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American Society of Radiologic Technologists (ASRT)
1500 Central Avenue SE
Albuquerque, NM 87123-3917
Ph: (800) 444-2778 or (505) 298-4500

American Registry of Radiologic Technologists (ARRT)
1225 Northland Drive
St. Paul, MN 55120-1155
Ph: (651) 687-0048

American Registry of Diagnostic Medical Sonographers (ARDMS)
51 Monroe Street
Plaza East One
Rockville, MD 20850-2400
Ph: (800) 541-9754
e-mail: ardms.org

Society of Diagnostic Medical Sonographers (SDMS)
2745 Dallas Parkway, Suite 350
Plano, TX 75093-8730
Ph: (214) 473-8057
(800) 229-9506
e-mail: sdms.org
WELCOME

Welcome to the Radiologic Sciences Program. You are entering a paramedical career program that is interesting, diversified, and demanding. The program is designed to help you develop the knowledge and skills required to perform in a specialized area. Many subtle qualities besides knowledge and skills are required to complete the program successfully. An important personal quality that will be closely evaluated throughout your training is your ability to relate with the patient and to provide both physical and emotional support to the patient. Another quality or trait is your ability to work as part of a team and interact successfully with department and hospital personnel. Weaknesses spotted in any area of performance will be expected to be resolved promptly. Counseling will be arranged if problems are significant. Remember, the faculty wishes to assist you in preparing for your newly chosen profession.

PURPOSE OF HANDBOOK

This handbook is designed to serve as an informational guide to assist in the orientation of students to the Diagnostic Medical Sonography Clinical experience. General information that applies to all students in the Bachelor of Science in Radiologic Sciences Program is also provided in this handbook. All sections of the handbook are to be read and adhered to.

PROGRAM PURPOSE

The purpose of the Diagnostic Medical Sonography Specialization is to provide to qualified individuals adequate educational opportunity, both in theory and practice, to allow proficiency in the areas of abdominal and obstetric/gynecological ultrasonography.

PROGRAM PHILOSOPHY

The College of Applied Sciences and Arts seeks to inspire and cultivate vision through personal involvement of students with faulty and staff toward achieving technical expertise for success in a diverse and changing society. The Diagnostic Medical Sonography faculty subscribe and share in the mission of the college in philosophy, goals and objectives.
PROGRAM GOALS

Based on the above stated philosophy and available resources, the Diagnostic Medical Sonography Program will strive to attain the following goals:

- All applicants shall have equal opportunity to be accepted into the program.
- All students shall have equal opportunity to succeed when enrolled in the program.
- Acknowledging the dignity, worth, and individuality of the learner, faculty shall assume responsibility for the guidance of the learning activity.
- Faculty shall continually evaluate and modify curriculum requirements to comply with the Standards as defined by the accrediting agencies responsible for sonography programs and Southern Illinois University Carbondale.
- Graduates will be cognizant of Sonography as an art and science committed to serving humanity.
- Graduates will possess those skills necessary for entry-level sonography employment.
- Graduates will be professionally and morally obligated to life-long learning in an ever-changing field of diagnostic imaging.

PROGRAM OBJECTIVES

Upon completion of the Diagnostic Medical Sonography Program, the student shall possess the technical skills necessary to:

- Obtain, review, and process patient history and clinical data to obtain optimum diagnostic information.
- Perform appropriate sonographic procedures, recording anatomic, pathologic and / or physiologic information pertinent to the requested study.
- Deliver finalized exam to interpreting physician with appropriate oral and /or written summary of technical findings.
- Demonstrate discretion and good judgement in communication skills with both the patient and fellow health-care professionals.
- Promote patient and public information in matters of health and sonography.
TECHNICAL STANDARDS

Diagnostic Medical Sonographers utilize multiple cognitive and psychomotor skills to accomplish the above stated objectives. Successful completion of the Diagnostic Medical Sonography Specialization demands that with reasonable accommodations, the student must be able to accomplish the following safely, efficiently and competently.

