

BHSEC
Engineering
Dr. Schubert

End of Term Planning Guide: Rev 1/8/18 (Update to Rev 12/20/17)

Final Exam

Technical: Bridges, Rockets, Heating are NOT on the final

Problem Solving: Problem Solving method, Heuristics, Problems to be solved

Engineering Design Process: Project Steps and Applications to case study.

Decision Making, Brainstorming,

Principles/Application of Excellent Visuals,

Strategy of Experimentation

Quantitative and Qualitative Data Analysis,

Risk Management: Strategies and applications of Reason's Swiss Cheese Model

Bayes Theorem

Prepare by reviewing the quizzes and exams and problems done for homework in these areas. Know the principles and how to apply them. Test yourself orally with other students in the class

Exam 3 The median was 78 and the high 97. If you have questions about scoring see me on Friday.

In order to recognize and reward work and real growth, the weighting of the course is heavily on the back end. For this reason, **one of the three mid-term grades will be dropped at the end of the course.**

Schedule: Key Milestone Dates

Testing Deadline: Friday 1/12

Final 1st Period: Tuesday 11/16 9 am; 3rd Period: Thursday 11/18 9 am

Report Deadline: Monday Jan 22 Noon (I will not be at BHSEC after that date). Can be e-mailed. PUT YOUR TEAM NUMBER ON THE TITLE PAGE AND E-MAIL HEADING. The report can only be considered as submitted if you receive a confirmation back that I have received it. It is your responsibility to be sure that it has been received.

Project Reports: Group/Individual Contributions

Individual:

Introduction

Concept Map

Your simulator results

Principles

Revisions to Design /Construction Narratives

Narrative of Tests

Analysis of Design and Results

Discussion of Comparative Results

Group:

Bridge Design Selection

Design Narrative

Construction

Report should include table of class bridge testing results (will be posted on web site) with comparative analysis.

As in earlier projects, several sections can be written and completed well in advance of the due date.

Content and level of thoughtful effort are key. Comments about earlier reports can also be consulted for improving quality.