35. Obtains CW through TV. Measures PHT, Mean PG with TVA noted (Use the Tricuspid valve package, pick TV trace, trace the E and A wave. Pick the MV PHT package. Measure the PHT slope)	
36. Assessment of RVSP if seen (Use tricuspid valve package, then TR max + RAP)	
37. Obtains TAPSE M mode measurement. Use the Apical 4 chamber view, Place M-mode cursor between the RV free wall and the lateral annulus of the TV. Use caliper to measure systolic excursion	

38. Obtains Apical Five Chamber (Cine Loop)	
39. Properly places color on the AV (adjusts color gain/scale)	
40. Obtains PW above Aortic valve for LVOT velocity. Measures LVOT velocity (Use the Aortic valve package. Pick LVOT trace)	
41. Obtains CW through the Aortic valve for AV velocity. Measures AV velocity. AVA noted (Use the Aortic valve package. Pick AV trace)	
Measures Aortic regurgitation (if seen) using CW. Use the Aortic package / AR PHT slope	
42. Obtains Apical Two-Chamber in 2D and in Color (Cine Loop)	
43. Obtains Apical Three-Chamber (Cine Loop)	
44. Properly places color on AV & MV (adjusts color gain/scale)	
45. Obtains Subcostal Four-Chamber	
46. Properly places color on the Interatrial Septum and Interventricular Septum	
47. Obtains IVC (Cine Loop)	
48. Properly places color on IVC & Hepatic veins (adjusts color gain/scale)	
49. Performs sniff test on IVC	
50. Obtains Abdominal Aorta view	
51. Properly places color on Descending Aorta (adjusts color gain/scale)	
52. Obtain Aorta from Suprasternal notch (Cine Loop)	
53. Places Color over Ascending & Descending Aorta (Cine Loop)	

(Time allotted: 60 minutes)

Average Score: _____/68

Clinical Coordinator signature: _____

CLINICAL CONFERENCE I, II, III/EXIT EXAM

COMPLETE ABDOMEN

Student Name: _____ Date: _____
Machine #_____ Patient ID#_____

Performance Objectives	
FUNDAMENTALS OF SONOGRAPHIC PRINCIPLES	
• Properly sets up machine/room for exam/ provides a clean environment for a patient (PRE / POST)	
• Introduces self to a patient and verifies patient name, addressing as Mr., Mrs., etc.	
• Interacts with patient appropriately/Gives proper exam explanation and any necessary changing instructions	
• Makes the patient fell comfortable / Pillow & Climate	
• Respects the patient's right to privacy	
• Responds to patient needs/requests appropriately and respectfully / Professional Conduct	
• Selects the correct transducer(s) / Presets	
• Controls transducer properly/demonstrates hand-eye coordination/images are on axis	
• Uses appropriate body mechanics when scanning and moving patient	
• Identifies & differentiates normal & abnormal anatomy	
• Appropriately labeled all images with correct planes	
• Follows protocol	
• Utilizes universal precautions pre & post examination	
PANCREAS	
13. Pancreas TRANS with splenic vein	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. And #3 Pancreas head, body, and tail TRANS (take multiple pictures if needed)	

16. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
17. Pancreas head, SAG	
18. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
19. Pancreas neck SAC	
20. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
21. Pancreas body SAG	
22. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
23. Pancreas tail SAG	
24. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
LIVER	
33. **Left Lobe – Lateral SAG**	
34. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
35. Left Lobe Medial SAG	
36. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
37. **Left Lobe with Aorta SAG**	
38. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
39. **Left Lobe – Caudate SAG**	
40. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
41. **Left Lobe with IVC SAG**	
42. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
43. **Right lobe, Gallbladder, Main Lobar fissure, Portal vein**	

44. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
45. **Right Lobe with Right Kidney SAG**	
46. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
47. **Right Lobe with measurement SAG**	
48. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
49. **Right Lobe – Lateral SAG**	
50. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
51. **Left lobe and its lateral margin TRANS**	
52. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
53. **Left LOBE to include the ligamentum teres**	
54. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
55. **Porta Hepatis with MPV, HA, and CBD**	
56. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
57. **Right Lobe with Hepatic Veins TRANS**	
58. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
59. **Right lobe to include the right and left branches of the portal vein**	
60. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
61. **Right Lobe with right Kidney and Gallbladder TRANS**	
62. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
63. **Right lobe with diaphragm**	

64. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
GALLBLADDER	
13. **GB SAG - including neck, body, and fundus LLD**	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. **GB TRANS NECK LLD**	
16. GB TRANS BODY LLD	
17. GB TRANS FUNDUS LLD	
18. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
19. **GB wall thickness TRANS**	
20. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
21. **CBD with measurement**	
22. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
23. **Supine GB SAG (including neck, body, and fundus)**	
24. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
RIGHT KIDNEY	
17. **Kidney midline/ long axis/ SAG**	
18. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
19. **Kidney midline SAG with measurements**	
20. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
21. **Kidney medial SAG**	
22. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
23. **Kidney lateral SAG**	

24. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
25. **Kidney midline SAG with Color**	
26. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
27. **Kidney midline at hilumTRANS with and without a measurement (optional with color)**	
28. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
29. **Kidney superior pole TRANS**	
30. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
31. **Kidney inferior pole TRANS**	
32. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
SPLEEN	
9. Spleen SAG with measurements (two measurements)	
10. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
11. Spleen TRANS with measurement (third measurement)	
12. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
13. Spleen SAG with color flow	
14. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
15. Spleen with Left Kidney	
16. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
LEFT KIDNEY	
17. **Kidney midline/ long axis/ SAG**	

18. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
19. **Kidney midline SAG with measurements**	
20. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
21. **Kidney medial SAG**	
22. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
23. **Kidney lateral SAG**	
24. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
25. Kidney midline SAG with Color	
26. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
27. **Kidney midline at hilum TRANS with and without a measurement (optional with color)**	
28. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
29. **Kidney superior pole TRANS**	
30. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
31. **Kidney inferior pole TRANS**	
32. Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	

Students must obtain a passing score of 75% to pass (70 points minimum) **Score: _____/96**

Instructor comments: _____

_____

Instructor Signature: _____ Date: _____

CLINICAL CONFERENCE II,III /EXIT EXAM

GYN/PELVIC

Student Name: _____ Date: _____

Machine # _____ Patient ID#_____ Clinical Conference:_____

Performance Objectives	Score
OVERALL	---
Appropriately labeling all images along with correct planes	
Identified any abnormal pathology	
UTERUS	---
Uterus SAG midline	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus SAG midline with measurement	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Endometrium SAG with measurement	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus SAG lateral right	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus SAG lateral left	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
TRANS Vagina	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
TRANS Cervix	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus TRANS inferior	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus TRANS mid with measurement	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Uterus TRANS superior	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
RIGHT OVARY	---
Ovary SAG	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary SAG with measurements	

Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary TRANS	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary TRANS with measurement	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary with Color	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
LEFT OVARY	**---**
Ovary SAG	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary SAG with measurements	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary TRANS	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary TRANS with measurement	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
Ovary with Color	
Adjusts the proper physics instrumentation relating to each case including Depth, Gain, TGC, Focusing, Magnification, Field of View, Power, & Measurements	
SAG RIGHT ADNEXA	
SAG LEFT ADNEXA	

(Time allotted: 30 minutes)

Average Score: _____/44

Clinical Coordinator Signature: _____ Date: _____

Cambridge College of Healthcare & Technology
5150 Linton Blvd, Suite #340,
Delray Beach, FL 33484
Phone: (561)381-4990 Fax: (561) 381-4992
www.cambridgehealth.edu

Incident Report

Student: _____ Date:

_____

Instructor: _____ Program: _____

Date and time of Incident:

_____

Describe the incident (include location and names of participants):

_____

_____

_____

_____

_____

_____

_____

_____

_____

Describe injuries, if sustained:

_____

_____

_____

Action taken at the time of the incident or immediately following: _____

_____

_____

_____

_____

_____

_____

Witnesses: _____

_____

_____

****PROGRAM DEAN AND/OR CAMPUS DEAN MUST BE NOTIFIED IMMEDIATELY****

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Pregnancy Note

Date: _____

Please note that _____ is currently enrolled in the Diagnostic Medical Sonography Program at Cambridge College of Healthcare & Technology, 5150 Linton Blvd, Suite 340, Delray Beach, Florida 33484.