BEHAVIORAL STANDARDS

- Demonstrate appropriate responses to the critically ill, medical emergencies and death
- Prioritize and manage multiple tasks simultaneously
- Assimilate and appropriately respond to clinical instruction from clinical mentors
- Communicate effectively with patients, families and other health care professionals, reflecting respect, politeness, tact, collaboration, teamwork and discretion

PHYSICAL STANDARDS

- Lift more than 50 pounds routinely
- Push, pull, bend and stoop routinely
- Have full use of both hands, wrists and shoulders
- Distinguish audible sounds
- Adequately view sonograms, including color distinctions
- Work standing 80% of the time
- Assist patients on and off examining tables
- Organize and accurately perform the individual steps in a sonographic procedure in the proper sequence
# DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM

## FALL SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
<th>Didactic</th>
<th>Lab</th>
<th>Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD 341 Fundamentals of Sonography</td>
<td>1</td>
<td>16</td>
<td></td>
<td>36</td>
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<tr>
<td>RAD 351 Ob/Gyn. Sonography</td>
<td>3</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>RAD 371 Abdominal Sonography</td>
<td>3</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>RAD 381 Ultrasound Physics &amp; Instrumentation</td>
<td>3</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>RAD 391 Sectional Anatomy</td>
<td>3</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>13</td>
<td>176</td>
<td>160</td>
<td>36</td>
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</tbody>
</table>

(372 Total Hours)

## SPRING SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
<th>Didactic</th>
<th>Lab</th>
<th>Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD 401 Clinical Internship I</td>
<td>12</td>
<td>160</td>
<td></td>
<td>560</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>12</td>
<td>160</td>
<td></td>
<td>560</td>
</tr>
</tbody>
</table>

(720 Total Hours)

## SUMMER SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
<th>Didactic</th>
<th>Lab</th>
<th>Clinic</th>
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</thead>
<tbody>
<tr>
<td>RAD 441 Clinical Internship II</td>
<td>4</td>
<td>60</td>
<td></td>
<td>320</td>
</tr>
<tr>
<td>RAD 451 Seminar</td>
<td>2</td>
<td>30</td>
<td>70</td>
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</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>6</td>
<td>90</td>
<td>70</td>
<td>320</td>
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</tbody>
</table>

(480 Total Hours)

1572 Total Hours
SCHOOL CALENDAR - SPRING SEMESTER 2012

Semester Classes Begin: Tuesday, January 17, 8:00 a.m.
Spring Break: Saturday March 10 - Sunday March 18
Honor’s Day: Sunday, April 15
Last Day at Clinical: Friday, April 27
Summer Break: Saturday, April 28 – Sunday, May 20 (3 weeks)
Clinical II Begins: Monday, May 21, 8:00 am.

RAD 401 TENTATIVE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 17-20</td>
<td>Department &amp; Facility Orientation paper and forms due</td>
</tr>
<tr>
<td>2</td>
<td>Jan 23-27</td>
<td>Scan protocol paper due</td>
</tr>
<tr>
<td>3</td>
<td>Jan 30-Feb 3</td>
<td>Knobology paper due/ Jan log-sheets due</td>
</tr>
<tr>
<td>4</td>
<td>Feb 6-10</td>
<td>1st Personal/Professional Growth Assessment due</td>
</tr>
<tr>
<td>5</td>
<td>Feb 13-17</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Feb 20-24</td>
<td>Minimum of 4 clinical competency forms due</td>
</tr>
<tr>
<td>7</td>
<td>Feb 27-Mar 2</td>
<td>Feb log-sheets due</td>
</tr>
<tr>
<td>8</td>
<td>Mar 5-9</td>
<td>2nd Personal/Professional Growth Assessment due</td>
</tr>
<tr>
<td>9</td>
<td>Mar 12-16</td>
<td><strong>Spring Break</strong></td>
</tr>
<tr>
<td>10</td>
<td>Mar 19-23</td>
<td>Case Study due</td>
</tr>
<tr>
<td>11</td>
<td>Mar 26-30</td>
<td>March log-sheets</td>
</tr>
<tr>
<td>12</td>
<td>Apr 2-6</td>
<td>Minimum of 4 clinical competency forms due</td>
</tr>
<tr>
<td>13</td>
<td>Apr 9-13</td>
<td>3rd Personal/Professional Growth Assessment due</td>
</tr>
<tr>
<td>14</td>
<td>Apr 16-20</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Apr 23-27</td>
<td><strong>MAIL</strong> final log sheets, competencies and assignments postmarked no later than 10:00 PM Saturday, April 28.</td>
</tr>
</tbody>
</table>

