

Syllabus

Clinical Rotations for Engineers (BME 5192)

Fall 2015

Course Information: BME 5192 Section 001 Credit Hours: 1 hrs Class time: TBA

Instructor: Thomas Boland, Ph.D. Department of Metallurgical and Materials Eng Office: BE 202 Phone: (915) 747-7992 FAX: (915) 747-8036 Email: tboland@utep.edu

OFFICE HOURS: by appointment

Pre-requisite for the course: BIOL 6305, DRSC 5495 and BME 5301

Textbook: none

Course Goals: Observational and participatory rotations through various divisions and laboratories at University Hospital and William Beaumont Medical Center

Student Learning Objectives:

1. Discuss the various imaging, diagnostic and therapeutic systems covered in class as well as those observed at area hospitals currently utilized by clinicians in both diagnosing and treating human disease.
2. Describe the basic operation as well the underlying principles of the diagnostic and treatment modalities covered
3. Gain an understanding of how modern technology is utilized in both the diagnosis and treatment of human disease.
4. Be able to describe a basic physical examination and the important laboratory tests used to evaluate the body's functional status.

Grading: Summary Report 30%
Site Evaluations 50%
Pre and post interview 10%
Self evaluations 10%

Summary Report: Students must write a reflective report on their experience during the practicum. *This report should be a minimum length of three full pages.*

Site Evaluations: The preceptor will complete two evaluation forms in order to evaluate the student's progress. The first evaluation, the "Midterm Student Performance Appraisal", should be completed prior to the student reaching their 5th week. The second evaluation, the "Final Student Performance Appraisal", and the "Performance Appraisal Checklist" should be completed shortly before, or immediately after the student has worked the full semester at the site.

Grading Policy: Final (midterm) grades will be determined based on the following.

- A: 90.00-100
- B: 80.00-89.99
- C: 70.00-79.99

D: 60-69.99

F: 0-59.99

Drop and Withdrawal: Please notify the instructor either by verbally or email of your intention of dropping the course

Topics Covered in BME 5192 (Subject to changes)

1. Clinical imaging and diagnostic devices
2. Clinical treatment devices
3. Use and interpretation of diagnostic results by clinicians
4. Physicians and the practice of medicine

Disability

If you have or suspect a disability and need accommodations, you should contact [The Disabled Student Services Office \(DSSO\)](#) at 747-5148. You can also email the office at dss@utep.edu or go by the Union Building East, Room 106. For additional information, visit the DSSO website at www.utep.edu/dsso/.

Academic Integrity

I expect a commitment to truthfulness, honor and responsibility, without which you cannot earn the trust and respect of others. Therefore, I will not tolerate lying, cheating, or stealing in any form.

Honor Code: “I, _____, hereby pledge that I have read and understood the entire syllabus for this course, and I will abide by the policies described above.

Student’s Signature _____ **Date** _____