# BIM 242 Introduction to Medical Imaging

- **Ramsey D Badawi**  
- **Kai Yang**  
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- **J. Anthony Seibert**

**Location:** GBSF 2202  
**Time:** 8:00 - 9:50 AM

### WEEK 1
- **Monday, September 26, 2011**  
  **WEEK 1: Introduction to Medical Imaging**  
  - **RDB**

- **Wednesday, September 28, 2011**  
  **Introduction to Nuclear Imaging**  
  - **RDB**

### WEEK 2
- **Monday, October 03, 2011**  
  **PET Applications and Instrumentation**  
  - **RDB**

- **Wednesday, October 05, 2011**  
  **Counting Stats and Gamma Cameras**  
  - **RDB**

### WEEK 3
- **Monday, October 10, 2011**  
  **Quantitative PET and Advanced Topics**  
  - **RDB**

- **Wednesday, October 12, 2011**  
  **ULTRASOUND IMAGING**  
  - **JAS**

### WEEK 4
- **Monday, October 17, 2011**  
  **X-RAY PRODUCTION**  
  - **JAS**

- **Wednesday, October 19, 2011**  
  **X-RAY INTERACTIONS**  
  - **KY**

### WEEK 5
- **Monday, October 24, 2011**  
  **PROJECTION IMAGING**  
  - **KY**

- **Wednesday, October 26, 2011**  
  **Image Reconstruction for Dummies**  
  - **JAS**

### WEEK 6
- **Monday, October 31, 2011**  
  **COMPUTED TOMOGRAPHY**  
  - **KY**

- **Wednesday, November 02, 2011**  
  **IMAGE QUALITY**  
  - **KY**

### WEEK 7
- **Monday, November 07, 2011**  
  **IMAGE PROCESSING / PACS**  
  - **JAS**

- **Wednesday, November 09, 2011**  
  **BREAST IMAGING**  
  - **KY**

### WEEK 8
- **Monday, November 14, 2011**  
  **MR IMAGING**  
  - **JAS**

- **Wednesday, November 16, 2011**  
  **INTERACTIONS OF LIGHT WITH TISSUE**  
  - **AJC**

### WEEK 9
- **Monday, November 21, 2011**  
  **MONTE CARLO LIGHT TRANSPORT**  
  - **AJC**

- **Wednesday, November 23, 2011**  
  **OPTICAL APPS IN MEDICINE-1**  
  - **AJC**

### WEEK 10
- **Monday, November 28, 2011**  
  **OPTICAL APPS IN MEDICINE-2**  
  - **AJC**

- **Wednesday, November 30, 2011**  
  **OPTICAL MICROSCOPY**  
  - **AJC**

**FINAL will be take-home, due Thursday, Dec 8th, 8PM**

**Recommended reading:** Bushberg et al., "The Essential Physics of Medical Imaging", third edition

**Homework:**

- **RDB**: 100 marks, 12.5% of grade
- **JAS**: 100 marks, 12.5% of grade
- **KY**: 100 marks, 12.5% of grade
- **AJC**: 100 marks, 12.5% of grade

**FINAL**: 400 marks, 50% of grade