*Daily logs* should be kept by the student and turned in (*stapled and in chronological order*) after the last day with other final paperwork.

*Weekly logs* to be sent via email attachment or U.S. mail postmarked by Saturday midnight.

WEB Assignments

Review assignments and exercises will be posted throughout the semester. To access:

1. Log-on to https://mycourses.siu.edu
2. Select Add course; College of Applied Sciences & Arts; RAD 401 Clinical Internship I (Having)

   NOTE: Password is Student ID
Clinical Site Assignments

- If your clinical experience involves more than one site, assignments submitted will include information from each site.
- Assignments are not to be written during clinical hours.
- Assignments may be mailed or attached via e-mail as a Microsoft Word document.
- Assignments not submitted (or post-marked) by the due date will suffer a late penalty equal to a drop of one letter grade.
- Assignments must be neat, organized, complete and legible.
- Failure to submit all assignments will result in an “incomplete” final grade.

Orientation Paper

1. Describe and evaluate your orientation process. What are the name(s) & title(s) of those persons with whom you as an ultrasound intern will be interacting? How does the ultrasound department interrelate with the other diagnostic imaging areas? What information did you receive enabling you to become a contributing member to the ultrasound imaging team?

2. Along with the orientation paper assignment return the following completed forms:
   - Film Badge Policy
   - Hospital Policy Manual & Department Orientation Form
   - Understanding of Clinical Responsibilities
   - Department Procedure and Protocol Form
   - Student-Hospital Employment Agreement (This form must be submitted regardless of hospital employment status.)

Protocol Paper

State the protocol for all Abd/Small Parts & OB/Gyn exams performed at your institution. This information should be made available to you from the departmental manual. This exercise is intended to be a learning tool for you and is to be submitted in legible handwritten form.

Knobology Paper

Identify the ultrasound unit you will be using the most. Obtain the manufacturer’s manual for the unit and submit a diagram of the instrument panel. Explain the function of each selection of the instrument panel and how to engage it. Also, describe the transducers available for the unit and what types of exams are most ideally suited for each transducer.

Journal Assignment

Beginning Week 1, journal entries will be submitted and continued each week through the final week of the internship for a total of 15 entries. Entries are due by 4 PM each Sunday. No points will be awarded for late entries. ***No journal entry is necessary during spring break unless you are using the week to make up time. The goal of the journal is to describe your clinical experience each week & relay any issues that the instructor should know about. Topics to be covered each week include: 1) My clinical experience this week was ___ (overall summary); 2) I think I really made progress this week with ___ (cite at least one example); 3) Area(s) I struggled with this week were ____ and why you thought this happened; and 4) My goals for next week are ___ (examples).

* For specific instructions, click on "Discussions" then "Weekly Journal Assignment" and
follow the posted directions.

Case Study

A written case study manuscript, including good quality images, of an interesting pathology that you observed/participated in during your internship is required. Criteria for writing the case review are as follows:

- MS Word document
- 8.5 x 11” with 1” margins, double spaced, 12 point font
- All patient identifiers must be removed from the case report as well as images or other supporting information.

