

## ENSC 305W/440W Grading Rubric for Project Proposal

Criteria	Details	Marks
<b>Introduction/Background</b>	Introduces basic purpose of the project. Includes clear background for the project.	<b>/05%</b>
<b>Scope/Risks/Benefits</b>	Clearly outlines project scope. Details both potential risks involved in project and potential benefits flowing from it.	<b>/15%</b>
<b>Market/Competition/Research Rationale</b>	Describes the market for a commercial project and details the current competition. For a research project, the need for the system or device is outlined and current solutions are detailed.	<b>/10%</b>
<b>Company Details</b>	Team has devised a creative company name, product name, and a logo. Outlines relevant skills/expertise of team members.	<b>/05%</b>
<b>Project Planning</b>	Details major processes and milestones of the project. Includes Gantt, Milestone, and/or PERT charts as necessary (MS Project).	<b>/10%</b>
<b>Cost Considerations</b>	Includes a realistic estimate of project costs. Includes potential funding sources. Allows for contingencies.	<b>/05%</b>
<b>Conclusion/References</b>	Summarizes project and motivates readers. Includes references for information from other sources.	<b>/10%</b>
<b>Rhetorical Issues</b>	Document is persuasive and could convince a potential investor to consider funding the project. Clearly considers audience expertise and interests.	<b>/10%</b>
<b>Presentation/Organization</b>	Document looks like a professional proposal. Ideas follow in a logical manner. Layout and design is attractive.	<b>/10%</b>
<b>Format Issues</b>	Includes letter of transmittal, title page, executive summary, table of contents, list of figures and tables, glossary, and references. Pages are numbered, figures and tables are introduced, headings are numbered, etc. References and citations are properly formatted.	<b>/10%</b>
<b>Correctness/Style</b>	Correct spelling, grammar, and punctuation. Style is clear concise, and coherent.	<b>/10%</b>
<b>Comments</b>		

## ENSC 305W/440W Grading Rubric for Functional Specification

Criteria	Details	Marks
<b>Introduction/Background</b>	Introduces basic purpose of the project.	<b>/05%</b>
<b>Content</b>	Document explains the functionality of the proposed product without excessive design content (i.e., outlines the “what” rather than the “how”).	<b>/10%</b>
<b>Technical Correctness</b>	Ideas presented represent valid functional specifications that must be considered for a marketed product. Specifications are presented using tables, graphs, and figures where possible (rather than over-reliance upon text).	<b>/15%</b>
<b>Process Details</b>	Complete analysis of problem. Justification for chosen functionalities. Sources of ideas referenced. Specification distinguishes between functions for present project version and later stages of project (i.e., proof-of-concept, prototype, and production versions). Comprehensively details current constraints.	<b>/20%</b>
<b>Engineering Standards</b>	Outlines specific engineering standards that apply to the device or system and lists them in the references.	<b>/10%</b>
<b>Sustainability/Safety</b>	Issues related to sustainability issues and safety of the device are carefully analyzed. This analysis must cover the “cradle-to-cradle” cycle for the current version of the device and should outline major considerations for a device at the production stage.	<b>/10%</b>
<b>Conclusion/References</b>	Summarizes functionality. Includes references for information from other sources.	<b>/05%</b>
<b>Presentation/Organization</b>	Document looks like a professional specification. Ideas follow in a logical manner.	<b>/05%</b>
<b>Format Issues</b>	Includes letter of transmittal, title page, executive summary, table of contents, list of figures and tables, glossary, and references. Pages are numbered, figures and tables are introduced, headings are numbered, etc. References and citations are properly formatted.	<b>/10%</b>
<b>Correctness/Style</b>	Correct spelling, grammar, and punctuation. Style is clear concise, and coherent. Uses passive voice judiciously.	<b>/10%</b>
<b>Comments</b>		

