MinE 3544 Mineral Processing Lab **Experimental Proposal Report** Technical Evaluation & Grading Rubric

Student name: ______

Report Section	Total	Rubric Item	Max Points	Your Score
Introduction	25	-The <i>Background</i> section describes the process (e.g. grinding, flotation) that will be investigated and why it is important for mineral processing	5	
		-The <i>Motivation</i> section explains knowledge gap or lack of understanding that explains why the project needs to be completed	5	
		-Preliminary data of a fundamental assessment is used to support the project motivation	3	
		-The <i>Project Objective</i> is a single statement that is clear and concise	2	
		-The Project Objective adequately articulates the primary goal of the work	5	
		-Hypothesis/expected results are clearly written and based on a scientific principle	5	
Technical Approach	45	-The feed material description includes all necessary information, including source, approximate feed grade, size, etc.	5	
		-All sample preparation steps, including crushing, grinding, screening, and characterization are adequately described. Keep in mind that some materials may arrive prepared and only need splitting.	10	
		-The laboratory procedures for conducting the tests are described	10	
		-A flowsheet or other graphic is used to explain the process steps OR the narrative description of sufficient detail to adequately replace a flowsheet graphic.	5	
		-The laboratory procedure explains which experimental parameters will be held constant and which will be evaluated (e.g. percent solids, reagent types, reagent dosages, grind time, flotation time, particle top size, circuit configuration)	5	
		-The data analysis section is adequate and contains any equations or models that will be used to interpret the results	10	
Resources and Timeline	15	-All major equipment needed to complete tests are listed	3	
		-Equipment descriptions are adequate	4	
		-The timeline includes all major tasks that need to be completed	3	
		-The timeline is adequate to complete the proposed effort.	5	
Overall		-The proposal is based is based on sound scientific principles and knowledge of the process unit to be studied	10	
Document	15	-The proposal used graphs, tables, and equations to supplement the narrative discussion.	2	
Characteristics		-The cover page is clear and includes are relevant information.	2	
		-The proposal properly integrates and utilizes references to support technical data.	1	

Additional Comments