

	1-Needs More	2	3 - Good	4	5 - Excellent
Task organization and completion. <ul style="list-style-type: none"> <input type="checkbox"/> Clear re-statement of deliverables? Refined from IPR1? Show both. <input type="checkbox"/> Does list of deliverables reflect those stated in handout? <input type="checkbox"/> Evidence that task organization has been effective? <input type="checkbox"/> Evidence that major portions of design are near completion? <input type="checkbox"/> Evidence of iterative design steps? 					
Reactor design. <ul style="list-style-type: none"> <input type="checkbox"/> Modelling of reactor in ChemCAD complete? <input type="checkbox"/> Has catalyst mass been calculated? <input type="checkbox"/> Has heat duty and mitigation been established <input type="checkbox"/> Has a realistic pressure drop been incorporated? <input type="checkbox"/> Design drawing showing configuration of the reactor? 					
Separator design. <ul style="list-style-type: none"> <input type="checkbox"/> Correct number of splits been incorporated into design? <input type="checkbox"/> Includes method to remove the water? <input type="checkbox"/> Distillation columns and flash units sized? <input type="checkbox"/> Are the reboilers and condensers sized? <input type="checkbox"/> Ancillary pumps, compressors, and turbines included? 					
Literature review. <ul style="list-style-type: none"> <input type="checkbox"/> What are the TCIs and capacities for other plants already built, in 2016 dollars? <input type="checkbox"/> Calculated preliminary plant cost of their plant from scaling existing plant(s)? <input type="checkbox"/> Shows electron-pushing organic chemistry mechanism of FT reaction? <input type="checkbox"/> Shows citations for mechanism from chemical journals? <input type="checkbox"/> Making use of important chemical engineering design references? 					
Quality of PowerPoint briefing. <ul style="list-style-type: none"> <input type="checkbox"/> Are slides organized and clear? <input type="checkbox"/> Was the number of slides appropriate for a 15 minute briefing? <input type="checkbox"/> Did the cadets each speak clearly with correct grammar? <input type="checkbox"/> How did the cadets respond to questions? <input type="checkbox"/> Did all group members play a significant role? 					
Process Design <ul style="list-style-type: none"> <input type="checkbox"/> TCI of HI, SU, and ASP? Utility costs complete? <input type="checkbox"/> Estimate of labor costs complete? <input type="checkbox"/> Preliminary I/O analysis complete? <input type="checkbox"/> What is the cost of the reactor and catalyst? <input type="checkbox"/> What is the cost of each unit in the separator train? 					
Notes: Total Score: _____					