Course project general rubric

This rubric is a general rubric designed to assess engineering courses’ final project.

**Presentation and discussion**  (70% of the project grade)

Each student should present for at least 2-minutes.

All presentations must be recorded for quality check.

During/ after presentation examiner will ask two types of questions.

Interactive timed questions, Oral questions. (Can be from any course learning outcome)

|  |  |  |
| --- | --- | --- |
| No | Aspect | Max mark |
| 1. | Students’ ability to present his/her project in scientific way. | 10% |
| 2. | Interactive timed questions. (Can be from any course LO) | 30% |
| 3. | Oral questions and discussion. | 20% |
| 4. | Proper use of course terminologies. | 10% |

**Project report evaluation** (30% of the project grade)

|  |  |  |
| --- | --- | --- |
| No | Aspect | Max mark |
| 1. | Introduction/ Objective. | 4% |
| 2. | Calculations /Codes/ Theory. | 4% |
| 3. | Diagrams / Charts / Figures and Plots with proper captions | 4% |
| 4. | Results / Analysis & Discussion | 10% |
| 5. | Conclusions/ Summary /self-reflection | 4% |
| 6. | Quality of work performed including quality of report, neatness etc. | 4% |

The interactive timed questions can be created using any website or platform, such as:

|  |  |
| --- | --- |
| BBlearn | Use Polling active questions |
| Nearpod (Highly recommended) | <https://nearpod.com/> |
| Kahoot | <https://kahoot.com/> |
| Quizwhizzer | <https://quizwhizzer.com/> |

Examiner show interactive questions one by one and students need to answer immediately.

Nearpod is highly recommended as it provides high flexibility on questions type and it records both students’ grades and time. (Time can be used to rank students).

1. Student Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student ID: \_\_\_\_\_\_\_\_\_\_
2. Student Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student ID:\_\_\_\_\_\_\_\_\_\_
3. Student Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student ID:\_\_\_\_\_\_\_\_\_\_
4. Student Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student ID:\_\_\_\_\_\_\_\_\_\_

**Part I: Presentation and discussion**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Aspect | Max mark | Student  # 1 | Student  # 2 | Student  # 3 | Student  # 4 |
| 1. | Students’ ability to present his/her project in scientific way. | 10% |  |  |  |  |
| 2. | Interactive timed questions. | 30% |  |  |  |  |
| 3. | Oral questions and discussion. | 20% |  |  |  |  |
| 4. | Proper use of course terminologies. | 10% |  |  |  |  |

**Part II: Report evaluation**

|  |  |  |  |
| --- | --- | --- | --- |
| No | Aspect | Max mark | Grade |
| 1. | Introduction/ Objective. | 4% |  |
| 2. | Calculations /Codes/ Theory. | 4% |  |
| 3. | Diagrams / Charts / Figures and Plots with proper captions | 4% |  |
| 4. | Results / Analysis & Discussion | 10% |  |
| 5. | Conclusions/ Summary /self-reflection | 4% |  |
| 6. | Quality of work performed including quality of report, neatness etc. | 4% |  |

Total Grade of each student (Part I + Part II)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Max mark | Student  # 1 | Student  # 2 | Student  # 3 | Student  # 4 |
| 100% |  |  |  |  |

Guide to evaluate each aspect

**Part I: Presentation and discussion**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Aspect | Marginal level | Satisfactory level | Outstanding |
| 1. | Students’ ability to present his/her project in scientific way. | The presenter speaks and participates at a poor level and interaction.  Grade: (2-5) out of 10 | The student has a good articulation.  The presenter speaks and participates at an acceptable level. Speaker demonstrates a good interaction (Volume, eye contact,..etc).  Grade: (6-8) out of 10 | The student has excellent articulation. The presenter speaks and participates at a very high and balanced level. Speaker demonstrates a very good interaction  (Volume, eye contact,..etc).  Grade: (9-10) out of 10 |
| 2. | Interactive timed questions. | Student grade in this aspect depends on the number of correct answers s/he provides for the timed questions. (Min: 0 and Max: 30 out of 30) | | |
| 3. | Oral questions and discussion. | Demonstrates poor knowledge by not answering all or most of the questions.  Grade: (4-10) out of 20 | Demonstrates partial knowledge by answering some questions with explanations and elaborations.  Grade:(11-16) out of 20 | Demonstrates full knowledge by answering all questions with explanations and elaborations.  Grade: (17-20) out of 20 |
| 4. | Proper use of course terminologies. | Improper use of technical terms. Presentation has a lot of spelling and grammatical mistakes.  Grade: (2-5) out of 10 | Presentation has few spelling and grammatical mistakes. Proper use of technical terms.  Grade: (6-8) out of 10 | Presentation has minimal spelling and grammatical mistakes. Proper and correct use of technical terms.  Grade: (9-10) out of 10 |

**Part II: Report evaluation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Aspect | Marginal level | Satisfactory level | Outstanding |
| 1. | Introduction/ Objective. | State the objective, some potential applications, and a brief literature survey.  Grade: (1-2) out of 4 | Explain objective of the work, most of the applications, and good literature survey.  Grade: 3 out of 4 | Illustrate objective of the work with examples, introduce all the applications, and rigid literature survey.  Grade: 4 out of 4 |
| 2. | Calculations /Codes/ Theory. | Poor calculations (and or code/ simulation), many mistakes, Project technical description and analysis are poorly presented.  Grade: (1-2) out of 4 | Reasonable calculations (and or code/ simulation), few mistakes, Project technical description and analysis are fairly presented.  Grade: 3 out of 4 | All calculations (and or code/ simulation), are done with no mistakes, Project technical description and analysis are fully presented.  Grade: 4 out of 4 |
| 3. | Diagrams / Charts / Figures and Plots with proper captions | Poor use of figures/ charts / diagrams, most visual elements are not titled and not addressed.  Grade: (1-2) out of 4 | Acceptable use of figures/ charts / diagrams, most of visual elements not titled and addressed.  Grade: 3 out of 4 | Perfect use of figures/ charts / diagrams, all visual elements are titled and addressed.  Grade: 4 out of 4 |
| 4. | Results / Analysis & Discussion | Provide only basic analysis with basic results with a poor discussion.  Grade: (2-5) out of 10 | Provide sufficient analysis, some results using schematics/figures/table, the discussion is related to the results and the purpose of the project.  Grade: (6-8) out of 10 | Provide excellent analysis, full illustration of the results using schematics/figures/tables, the discussion related back to the results and purpose of the project. It contain detail comparative study, and general significance of the results to the study and lesson learnt.  Grade: (9-10) out of 10 |
| 5. | Conclusions/ Summary /self-reflection | Demonstrate basic/poor summary.  Grade: (1-2) out of 4 | Demonstrate partial summary and self-reflection.  Grade: 3 out of 4 | Demonstrate full summary and self-reflection.  Grade: 4 out of 4 |
| 6. | Quality of work performed including quality of report, neatness etc. | Low quality with many language mistakes, poor organization and inconsistent format.  Grade: (1-2) out of 4 | Good quality with few language mistakes, good organization and good format.  Grade: 3 out of 4 | Excellent quality with almost no language mistakes, perfect organization and almost consistent format.  Grade: 4 out of 4 |