Calculus/Physics Project Grading Holistic Grading Scheme
July 2001

Process

5 This grade indicates excellent work all around.

- The group shows commitment to the project by setting up and attending meetings with the advisor, by making significant progress between meetings, by giving a copy of their work to their advisor at each meeting. (It must be a copy so the group has something to work from.)
- At each meeting the group is able to give the advisor an overview of what they have accomplished, what is the next step, what are the major hurdles in front of them at that moment and possible ways around those hurdles.
- The group is able to reformulate the question in a way that points toward a solution. For groups that created their own project this may take several weeks to accomplish.
- The group is constantly monitoring their progress toward a solution. If they having difficulty making progress toward the solution, they take steps to adjust their approach.
- Strong groups are independent problem solvers and use many resources other than the advisor for help. Resources include their own class notes, textbook, other journals and books in the library, the web (though groups should be careful to evaluate the reputation of the source on the web), and other students.
- The group seeks help on the form of their writing from other students and from the Writing Center.

4 This grade indicates a very good, but not quite excellent performance. Groups receiving this grade fell short in one or two areas described above.

3 This grade indicates a good performance by the group. In this case there were some significant pieces missing, but also some strengths.

2 This grade indicates that the group performed poorly in most areas.

1 This grade indicates that the group performed poorly in all areas.

Product

5 This grade indicates excellent performance by the group. Excellent reports have the following features:
- The physics and mathematics is correct or nearly so.
- The reader is given a conceptual overview to guide their understanding of the solution.
♦ The question is completely answered. Exceptional reports go beyond the original question to look at even more features of the physical situation.
♦ Convincing checks are presented.
♦ The report is easy to read.
  ➢ The report includes an introduction, physical situation, mathematical model, check, and conclusion.
  ➢ Diagrams, plots and sketches are used as needed.
  ➢ Assumptions are clearly noted and justified.
  ➢ The approach to the solution is justified.
  ➢ The paper stands on its own. That is, it contains enough information so that any fellow student can read and understand the solution.
  ➢ The paper should flow easily from one paragraph to the other and should not read like a series of unrelated ideas.
  ➢ There are few, if any, errors in grammar, punctuation, or spelling.
  ➢ If resources other than the textbook are used, citations are given.

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