As a student in this program, it is required that a minimum of 30 hours per week of clinical externship be completed. This required the student to be standing for 8 hours per day and possibly be exposed to patients with a variety of illnesses, diseases and/or bacteria. The student may be required to move or lift patients which could be physically demanding and we are aware that all of the above mentioned offer a different degree of danger to the mother or fetus.

The student has opted to continue in our program throughout her pregnancy, which will require all the demands required in the curriculum, as stated above. We require physician approval for the student to remain in the program during her pregnancy. This approval must either be given to us on a prescription pad or on physician letterhead.

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CONFIDENTIALITY STATEMENT

Cambridge College of Healthcare & Technology is committed to the support and maintenance of the policies at their clinical training affiliates concerning the Health Insurance Portability and Accountability Act of 1996 and its related regulations ("HIPAA"). All institutions are required to safeguard the privacy of their patients and to protect the confidentiality and security of patient information. In the course of your duties as a **Diagnostic Medical Sonography** student at Cambridge College you may be given access to ***confidential information*** about patients (including people who choose to participate in research), employees, students, other individuals, or the institution itself. ***Confidential information*** or data is defined as any information where the individual, hospital or physician is named or otherwise identifiable. By signing this statement, you acknowledge that your access to ***confidential information*** is for the purpose of performing your responsibilities as a **Diagnostic Medical Sonography** trainee in one of Cambridge College's clinical affiliates, and for no other purpose.

1. I will look at and use only the information I need to care for my patients or do my job. I will not look at patient records or seek other ***confidential information*** that I do not need to perform my job. I understand that in accordance with state and federal law the institution where I am in clinical training audits access to **P**rotected **H**ealth **I**nformation (PHI) to determine whether this rule is followed.
2. I understand that patient information or any other ***confidential information*** is not to be shared with anyone who does not have an official need to know. I will be especially careful not to share this information with others in casual conversation.
3. I will handle all records-both paper and electronic-with care to prevent unauthorized use or disclosure of confidential information. I understand that I am not permitted to remove confidential information from my work area. I also understand that I may not copy medical records or remove them from the patient floors or the Medical Records Department unless authorized to do so.
4. Because electronic messages may be intercepted by other people, I will not use e-mail to send individually identifiable PHI to patients unless authorized by those patients. Authorization may be on paper (a statement signed by the patient) or implied (a patient's e-mail request for such information.)
5. If I no longer need ***confidential information***, I will dispose of it in a way that ensures that others will not see it in accordance with the institution's Destruction of Confidential Waste policy.
6. If I am involved in research, any research utilizing patient information will be performed in accordance with federal and state regulations and local Review Board (RB) policies of the institution where I am in clinical training.
7. If my responsibilities include sharing institutional ***confidential information*** with outside parties such as ambulance driver, home care providers, insurance companies, or research sponsors, I will use only processes and procedures approved by the institution for sharing such information.
8. Any passwords, verification codes, or electronic signature codes assigned to me are equivalent to my personal signature:
   a. They are intended for my use only
   b. I will not share them with anyone or let anyone else use them
   c. I will not learn or use the passwords, verification codes, or electronic signature codes of others.
9. If I find that someone has been using my passwords or codes, or if I learn that someone else is using passwords or codes improperly, I will immediately notify my clinical supervisor. I understand that if I allow another person to use my codes, I will be held accountable.
10. I will handle all confidential information stored on a computer or downloaded to diskettes or CDs with care to prevent unauthorized access to, disclosure of, or loss of this information.
11. I understand that the confidential information and software I use for my clinical training are not to be used for personal benefit or to benefit another unauthorized institution. I also understand that the institution where I am doing my clinical training may inspect the computers it owns, as well as personal PCs used for work, to ensure that its data software is used according to its policies and procedures.

I hereby acknowledge that I understand the contents of this CONFIDENTIALITY STATEMENT.

Printed name: _____ Campus/Program/Start Date: _____

Signature: _____ Date: _____

Cambridge College of Healthcare & Technology

Technical Standards

Diagnostic Medical Sonography at Cambridge College has established technical standards that must be met by the student.

The student must be able to:

- •Stand upright for at least 30 minutes at a time.
- •Communicate in a clear and concise manner to patients and people in various departments.
- •Read and apply appropriate instructions in all aspects of procedure performance.
- •Lift at least fifty (50) pounds of weight.
- •Move immobile patients from stretcher or wheelchair to ultrasound table.
- •Push standard wheelchair or stretcher from waiting area to procedure room.
- •Maneuver ultrasound unit.
- •Understand and apply clinical instructions given by faculty and department personnel.
- •Utilize keyboard on ultrasound machine and other computers.
- •Visually monitor patients in dimmed light.
- •Hear various equipment and background sounds during equipment operations.

