

Work Breakdown Structure

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EML4551C: Senior Design I

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NASA/Psyche - Robotic Explorer for Hypothesized Surfaces					
Phase I - Project Definition					
Phase II - Preliminary Design					
Phase III - Detailed Design & Project Management					
Level	Task	Responsibility	Status	Due Date	Notes
1.0	NASA/Psyche Rover	-	-	-	-
1.1	Milestone 1: Work Breakdown Structure	Team	✓	Jan. 13	https://canvas.fsu.edu/courses/158203/assignments/1068276
1.1.1	Outline Project Milestones and Deliverables	Asia	✓		
1.1.2	Assign Project Tasks	Jesse	✓		
1.1.3	Format and Submit Work Breakdown Structure	Colin	✓		
1.2	Milestone 2: Project Charter	Team	□	Jan. 20	https://canvas.fsu.edu/courses/158203/assignments/1068240
1.2.1	Create Project Scope	Leila	□		
1.2.1.1	Create Project Description	Colin	□		
1.2.1.2	Develop Key Goals	Leila	□		
1.2.1.3	Determine Market	Jesse	□		
1.2.1.4	Identify Useful Assumptions	Asia	□		
1.2.1.5	Determine Stakeholders	Jesse	□		
1.2.2	Create Code of Conduct	Asia	□		
1.2.2.1	Develop Mission Statement	Jesse	□		
1.2.2.2	Appoint Team Roles	Colin	□		
1.2.2.3	Determine Methods of Communication	Leila	□		
1.2.2.4	Determine Dress Code	Leila	□		
1.2.2.5	Determine Attendance Policy	Colin	□		
1.2.2.6	Create Statement of Understanding	Colin	□		
1.2.3	Format and Submit Project Charter	Colin	□		
1.3	Advisor Meet & Greet	Team	□	Jan. 22	https://canvas.fsu.edu/courses/158203/assignments/1068191
1.3.1	Schedule Meeting	Jesse	□		
1.3.2	Record Minutes	Leila	□		
1.3.2.1	Record Customer Statements	Colin	□		
1.3.3	Format and Submit Advisor Meet and Greet	Colin	□		
1.4	Milestone 3: Customer Needs & Wants	Team	□	Jan. 27	https://canvas.fsu.edu/courses/158203/assignments/1068203
1.4.1	Determine Interpreted Needs	Asia	□		Customer Statements
1.4.2	Review and Summarize Results	Asia	□		
1.4.3	Format and Submit Customer Needs and Wants	Colin	□		
1.5	Milestone 4: Functional Decomposition	Team	□	Feb. 3	https://canvas.fsu.edu/courses/158203/assignments/1068209
1.5.1	Generate Flow Chart	Leila	□		Hierarchy Chart
1.5.1.1	Create Accompanying Reference Table	Colin	□		
1.5.2	Introduce Functional Decomposition	Jesse	□		
1.5.3	Discuss Generated Data	Asia	□		Generated from Flow Chart
1.5.4	Discuss Function Relationships	Jesse	□		
1.5.5	Discuss System Connections	Leila	□		
1.5.6	Discuss Smart Integration	Colin	□		
1.5.7	Discuss Actions and Outcomes	Asia	□		
1.5.8	Discuss Function Resolution	Asia	□		

1.5.9	Format and Submit Functional Decomposition	Colin	<input type="checkbox"/>		
1.6	Advisor Meeting I	Team	<input type="checkbox"/>	Feb. 5	https://canvas.fsu.edu/courses/158203/assignments/1068232
1.6.1	Schedule Advisor Meeting I	Colin	<input type="checkbox"/>		
1.6.2	Complete Pre-Advisor Meeting Documents	Colin	<input type="checkbox"/>		
1.6.2.1	Create Agenda	Leila	<input type="checkbox"/>		
1.6.2.2	Create Timeline	Asia	<input type="checkbox"/>		
1.6.2.3	Create Budget Report	Jesse	<input type="checkbox"/>		
1.6.2.4	Format and Submit Pre-Advisor Meeting Documents	Colin	<input type="checkbox"/>		Submit agenda, timeline and budget report
1.6.3	Record Minutes	Leila	<input type="checkbox"/>		