Format of the document must be as follows:

- Title page (include title, author’s name, date)
- Case report
  - Introduction
    - Explain significance of case study (rare finding, unusual combination of pathology, why this case is interesting)
  - Case report
    - Relevant pt information (age, gender, history, presenting findings, other associated diagnostic test results, sonographic equipment and technique used, description of sonographic findings, pt outcome)
  - Discussion
    - Review of etiology, pathophysiology, and treatment for the case and summarize the sonographic criteria the case has demonstrated.
    - This is the focus of the paper and should reflect a substantial and thorough research of the topic.
  - Conclusion (Summarize the study)
  - References
    - Must be cited in the text in numerical order and listed on a separate page following the format used in JDMS articles.
    - A minimum of 5 citations from peer reviewed articles or textbooks
  - Images
    - Images sufficient to support the pathology shall be captured as a powerpoint file (.ppt) and inserted after the reference page of the document.
    - Images should be free of any patient identifiers.
    - Other supporting documentation (optional, but may include a table, figure, illustration, etc.)

- The case must be submitted as a blackboard assignment attachment.

***The grading rubric is available on Blackboard under:

Course tools ► Assignments ► Case Study ► Preview
The sonography student is assigned to one or more clinical sites for a total of 40 hrs/week the entire semester. The clinical internship is designed to provide clinical experience necessary to develop skills in preparation for entry level abdomen/small parts and ob-gyn sonography. The clinical instructor is responsible for providing adequate observation, guidance and scanning opportunity. The clinical instructor(s) shall be available to the student, provide appropriate clinical supervision, and be responsible for the student clinical evaluation. When the intern has independently demonstrated competent scanning skills, a competency evaluation form shall be completed by the clinical instructor or assigned RDMS who is appropriately credentialed in that area. This form shall reflect the intern’s ability as demonstrated on a mutually agreed upon patient exam. The competency form must be signed and dated by both the clinical instructor and intern.

The intern may request to be re-evaluated at a later date for a better score. All evaluation forms are to be forwarded to the ultrasound program for grading purposes. The intern shall not perform an ultrasound exam without direct supervision until proof of competency has been documented.

Competencies must be submitted for each of the following:
- Gallbladder
- Liver
- Pancreas
- Spleen
- Kidney
- Aorta
- Transabdominal non-gravid pelvis
- 1st trimester gravid pelvis/limited OB
- 2nd trimester complete OB

Additionally, a competency from one of the following superficial parts exams must be completed:
- Thyroid
- Breast
- Scrotum
- Pylorus
- Appendix

*Multiple competencies may be submitted. The best score will be calculated for a final grade. Final Grade will be derived accordingly:

Clinical competencies = 200 points
Orientation paper = 5 points
Scan protocol paper = 10 points
Knobology paper = 15 points
WEB Assignments = 115 points
Personal/Professional Assessment = 30 points (Total P/P points/3)
Case Study = 25 points

Total possible points = 400 points

A = 400 - 370
B = 369 - 338
C = 337 - 306
D = 305 - 278
F = below 278
APPENDIX

The following forms are available in the US Clinical Internship I File

* Film Badge Policy
* Student-Hospital Employment Agreement
* Understanding of Clinical Responsibilities Form
* Hospital Policy Manual & Department Orientation Form
* Department Procedure and Protocol Form
** Evaluation of Clinical Site
** Clinical Attendance Time Sheet
*** Ultrasound Clinical Competency Evaluation
*** Personal / Professional Growth Assessment
*** Ultrasound Examination Daily Logsheet (to be mailed at the end of internship)
*** Weekly Examination Logsheet (due weekly, postmarked by 12:00 midnight)
*** Ultrasound Examination Monthly Logsheet (due at the end of each month)
**** DMS Student Clinical Experience Record

* To be signed and returned to instructor on week 1.
** To be returned to DMS Program instructor upon completion of clinical semester.
*** Forms may be photocopied as needed.
**** This form is a permanent record documenting all clinical experience acquired throughout the entire sonography program. It is a cumulative document and must be submitted upon completion of your final clinical rotation.

All forms must be properly signed to be accepted for a grade.