I_____ (print name), verify that I have read the above technical standards and am capable of performing all standards as described.

_____ _____

Signature Date

Cambridge College of Healthcare & Technology
5150 Linton Boulevard, Suite 340
Delray Beach, FL 33484
(P)561-381-4990 (F)561-381-4992

5669 Peachtree Dunwoody Rd, Ste 100
Atlanta, GA 30342
(P)404-255-4500 (F)404-255-4503

Cambridge Institute of Allied Health & Technology
460 East Altamonte Drive, 3rd Floor
Altamonte Springs, FL 32701
(P)407-265-8383 (F)407-265-8384

AUTHORIZATION FOR ULTRASOUND IMAGING

As a student in the Diagnostic Medical Sonography Program at Cambridge Institute of Allied Health & Technology, I realize that as part of certain curricular, it will benefit my education to perform Ultrasound scans on other students as well as receive Ultrasound scans on myself.

However, I _____ understand that being scanned via Ultrasound as a patient by my fellow students and or Instructors in the Ultrasound Lab is voluntary and for educational purposes only. Participation or non-participation in the aforementioned scanning process cannot affect my grade(s) and evaluation(s). **Grades are based on the criteria published in the syllabi.**

Please initial one of the two choices below:

_____ I volunteer to be scanned via Ultrasound as a patient during lab for other students and or an instructor. There will be no effect on my grades.

_____ I DO NOT want to participate as a volunteer/patient regarding the aforementioned scanning process. There will be no effect on my grades.

Please initial/acknowledge the statement below:

_____ I further acknowledge that it is the responsibility of the DMS program to provide a volunteer/patient or alternate simulated experience for the Ultrasound scan lab.

I fully understand and agree to all of the aforementioned information.

Student Printed Name _____

Student Signature _____ Date _____

Program Director Signature _____ Date _____

Cambridge College of Healthcare & Technology
Clinical Placement Policy & Procedures

Clinical placements are structured to ensure the achievement of the DMS program's goals and outcomes. Clinical placement Matrices are composed to meet the CAAHEP programmatic standards of:

III. Resources

A. Type and amount

2. Clinical affiliates must provide each student access to adequate numbers and variety of types of diagnostic medical examinations to develop clinical competency in both normal and abnormal findings for the learning concentrations(s) being offered.

Programs should provide students with a variety of patient care settings in which sonographic procedures are performed on in-patients and outpatients. These settings may include the following: Ambulatory care facilities, specialty centers, Emergency/trauma, Intensive/critical/coronary care, Surgery, Angiography/cardiac catheterization.

Clinical Placement Procedures:

- All students are required to attend Clinical Orientation on campus with the DMS Clinical Coordinators.
- Prior to clinical placement of DMS A 2010 Clinical I, students are responsible for the following clinical documentation: Please refer to **Exhibit A**.
    - Medical Form
    - Drug Screening
    - Background Check
    - VECHS Fingerprinting
    - CPR American Heart Association (CPR classes are held on campus)
- All Drug Screenings, Background Checks, and Fingerprinting are verified through Complio (American DataBank) prior to clinical placement.
- Clinical Coordinators will schedule CPR class on campus every semester.
- Clinical placement schedules are finalized upon confirmed receipt from clinical affiliate department managers.
- Each semester all clinical schedules are compiled in a clinical rotation matrix by the DMS Clinical Coordinators to ensure concentration thresholds are met.
- All clinical schedules are entered into the Core ELMS 21 days prior to the start of each rotation. An electronic notification is delivered from the Core ELMS system to each student's Cambridge email with the details of their clinical placement schedule. Please refer to **Exhibit B**.
- Clinical placements are determined by the following factors:
    - Program Curriculum Schedule
    - Outstanding Competencies
    - Daily Logs (hands on experience in each modality, i.e., Echocardiography, Abdomen, OB/GYN)

Exhibit A:

Cambridge College of Healthcare & Technology

5150 Linton Blvd, Suite 340 Delray Beach, FL 33484
Telephone: (561) 381- 4990 Fax: (561) 381- 4992

MEDICAL FORM

This Medical Report Form is to be completed by a physician and returned promptly to the Institute.

