# Bergen Community College Division of Health Professions Diagnostic Medical Sonography Program

DMS 227-Echocardiography II

**Course Syllabus** 

2 lec, 3 lab, 3 credits

Prerequisites: DMS-229, DMS-226, DMS-201

Corequisites: DMS-222, DMS-228

<u>Course Description</u>: 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