1.6.4	Complete Post Advisor Meeting Documents	Jesse	<input type="checkbox"/>	Feb. 5	https://canvas.fsu.edu/courses/158203/assignments/1068225
1.6.4.1	Format and Submit Post Advisor Meeting Documents	Colin	<input type="checkbox"/>		Submit minutes
1.7	Milestone 5: Phase I Design Review	Team	<input type="checkbox"/>	Feb. 10	https://canvas.fsu.edu/courses/158203/assignments/1068235
1.7.1	Present Design Review I	Team	<input type="checkbox"/>		
1.7.1.1	Introduce Group	Colin	<input type="checkbox"/>		
1.7.1.2	Discuss Project Brief Summary	Jesse	<input type="checkbox"/>		
1.7.1.3	Explain Project Background	Leila	<input type="checkbox"/>		
1.7.1.4	Provide Current Design Status	Asia	<input type="checkbox"/>		
1.7.1.5	Forecast Future Plans	Colin	<input type="checkbox"/>		i.e. Schedule and Budget
1.7.2	Format and Submit Presentation	Colin	<input type="checkbox"/>		
1.8	Milestone 6: Targets	Team	<input type="checkbox"/>	Feb. 17	https://canvas.fsu.edu/courses/158203/assignments/1068260
1.8.1	Create Spreadsheet for Targets	Colin	<input type="checkbox"/>		
1.8.2	Identify Function Targets	Leila	<input type="checkbox"/>		
1.8.2.1	Identify Additional Outside Targets	Leila	<input type="checkbox"/>		
1.8.3	Identify Validation Tools	Asia	<input type="checkbox"/>		
1.8.4	Discuss Target Determination	Jesse	<input type="checkbox"/>		
1.8.5	Create Summary and Target Catalog	Asia	<input type="checkbox"/>		
1.8.6	Format and Submit Targets Report	Colin	<input type="checkbox"/>		
1.9	Milestone 7: Concept Generation	Team	<input type="checkbox"/>	Feb. 24	https://canvas.fsu.edu/courses/158203/assignments/1068201
1.9.1	Generate Project Concepts	Jesse	<input type="checkbox"/>		
1.9.1.1	Brainstorm with Team	Team	<input type="checkbox"/>		
1.9.1.2	Calculate Number of Generated Concepts	Jesse	<input type="checkbox"/>		100 concepts or within allowable tolerance
1.9.2	Identify Five Medium Fidelity Concepts	Colin	<input type="checkbox"/>		
1.9.2.1	Hand Sketch Concepts	Leila	<input type="checkbox"/>		
1.9.3	Identify Three High Fidelity Concepts	Asia	<input type="checkbox"/>		
1.9.3.1	Model Concepts in CAD	Jesse	<input type="checkbox"/>		
1.9.4	Identify and Display Use of Concept Generation Tools	Colin	<input type="checkbox"/>		
1.9.5	Format and Submit Concept Generation Report	Colin	<input type="checkbox"/>		
1.10	Milestone 8: Concept Selection	Team	<input type="checkbox"/>	Mar. 3	https://canvas.fsu.edu/courses/158203/assignments/1068202
1.10.1	Develop House of Quality (HoQ)	Leila	<input type="checkbox"/>		
1.10.1.1	Identify Engineering Characteristics	Colin	<input type="checkbox"/>		
1.10.1.2	Identify and Rank Customer Requirements	Asia	<input type="checkbox"/>		
1.10.1.3	Calculate Raw Scores and Weights	Asia	<input type="checkbox"/>		%
1.10.1.4	Rank Engineering Characteristics	Colin	<input type="checkbox"/>		
1.10.2	Discuss HoQ Outcomes	Jesse	<input type="checkbox"/>		
1.10.3	Develop Pugh Chart with High Ranking Selection Criteria	Colin	<input type="checkbox"/>		
1.10.3.1	Develop Second Pugh Chart for Re-Evaluation of Concepts	Asia	<input type="checkbox"/>		
1.10.4	Discuss Outcome(s) of Chart(s)	Jesse	<input type="checkbox"/>		
1.10.5	Develop AHP for Detailed Concept Selection	Leila	<input type="checkbox"/>		