ALL LISTED REQUIREMENTS MUST BE FULFILLED

Student Name _____ Date of Birth _____/_____/_____
Exam Date _____/_____/_____ Height _____ Weight _____ BP _____ Pulse _____
Visual Activity: Left Eye _____ Right Eye _____
Previous Health (Please list):
Illnesses _____
Hospitalizations _____
Injuries _____
Current Medication _____

PPD Mantoux Skin testing (**within 6months**) Date_____/_____/_____ Result _____
If PPD is positive, Chest X-Ray Date_____/_____/_____ Result _____ ***Attach CXR results***
INH Therapy and Date_____/_____/_____ _____
Place or Agency _____

Tetanus-Diphtheria Vaccine (within last 10 years) Date Vaccinated ___/___/___
Tetanus- Diphtheria and Pertussis (TDaP)Vaccine ___/___/___

MMR Vaccine Date ___/___/___, ____/___/____

Measles-Titer/Vaccine Date_____/_____/_____, ____/____/____
Titer Result _____ ☐ Immune ☐ Not Immune
Place or Agency _____

Mumps-Titer/Vaccine Date_____/_____/_____, ____/____/____
Titer Result _____ ☐ Immune ☐ Not Immune
Place or Agency _____

Rubella-Titer/Vaccine Date_____/_____/_____ ,____/____/____
Titer Result _____ ☐ Immune ☐ Not Immune
Place or Agency _____

Varicella Dx/Vaccine (Chicken Pox) Date_____/_____/____, ____/____/____
Titer Result _____ ☐ Immune ☐ Not Immune
Place or Agency _____

Hepatitis B Vaccination Series (Series is a requirement unless proof of immunity is documented)
HBV #1 Date_____/_____/____
HBV #2 Date_____/_____/____ or ☐ Immune or ☐ Signed HBV declination
HBV #3 Date_____/_____/____
Flu shot (During 10/1-5/1) _____
Covid-19 Date_____/_____/____, ____/____/____ OR ____/____/____

List any limitation for work in a hospital/clinical setting: _____
_____

I certify that the above-named patient is free of communicable disease, able to work full-duty, no restrictions and able to perform all aspects of the job. I also certify that the individual is able to drive long distances.

Name of Physician (please print) _____
Signature of Physician _____ Date _____/_____/_____
Telephone _____ Address _____
Physician Office stamp:

complio
by American DataBank

Cambridge College of Healthcare & Technology

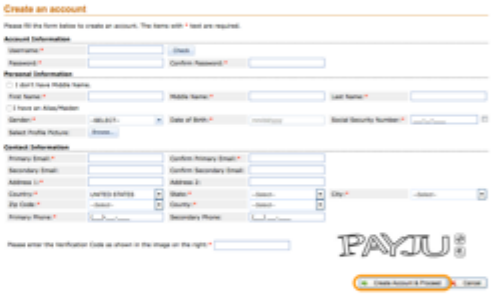
Complio Order Process

Cambridge College has partnered with American DataBank and the Complio system to provide background check, drug screening, and FBI fingerprinting for their students. Please follow the next steps to place your order.

Create an Account

Step 1 Go to http://cambridgehealthscreening.com, click on New Users (Create An Account)

Step 2 Complete the required information and click on Create Account & Proceed



Step 3 Check your email for an activation email and click on the link to activate your account.

Place an Order

Step 1 Go to http://cambridgehealthscreening.com, click on Existing Users (Click Here to Login)

Questions? Call 1-800-200-0853 or Email complio@americandatabank.com ©American DataBank LLC.

Step 2 Sign in, close the popup window and click on **Get Started**

Step 3 Select your **Campus** and **Program** then click on **Load Packages**

Step 4 Select the **Level 2 Background Check Package** and click **Next**

Follow the instructions and continue the purchase process until the order is complete.

Note: All orders that include a drug screen service will have the registration form automatically sent to your email.

Note: All orders that include an FBI fingerprint service will have additional instructions automatically sent to your email.

Additional Resources

Video Tutorials
Log into Complio, click on **Video Tutorials** in Top Menu

Live Chat & Email
Log into Complio, click on **Get Help**

Phone Support
1-800-200-0853 (Mon-Fri 9am-8pm EST, Sat 10am-7pm)

Questions? Call 1-800-200-0853 or Email complio@americandatabank.com ©American DataBank LLC.

