



USC University of
Southern California

USC Viterbi
School of Engineering
*Alfred E. Mann Department of
Biomedical Engineering*

**USC Viterbi School of Engineering
BME Department
BME 527: Integration of Medical Imaging Systems
Brent J. Liu, Ph.D.**

September 21th, 2023

Instructions for all homework

- No more than 2 pages/Question.
- Please write neatly or type (preferred).
- Put your name and date of the assignment on each page.
- State the problem clearly, what are the assumptions, methods, results, and summary.
- **ABSOLUTELY NO LATE HW ACCEPTED!**

Homework 3

Due date: October 5th @ 5PM

Prerequisites:

1. Read Chapter 2; HK Huang: PACS-Based Multimedia Imaging Informatics 3rd Ed., Wiley & Sons, 2019.

Instructions:

1. Describe the similarity and differences between a laser film scanner and a computed radiography (CR) system.
2. Based on the figure shown in the lecture slides, please explain how the CR system compensates for X-ray underexposure (Case II).
3. You should submit one .doc or .pdf format file through DEN.
4. The name of your homework should be like:
 - HW3_name_student ID.pdf (.txt)
5. If you prefer to submit the homework in person, you could write or print out and hand it in before the class.
6. If you are not satisfied with the initial grade, you can still have chance to regrade.