Course Syllabus

DMS 227-Echocardiography II
2 lec, 3 lab, 3 credits
Prerequisites: DMS-229, DMS-226, DMS-201
Corequisites: DMS-222, DMS-228

Course Description: This course is a continuance of Echocardiography explaining the normal anatomy and physiology of the adult heart. A more in-depth analysis of the physiology/hemodynamics of the heart chambers and muscles are emphasized. Doppler flow patterns and sonographic evaluation of the abnormal heart will be stressed. New techniques as an adjunct tool to Echocardiography will be discussed. Students will perform a complete echo exam in lab. Cardiac measurements of the chambers and muscles will be covered.

Required Text: Echocardiography—from a Sonographer’s Perspective—Susan King DeWitt, BS, RDCS

Topics Covered:

- **Review of Heart Valve anatomy and physiology, m-mode, doppler**
  Lab- Echo exam

- **Cardiac conduction system and electrophysiology.**
  Preload and Afterload.
  Lab-Echo exam

- **Quiz**
  Basic Embryology and fetal circulation
  Lab- Echo exam

- **Coronary Artery Disease**
  Lab- Echo exam

- **Cardiac Conductions System**
  Lab- Echo exam

- **Quiz**
  Heart sounds and murmurs
  Lab- Echo exam

- **Diseases of the Aorta**
  Lab- Echo exam

- **Midterm**
  Lab- Echo exam

- **TEE**
  Lab- Echo exam
Cardiac Pharmacology
Lab-Echo exam

Lab- echo exam

Quiz
Contrast enhanced Ultrasound
Lab-Echo exam

Stress echo
Lab- Echo exam

Lab testing

Final

Grade calculations:
Quiz- 25%
Midterm exam- 25%
Final exam- 35%
Lab test- 15%

**A missed quiz may only be made-up before the next class or you will receive a zero

92 - 100    A
88 - 91.9    B+
83 - 87.9    B
79 - 82.9    C+
75 - 78.9    C
<75          F