Exhibit B:

Scheduling Message from Cambridge College of Healthcare & Technology

A new rotation schedule was created for you for Cambridge College of Healthcare & Technology.

Rotation Date: Summer 2 2018 (07-09-18 to 08-31-18)
Rotation Type: Clinical Rotation IV

Student: - Diagnostic Medical Sonography - Delray, FL
Student Email: @myemail.cambridgehealth.edu

Preceptor: Mary Ann Jacobsen
Site: Cleveland Clinic
Preceptor Email:

Daily Schedule: Th-F (8:00am-4:00pm)

Schedules are subject to last minute change due to site availability, you will be notified should these changes occur.

Best Regards,
Cambridge College of Healthcare & Technology

Jorge Valdes, jvaldes@cambridgehealth.edu

Account Login: https://www.corehighered.com/login-elms.php

Sonography classes are held on campus and scheduled on various days Monday thru Friday. Online classes are scheduled as per the student requirement meaning some classes are pre-requisites to entering the program.

The curriculum is in fact subject to change at any time during the program.

Clinical

Clinical rotations require 100% participation.

Clinical sites may be up to **100 miles from campus**.

Students must have reliable transportation to reach these sites.

Additional Costs and Considerations

1. Computer Knowledge with regular checks of Cambridge email account (Library available)
2. Pre-requisite classes if not transferring credits
3. Transfer of credit will be assessed with an official transcript
4. Liability insurance only
5. Clinical shift times (7am-11pm) Clinical rotations include day, evening, night and weekend hours
6. Uniforms—$30 /set---follow dress code policy in classroom & clinical—1 set included in tuition
7. Background check
8. Ultrasound Physics registry fee $250-Graduation Requirement
9. All other specialty registry testing approximately $ 275 per discipline (physics + specialty)
10. Professional Registry fee----annually—approximately $95
11. Professional organizations—optional--- (membership fees)

Websites to visit: ARDMS.org CCI-ONLINE.org CAAHEP.org SDMS.org AIUM.org

Applicant Signature_____ Date_____

Signature indicates acknowledgment of mandatory traveling to clinical sites up to 100 miles from the campus. Failure to satisfy this requirement may result in termination from the DMS program.

Program Director Signature_____ Date_____

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www.cambridgehealth.edu

DIAGNOSTIC MEDICAL SONOGRAPHY

STUDENT SIGNATURE SHEET

CLINICAL HANDBOOK

I, the undersigned, have read, fully understood and agree to comply with all the policies, regulations, procedures AND rules stated in the Clinical Rotation Policies and Procedures Handbook for the clinical portion of my education in the Diagnostic Medical Sonography program at Cambridge College.

I understand involvement in any infraction of any of these policies, regulation, procedures and protocols could lead to a disciplinary action.

NAME: (print): _____

SIGNATURE: _____

DATE: _____

IMPORTANT RULES AND REGULATIONS
(From the Institutional Catalog)

SEXUAL HARASSMENT

It is the policy of Cambridge College of Healthcare & Technology that conduct by any of its employees or students which may be interpreted as sexual harassment is prohibited and shall not be tolerated in the workplace or classroom. Additionally, any form of harassment based on age, race, religion, disability, national origin, color, marital status, sexual orientation or any protected class by or toward any employee or student of Cambridge College of Healthcare & Technology is prohibited. No one has the right to harass employees or students. Violations of this policy may result in severe disciplinary action and/or legal proceedings and may result in termination which shall not be subject in any manner whatsoever to any review by the Academic Affairs Committee. Cambridge College strives to provide a work/study environment which ensures that all employees and students are treated with dignity and respect.

DEFINITION

Broadly defined sexual harassment constitutes unwelcome sexual advances, request for sexual favors and other verbal or physical conduct of a sexual nature. This harassment can take two (2) forms, i.e., quid pro quo (this for that) and hostile environment harassment.

QUID PRO QUO HARASSMENT

1) Submission to such conduct is made, either explicitly or implicitly, as a condition of an individual's choice.
2) Submission to or rejection of such conduct by an individual is used as the basis for decisions affecting such individual.

