Student Learning Outcomes:

Upon completion of this course, students will be able to:

1. Critique scientific literature through evaluation of presented results and conclusions in a peer-reviewed journal article. (*ABET Outcome 7*)
2. Create a clear and concise presentation on a biomedical engineering topic, and present to an audience with limited knowledge about the area. (*ABET Outcome 3*)
3. Identify current bottle neck limitations in the area of biomedical engineering and highlight the scientific breakthrough that will be needed in order to advance this profession (*ABET Outcome 7*)
4. Demonstrate proficient oral and written communications skills through presentations and written documents related to contemporary biomedical engineering advances. (*ABET Outcome 3*)

Grading:

Topic Submission

Presentation

Position Paper

Attendance

 4 points

30 points

50 points

16 points

100 – 90 A

89 – 80 B

79 – 70 C

69 – 60 D

59 – 0 F

Grade Assignment:

Grading Policy:

No make-up assignments without prior arrangement. Late assignment = no assignment.

Wednesdays 2:00-3:00; Thursdays 2:30-3:30;
by appointment preferred

**BMEG 421 – Biomedical Engineering Seminar and Journal Club**

Semester:

Spring 2019

Format:

Seminar

Credit Hours:

1 hr credit

Instructor:

Dr. Robin Hissam, 513 Engineering Sciences Building 293-9339; robin.hissam@mail.wvu.edu

Schedule:

11:00 - 11:50pm F

Location:

401 Engineering Sciences Building

Office Hours:

Course Goal:

This course will introduce students to the current research and topics pertinent to biomedical engineering through literature review and guest lectures by external and internal speakers.

*Attendance***:**

Students are allowed one unexcused absence. Each additional excused absence will result in a loss of 2 points from the final grade. Consistent with WVU guidelines, students absent from regularly scheduled class time because of authorized University activities will have the opportunity to make-up the missed session at an alternate time.

Assignments:

The advancement of biomedical engineering technologies, protocols and strategies are often exciting, but are open to critique and review. The paper you will be submitting should address one aspect of biomedical engineering in which there can be a strong debate. Students will work in pairs to develop both a presentation and a paper on that aspect of biomedical engineering.

*Presentations:*

Students will present as a team on the selected topic. The presentation should give background information on the topic, and each student should take a position on the topic and support that position with examples and/or literature. Presentations will be approximately 20 minutes with 5 minutes for questions.

*Position Paper*:

Position papers will be submitted by individual students. The paper will be comprised of four sections; 1) introduction to the topic addressed and objective of the article, 2) statement of the position taken for the paper, 3) a well-synthesized argument for the position selected, and 4) multiple references used to develop the position. The purpose of these assignments is to ensure the students can investigate a topic and coherently and critically evaluate information. The paper should be at least 2 pages long, single spaced, not counting references and pictures/graphs, printed with at most a 12 point font with 1 inch margins.

Approximate Course Schedule:

Jan 11

**First Day of Class**

Jan 18

Jan 28

Student Presentations

Feb 1

Student Presentations

Feb 8

Student Presentations

Feb 15

Student Presentations

Feb 22

Student Presentations

Mar 1

Student Presentations

Mar 8

Student Presentations

[*Critique Due*](http://diversity.wvu.edu/)

Mar 15

**Spring Break**

Mar 22

Student Presentations

Mar 29

Student Presentations

Apr 5

Apr 12

Apr 19

Apr 26

**Last Day of Class**

*Revised Critique Due*