## ENSC 305W/440W Grading Rubric for Design Specification

Criteria	Details	Marks
<b>Introduction/Background</b>	Introduces basic purpose of the project.	<b>/05%</b>
<b>Content</b>	Document explains the design specifications with proper justification for the design approach chosen. Includes descriptions of the physics (or chemistry, biology, geology, meteorology, etc.) underlying the choices.	<b>/20%</b>
<b>Technical Correctness</b>	Ideas presented represent valid design specifications that will be met. Specifications are presented using tables, graphs, and figures where possible (rather than over-reliance upon text). Equations and graphs are used to back up/illustrate the science.	<b>/20%</b>
<b>Process Details</b>	Specification distinguishes between design details for present project version and later stages of project (i.e., proof-of-concept, prototype, and production versions). Numbering of design specs matches up with numbering for functional specs.	<b>/15%</b>
<b>Test Plan</b>	Provides a functional test plan for the present project version. (Note that project success will be measured against this test plan.)	<b>/10%</b>
<b>Conclusion/References</b>	Summarizes functionality. Includes references for information from other sources.	<b>/05%</b>
<b>Presentation/Organization</b>	Document looks like a professional specification. Ideas follow in a logical manner.	<b>/05%</b>
<b>Format Issues</b>	Includes letter of transmittal, title page, abstract, table of contents, list of figures and tables, glossary, and references. Pages are numbered, figures and tables are introduced, headings are numbered, etc. References and citations are properly formatted.	<b>/10%</b>
<b>Correctness/Style</b>	Correct spelling, grammar, and punctuation. Style is clear concise, and coherent. Uses passive voice judiciously.	<b>/10%</b>
<b>Comments</b>		

## ENSC 305W/440W Grading Rubric for Oral Progress Report

Criteria	Details	Marks
<b>Introduction/Background</b>	Introduces basic purpose and scope of the project clearly and concisely. Provides any necessary background.	<b>/10%</b>
<b>Schedule</b>	Outlines original schedule and where project currently stands in relation to it.	<b>/05%</b>
<b>Financial</b>	Outlines sources of funding and expenditures to date.	<b>/05%</b>
<b>Progress</b>	Details progress to date with respect to planning, research, user meetings experimentation, design, parts/materials acquisition, tests/measurements, fabrication, documentation, etc.	<b>/20%</b>
<b>Remediation</b>	Outlines how they will compensate for any current schedule slippage or issues with design or materials. Anticipates how to deal with unforeseen problems that may arise.	<b>/20%</b>
<b>Summary</b>	Clearly and concisely summarizes the current state of the project.	<b>/05%</b>
<b>Questions</b>	Questions are answered clearly and concisely without becoming defensive.	<b>/20%</b>
<b>Team Participation</b>	Everyone participates in presentation.	<b>/10%</b>
<b>Timing</b>	10 minutes for presentation. 5 minutes for questions.	<b>/05%</b>
<b>Comments</b>		

## ENSC 305W/440W Grading Rubric for Written Progress Report

Criteria	Details	Marks
<b>Introduction/Background</b>	Introduces basic purpose and scope of the project clearly and concisely. Provides any necessary background.	<b>/5%</b>
<b>Schedule</b>	Outlines original schedule and where project currently stands in relation to it.	<b>/10%</b>
<b>Financial</b>	Outlines sources of funding and expenditures to date.	<b>/10%</b>
<b>Progress</b>	Details progress to date with respect to planning, research, user meetings experimentation, design, parts/materials acquisition, tests/measurements, fabrication, documentation, etc. <b>(Please note that this section is worth 60% if no remediation section is required.)</b>	<b>/30%</b> <b>or</b> <b>/60%</b>
<b>Remediation (only include if required)</b>	Outlines how to compensate for any current schedule slippage or issues with design or materials. Anticipates how to deal with unforeseen problems that may arise.	<b>/30%</b>
<b>Summary/Conclusion</b>	Clearly and concisely summarizes the current state of the project.	<b>/5%</b>
<b>Conciseness</b>	Maximum 3 pages if remediation is required. Maximum 2 pages if remediation not required.	<b>/10%</b>
<b>Comments</b>		