HOSTILE WORK/STUDY ENVIRONMENT HARASSMENT

Such conduct has the effect of unreasonably interfering with an individual's work or study performance, creating an intimidating, hostile or offensive environment. The intent of the alleged harasser plays no part in this type of sexual harassment. Sexual harassment can take many forms which may involve verbal and/or non-verbal behavior. Such behavior is unacceptable at Cambridge College and all of its Clinical Affiliates. Examples of sexual harassment include, but are not limited to:

- touching another person, as well as comments, jokes, innuendoes and gestures of a sexual nature;
- suggestive or obscene letters and notes;
- displaying sexually suggestive objects, photographs, cartoons, or posters; threats or suggestions that a lack of sexual favors will result in reprisal, such as withholding work assignments or completing unsatisfactory performance evaluations; and
- impeding or blocking an individual's movements or any physical interference with normal work activities.

PROCEDURE

All instances of sexual harassment, whether on-campus or at a clinical site, should be immediately brought to the attention of your Program Dean or Clinical Coordinator, who will report the incident to the Campus Dean.

The Campus Dean will appoint the appropriate officer of Cambridge College of Healthcare & Technology to conduct a prompt confidential investigation of the claims as required by law. Instructors who receive complaints of sexual harassment either on-campus or at a clinical site must also immediately report the complaint to the Program Dean who shall refer the employee or student involved to the Campus Dean of Cambridge College in strict confidence.

If the investigation confirms the sexual harassment charge, disciplinary action (which may include termination) will promptly occur. If a complaint of sexual harassment is determined to be wrongfully brought against an employee or student, appropriate disciplinary action may be taken against the employee or student who wrongfully filed the complaint. Employees and students shall not be subject to retaliation of any sort when a complaint is being investigated or any time thereafter. Any such conduct shall also be brought to the immediate attention of the Campus Dean of Cambridge College and appropriate action shall be taken.

Florida Senate Bill 524 (Sexually Violent Predators)

Effective July 1, 2014, the Florida Department of Law Enforcement (FDLE) has a website in existence for sexual predator and sexual offender registry. The website and toll free telephone number are below:

FDLE website - http://offender.fdle.state.fl.us/offender/homepage.do
FDLE toll-free number - 1-888-357-7332 for TTY Accessibility - 1-877-414-7234

Safety in Private Spaces Act

Please be advised that on October 18, 2023, the State Board of Education approved new Rule 6E-7.001, Florida Administrative Code (F.A.C.), Designation of Restrooms and Changing Facilities in Private Postsecondary Educational Institutions. It is the responsibility as a licensed college or university (as defined in Section 1005.02(4), Florida Statutes (F.S.)), or an institution not under the jurisdiction or purview of the commission as identified in Section 1005.06(b)-(f), F.S., to review and be acquainted with the new rule and with Section 553.865, F.S., the Safety in Private Spaces Act, which the new rule implements. As of July 1, 2023, all CIE-licensed colleges and universities and institutions not under the jurisdiction or purview of the commission as identified in Section 1005.06(b)-(f), F.S., must ensure that (a) restrooms are designated for exclusive use by males or females, as defined in Section 553.865 (3), F.S., or that there is a unisex restroom; and (b) that changing facilities are designated for exclusive use by males or females, as defined in Section 553.865 (3), F.S., or that there is a unisex changing facility. (1) Purpose. The purpose of this rule is to provide requirements regarding restroom and changing facilities at colleges and universities licensed by the Commission for Independent Education and at institutions not under the jurisdiction or purview of the commission, as identified in s. 1005.06 (1)(b)-(f), Florida Statutes (F.S.) pursuant to s. 553.865, F.S. (2) Compliance. **Colleges and universities licensed by the Commission for Independent Education, and institutions not under the jurisdiction or purview of the commission, as identified in s. 1005.06(1)(b)-(f), F.S., must comply with all applicable requirements of s. 553.865, F.S., and update policies and procedures pertaining to the use of restrooms and changing facilities by males or females based on biological sex at birth.**

Conduct

- Students in violation of the Safety in Private Spaces Act Rule 6E-7.001 may be suspended while the violation is reviewed by College Review Committee. Once reviewed the decision is final, binding and conclusive

If you have any question, more detailed information about the new law and rule can be found on the Florida Legislature's website at leg.state.fl.us and the Commission's website at www.fldoe.org/policy/cie.