COURSE DESCRIPTION: Ultrasound Clinic IV requires the student to spend five days a week in an approved Ultrasound Department. Students will perform a complete echocardiography procedure under the direct supervision of the supervising sonographer. Students are given specific learning objectives for the rotation. Progress is evaluated according to a competency based clinical education system. 2 credit, 240 hours, 16 hours per week for 15 weeks = 240 hours

Prerequisite: DMS 220, DMS 214, DMS 229, DMS 226  Co-requisite: DMS 227

NARRATIVE: The student is assigned to a clinical affiliate by the program faculty. Forty hours per week are required and students will follow the Clinical Manual regarding rules and regulations at the clinical site. The goal is to become clinical competent in performing an Echocardiography exam in an Echo lab.

OBJECTIVES: The terminal objectives for Ultrasound Clinic IV-Echocardiography are to demonstrate competence in the Echocardiography category. Steps (in order) for achieving this goal are:

1. Demonstrate continued competence in all objectives that were previously mastered in Cardiac and Vascular Sonography. Students will continue all objectives learned in the previous clinical rotations.

2. Practice scanning (with supervision) areas of the body pertinent to the specific rotation. (i.e. heart and Doppler imaging techniques). Bring a video or MO disk to clinical to record scanning practice.

3. When sufficient practice in scanning are achieved (at least 4 patients), the student asks the clinical instructor for a competency evaluation. A competency will be required.

4. The student will perform the protocol provided by the assigned clinical site. Competency is based on equipment setup, technical skill and efficiency in performing the skill.

5. If the student fails the competency evaluation(s), the competency may be repeated up to 3 times with the highest grade being reported. In order to pass the course, all competencies must be successfully completed within the semester timeframe or a failing grade will ensue. The student needs to pass the competencies to move on to the next level. The Clinical Faculty will only perform clinical testing when the student has demonstrated readiness.

COURSE REQUIREMENTS: For successful completion of the course, the following requirements must be met:

1. All clinical hours must be complete (240 hours). Any make up days must be done as indicated on the attendance calendar. Hours can only be made up during this time.

2. All Clinical Competencies must be completed. These are: a complete echocardiogram

3. Professional Growth Evaluations will be completed for each student by the supervising sonographer and the clinical faculty.

4. Student competence in evaluations of normal and abnormal echocardiograms.

FINAL GRADE: Final grade will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
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<tbody>
<tr>
<td>All Clinical Time Complete</td>
<td>70%</td>
</tr>
<tr>
<td>Echo Competency Form</td>
<td></td>
</tr>
<tr>
<td>Average of the Professional Growths Evaluation (Min. of four req.)</td>
<td>20%</td>
</tr>
<tr>
<td>Abnormal Film Evaluation</td>
<td>10%</td>
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Clinical IV LY