1.10.6	Discuss Outcome of AHP	Leila	<input type="checkbox"/>		

1.10.7	Identify and Summarize Final Selection	Leila	<input type="checkbox"/>		
1.10.8	Format and Submit Concept Selection Report	Colin	<input type="checkbox"/>		
1.11	Advisor Meeting II	Team	<input type="checkbox"/>	Mar. 5	https://canvas.fsu.edu/courses/158203/assignments/1068233
1.11.1	Schedule Advisor Meeting II	Colin	<input type="checkbox"/>		
1.11.2	Complete Pre-Advisor Meeting Documents	Colin	<input type="checkbox"/>		
1.11.2.1	Create Agenda	Asia	<input type="checkbox"/>		
1.11.2.2	Create Timeline	Leila	<input type="checkbox"/>		https://canvas.fsu.edu/courses/158203/assignments/1068226
1.11.2.3	Create Budget Report	Jesse	<input type="checkbox"/>		
1.11.2.4	Format and Submit Pre-Advisor Meeting Documents	Colin	<input type="checkbox"/>		Submit agenda, timeline and budget report
1.11.3	Record Minutes	Leila	<input type="checkbox"/>		
1.11.4	Complete Post Advisor Meeting Documents	Jesse	<input type="checkbox"/>		
1.11.4.1	Format and Submit Post Advisor Meeting Documents	Colin	<input type="checkbox"/>		Submit minutes
1.12	Milestone 9: Phase II Design Review	Team	<input type="checkbox"/>	Mar. 10	https://canvas.fsu.edu/courses/158203/assignments/1068269
1.12.1	Presentation	Team	<input type="checkbox"/>		
1.12.1.1	Give Group Introduction	Colin	<input type="checkbox"/>		
1.12.1.2	Explain Project Brief Summary	Jesse	<input type="checkbox"/>		
1.12.1.3	Explain Targets	Leila	<input type="checkbox"/>		
1.12.1.4	Explain Concept Generation	Asia	<input type="checkbox"/>		
1.12.1.5	Overview of Concept Selection	Colin	<input type="checkbox"/>		
1.12.2	Format and Submit Presentation	Colin	<input type="checkbox"/>		
1.13	Milestone 10: Component Selection (Bill of Materials)	Team	<input type="checkbox"/>	Mar. 17	https://canvas.fsu.edu/courses/158203/assignments/1068199
1.13.1	Create Bill of Materials (BoM) Spreadsheet	Colin	<input type="checkbox"/>		
1.13.2	Identify Upcoming Order Needs	Leila	<input type="checkbox"/>		
1.13.2.1	Track Vendors and Part Numbers	Asia	<input type="checkbox"/>		
1.13.3	Develop Cost and Maturity Identification Methods	Jesse	<input type="checkbox"/>		
1.13.4	Format and Submit Bill of Materials Spreadsheet	Colin	<input type="checkbox"/>		
1.14	Milestone 11: Prototype Assessment Plan	Team	<input type="checkbox"/>	Mar. 24	https://canvas.fsu.edu/courses/158203/assignments/1089514
1.14.1	No Course Content Currently Developed (13:39, 01/11/2021)		<input type="checkbox"/>		Update when content becomes available
1.14.2	Format and Submit Prototype Assessment Plan	Colin	<input type="checkbox"/>		
1.15	Milestone 12: Risk Assessment	Team	<input type="checkbox"/>	Mar. 31	https://canvas.fsu.edu/courses/158203/assignments/1068248
1.15.1	Identify Potential Project Safety Hazards	Colin	<input type="checkbox"/>		
1.15.1.1	Assembly & Operation	Jesse	<input type="checkbox"/>		
1.15.1.2	Testing & Transport	Asia	<input type="checkbox"/>		
1.15.2	Outline Safety Measures	Colin	<input type="checkbox"/>		
1.15.2.1	Ensure Mitigating Efforts apply to Identified Hazards	Leila	<input type="checkbox"/>		Minimum one mitigation per hazard
1.15.2.2	Develop & Engineer Safe-Guards	Team	<input type="checkbox"/>		