## ENSC 305W/440W Grading Rubric for Presentation/Demo

Criteria	Details	Marks
<b>Title Slide/Organizer Personnel/Introduction Background/Motivation</b>	Presentation provides a title slide and an organizer for the presentation. Introduces team members and key roles. Clearly describes basic purpose of the project. Includes any necessary background for the project. Outlines motivation for the project (market, research, or curiosity driven).	<b>/05%</b>
<b>Body of Presentation</b>	Well organized and follows a logical structure. Provides a high-level description of main functions and project modules. Provides a business case (market, cost, financing, competition, etc.). Outlines materials, costs, and schedule (both estimated and actual). Details any major changes in scope and design.	<b>/25%</b>
<b>Multi-Person Presentation Format</b>	Appropriate transitions from team member to team member. Equity in participation.	<b>/05%</b>
<b>Slide Layout</b>	Slides formatted in a manner that is easily readable and includes details such as page numbers, titles, bullet format, graphics, etc. Slides have been carefully proofread for spelling and grammar issues.	<b>/10%</b>
<b>Multimedia/Prop Use</b>	Provides props or quick reference guides to pass out to audience. Makes use of video and audio media as appropriate.	<b>/05%</b>
<b>Conclusion/References Acknowledgements</b>	Summarizes project. Outlines what was learned by team members. Future plans for project, if any. Includes references for information from other sources. Acknowledges assistance of others.	<b>/05%</b>
<b>Questions</b>	Invites questions. Provides clear and concise answers. Avoids defensiveness.	<b>/10%</b>
<b>Demonstration</b>	Provides a convincing demonstration that the main functions outlined in the test plan have been successfully met. Able to answer questions about low-level technical details.	<b>/35%</b>
<b>Comments</b>		

## ENSC 305W/440W Grading Rubric for Post-Mortem

Criteria	Details	Marks
<b>Introduction/Background</b>	Introduces basic purpose of the project. Includes clear background and motivation for the project.	<b>/05%</b>
<b>Body of the Document</b>	Provides a high-level description of main functions and project modules. Outlines materials, costs, and schedule (both estimated and actual).	<b>/15%</b>
<b>Problems/Challenges</b>	Outlines major technical challenges encountered. Explains how these were resolved. Details any major changes in scope and design.	<b>/05%</b>
<b>Group Dynamics</b>	Includes a discussion of how the team was organized, any problems that arose, and how they were resolved	<b>/05%</b>
<b>Individual Learning/Workload Distribution Chart</b>	Includes a one-page, individually written reflection upon what was learned from the project, both technically and interpersonally (each team member writes a page about their learning experience). <b>The workload distribution chart outlines major technical, administrative, and support tasks and indicates who participated significantly in those tasks.</b>	<b>/25%</b>
<b>Conclusion/References</b>	Summarizes outcome and evaluates the project. Includes discussion of future plans, if any (or explains why project will be abandoned).	<b>/10%</b>
<b>Meeting Agendas/Minutes</b>	Includes an appendix that provides all the meeting agendas and minutes produced by the team over the course of the semester. (NB. Neatness does not count here.)	<b>/20%</b>
<b>Presentation/Organization</b>	Document looks like the work of a professional. Ideas follow in a logical manner. Layout and design is attractive.	<b>/05%</b>
<b>Format Issues</b>	Includes title page, table of contents, list of figures and tables, and references. Pages are numbered, figures and tables are introduced, headings are numbered, etc. References and citations are properly formatted.	<b>/05%</b>
<b>Correctness/Style</b>	Correct spelling, grammar, and punctuation. Style is clear, concise, and coherent.	<b>/05%</b>
<b>Comments</b>		

## ENSC 305W/440W Grading Rubric for Engineering Journals

Criteria	Details	Marks
<b>Identification</b>	Your journal has your full name, team name, and team number listed on the inside cover or first page of the journal. A contact phone number and your e-mail are also provided there. A sticker with your name is affixed to the outside cover. <b>Do not include student number anywhere in the journal.</b>	<b>/10%</b>
<b>Media</b>	Your journal is a standard, lined, black or blue lab-book with non-removable pre-numbered pages. <b>Spiral-bound notebooks, loose-leaf pages, or computer printouts are unacceptable and will result in a 0 for the entire assignment!</b>	<b>/15%</b>
<b>Format/Corrections</b>	All entries are in pen. Entries are dated (start on a new page for a new date). Corrections to past entries have a line drawn through them and are dated. <b>Do not scribble out or erase corrections.</b> Any added pages are securely glued or taped into the journal and are dated. Journal is reasonably legible. <b>Spelling and grammar don't count!</b>	<b>/25%</b>
<b>Regular Entries</b>	Journal is obviously written in on a regular basis. <b>Note that more than 3 entries per week (starting in the second week of classes) is the minimum required to receive full marks; less than 1 entry per week will result in a 0 for the entire assignment!</b>	<b>/50%</b>
<b>Comments</b>		