

Research Project Overview

585.751.81 Immunoengineering

One of the main methods of learning and demonstrating mastery of course concepts will be incorporated in your final project. You will produce 2 final products for this course's final project surrounding the same topic. You will come up with an engineering solution to a current disease or challenge in immunology. This will be in the form of a short, written proposal (similar to an R21) and a short pitch presentation (between 3 to 7 minutes) using a narrated PowerPoint presentation (or equivalent presentation software of your choice) using Voicethread. We will post specific details and instructions for each deliverable and what you will be evaluated on. Here is a brief outline of the project timeline and assignments:

Project Outline and Module Milestone Assignments

Project assignment	Modules to work on it (final is when due)
Project selection	2
Background research on problem (sources)	3
Significance section rough draft	4-5
Previous engineering approaches to solve problem (sources) and idea for how to solve	6-7
Innovation section rough draft	8
Experimental approach outline	9
Identify supporting data/potential pitfalls	10
Rough draft	11
Pitch presentation	13
Final proposal	13-14

The research paper will be graded as follows:

100-90 = A - Superior submission in all aspects. High quality research, analysis, innovation, and significance of the subject with excellent support, discussion, and justification at a level appropriate for a competent engineer with excellent organization and presentation.

89-80 = B - good submission in all aspects. Acceptable research analysis of the subject with adequate discussion and justification of major points. Good organization of paper that is generally easy to follow and proceeds logically through the material. Presentation of paper is acceptable, may be missing minor elements like section headings or have minor spelling/grammar errors. An acceptable number of references are provided.

79-70 = C - paper has major flaws and is not representative of a quality graduate level submission. Major gaps in research, analysis and coverage of the subject; may have minor technical inaccuracies. Organization is lacking, with major breaks in logic and flow. Presentation is below average, with missing elements and spelling/grammar errors that make paper difficult to read. The number of citations is unacceptable or incomplete.

<70 = F - paper has major inaccuracies and incomplete analysis, plagiarized portions, and/or entire missing sections. Presentation or organization errors are so egregious that paper is judged to be entirely unacceptable for submission.

The pitch presentation will be evaluated by the following elements:

1. Format and Content (50%)
2. Delivery (50%)

The presentation will be posted on Blackboard using VoiceThread and will be graded as follows:

100-90 = A - Complete and organized content; Innovative presentation structure; Superior presentation includes succinct overview of all the required elements; excellent use of multimedia content (e.g. video); and within the time limit

89-80 = B - Complete and organized content; Easy to follow presentation structure; Engaging presentation includes succinct overview of all the required elements; good use of multimedia content (e.g. video); and within the time limit

79-70 = C - Complete and organized content; Basic presentation includes succinct overview of most of the required elements and is reasonably within the time limit

<70 = F - Incomplete content; little or no organization; Presentation does not cover all the project elements, and is over or under the time limit