1.15.2.3	Identify Personal Protective Equipment	Asia	<input type="checkbox"/>		
1.15.3	Identify Emergency Responders	Jesse	<input type="checkbox"/>		
1.15.4	Research and Reference Literature from Governing Safety Entities	Leila	<input type="checkbox"/>		Example: OSHA
	Format and Submit Risk Assessment Documents	Colin	<input type="checkbox"/>		
1.16	Advisor Meeting III	Team	<input type="checkbox"/>	Apr. 2	https://canvas.fsu.edu/courses/158203/assignments/1068234
1.16.1	Schedule Advisor Meeting III	Colin	<input type="checkbox"/>		
1.16.2	Complete Pre-Advisor Meeting Documents	Jesse	<input type="checkbox"/>		
1.16.2.1	Create Agenda	Asia	<input type="checkbox"/>		
1.16.2.2	Create Timeline	Asia	<input type="checkbox"/>		
1.16.2.3	Create Budget Report	Colin	<input type="checkbox"/>		https://canvas.fsu.edu/courses/158203/assignments/1068227
1.16.2.4	Format and Submit Pre-Advisor Meeting Documents	Colin	<input type="checkbox"/>		Submit agenda, timeline and budget report
1.16.3	Record Minutes	Leila	<input type="checkbox"/>		

1.16.4	Complete Post Advisor Meeting Documents	Leila	<input type="checkbox"/>		
1.16.4.1	Format and Submit Post Advisor Meeting Documents	Colin	<input type="checkbox"/>		Submit minutes
1.17	Milestone 13: Summer Project Plan (WBS Update)	Team	<input type="checkbox"/>	Apr. 7	https://canvas.fsu.edu/courses/158203/assignments/1068254
1.17.1	Document Future Timeline	Jesse	<input type="checkbox"/>		
1.17.2	Document Future Milestones	Colin	<input type="checkbox"/>		
1.17.2.1	Engineering Design Day	Asia	<input type="checkbox"/>		
1.17.2.2	Finals	Leila	<input type="checkbox"/>		
1.17.2.3	Graduation	Asia	<input type="checkbox"/>		
1.17.3	Document Future Deliverables	Jesse	<input type="checkbox"/>		
1.17.4	Format and Submit Summer Project Plan	Colin	<input type="checkbox"/>		
1.18	Milestone 14: Phase III Design Review (Poster)	Team	<input type="checkbox"/>	Apr. 14	https://canvas.fsu.edu/courses/158203/assignments/1068270
1.18.1	Choose Poster Aesthetics	Asia	<input type="checkbox"/>		Poster size is 24 x 36 inches
1.18.2	Categorize Relevant Project Information to Develop Key Points	Jesse	<input type="checkbox"/>		Reference FAMU-FSU CoE poster for poster dimension details
1.18.3	Determine Project Objectives, Goals, & Outcomes	Colin	<input type="checkbox"/>		Poster should be in pdf format
1.18.4	Identify Graphics to Support Key Points	Leila	<input type="checkbox"/>		
1.18.5	Practice Presentation	Team	<input type="checkbox"/>		Refer to rubric in Canvas link for specific requirements
1.18.6	Present Current Project Progress	Team	<input type="checkbox"/>		
1.18.6.1	Introduce Group	Leila	<input type="checkbox"/>		
1.18.6.2	Phase I	Jesse	<input type="checkbox"/>		
1.18.6.3	Phase II	Asia	<input type="checkbox"/>		
1.18.6.4	Phase III	Colin	<input type="checkbox"/>		
1.18.7	Format and Submit Poster	Colin	<input type="checkbox"/>		
1.19	Milestone 15: Final Report (Spring)	Team	<input type="checkbox"/>	Apr. 16	https://canvas.fsu.edu/courses/158203/assignments/1100113
1.19.1	No Course Content Currently Developed (13:39, 01/11/2021)		<input type="checkbox"/>		Update when content becomes available
1.19.2	Format and Submit Final Report	Colin	<input type="checkbox"/>		