FINAL MINI PROJECTS

All students in the course "Microelectronics Radiation Effects and Reliability" are expected to complete a "mini" project. Projects can be individual or group-based and scoped to be completed in a two-week timeframe. Requirements are as follows:

1) Projects should be related to a topic discussed within the course. The projects can be based on simulation, modeling, data analysis, design, and/or testing. All projects must incorporate the following:

   a. Proposal: brief project proposals must be submitted for approval by the instructor. Proposals should include a title, list of team members, and a one paragraph description of the objective, methods, and expected outcome.

   b. Lab Notebook: keep track of your progress during the design, implementation, and reporting portions of your project. Submit your physical or e-notebooks with your final project deliverables.

   c. Final Deliverables: final projects can be submitted as a report, presentation (slides) or poster – your choice!

      i. Report format: reports should be between 4 and 8 pages in length (single column, 11 or 12 pt Times New Roman font, 1 in margins). Presentations should be between 10-15 slides. Posters should be completed with the provided template.

      ii. Regardless of the method, all reports should contain an Abstract, Project Description, Background, Methods & Materials, Key Results or Findings, and Conclusions. Other sections can be included and are optional.

      iii. Along with your report, submit any relevant design files along with a README to explain the content

2) Projects will be graded according to the following rubric:

Rubric for Final Project Report/Presentation

Project Title:
Name:

Criteria		Advanced (100%)	Proficient (85%)	Basic (70%)	Inadequate (60%)
Content of Work/Review	80	• Excellent summary. • In depth analysis of the methods/content (all major points discussed). • The key ideas/themes/findings are communicated with a high degree of clarity and insight. • Engaging introduction and conclusion, both indicative the overall focus of the paper or presentation. **80**	• Accurate summary but lacks concise description or missing major points. • Comprehensive analysis of the methods/content (most of the major points discussed, but some missing). • The key ideas/themes/findings are presented with clarity but lacks insight. • Engaging introduction and conclusion, paper or presentation focus is inconsistently supported. **68**	• Basic, but factual, summary. • Minimal analysis of the content (some of the major points discussed, but more missing than not). • Communicates the key ideas/themes/findings with little clarity or insight. • Introduction and conclusion do not indicate the overall focus of the paper or presentation. **56**	• Incomplete summary or factual errors. • No content provided (missed all major points of the content). • Key ideas/themes/findings are not communicated clearly and/or missed in analysis. • There is no clear introduction or conclusion. **48**
Reflection	60	• Demonstrates thorough understanding of work by listing all key findings and reflecting upon their implications. **60**	• Demonstrates considerable understanding of the work by listing all of the key findings. **51**	• Demonstrates some understanding of the work by listing some of the key findings…but documentation is lacking in completeness. **42**	• Demonstrates little understanding of the work with few or no key findings reported. **18**
Organization & Development of Ideas	30	• Logical development of ideas through well- developed paragraphs, good use of transitions. **30**	• Logical organization however transitions between thoughts/points may be unclear. **25.5**	• Some unorganized information. **21**	• No evidence of structure or organization. **18**
Mechanics	30	• Meets length requirement (a minimum of 4 pages or 10 slides) while also all content criteria (above). • <2 grammatical errors. • <2 punctuation errors. • Citation guidelines [of choice] are meticulously followed. • Consistent formatting (Font/Spacing). **30**	• Length requirement is met with proficient content. • <4 grammatical errors. • <4 punctuation errors. • Citation guidelines [of choice] are followed, however, one error present. • Some inconsistent formatting (either in Font or in Spacing). **25.5**	• Length requirement is not met; minimal content. • <6 grammatical errors • <6 punctuation errors • Demonstrates little ability to adhere to a consistent citation method/more than two errors present. • Neither Font nor Spacing formatting consistent. **21**	• Length requirement is not met; poor content. • Numerous grammatical errors. • Numerous punctuation errors. • No citations. • Does not adhere to any clear Font/Spacing choices/messy presentation or inconsistent text formatting. **18**

Total Score: _____ /200