

Bioengineering Design Strategy Rubric

Instructor: Z. Maria Oden

Team Name: _____

		Cycle 2	Cycle 3
1.	Quality of design strategy discussion and device description	/40	
2.	Quality of device implementation plan	/25	
3.	Use of figures	/25	
4.	Professionalism/ Formatting	/10	
5.	Response to comments/ previous grading		/20
	TOTAL:	/100	/20

Grading elements in Design Strategy

	Excellent (max pts)	Average (mid pts)	Poor (lowest pts)
Quality of design strategy discussion and device description	Discussion provides logical, well supported discussion of how the team is approaching the problem and why. Intended device operation is discussed in detail, with adequate justification that explains why the team chose this approach over other options.	Design strategy is described, but discussion is not always complete. Elements of device operation may be unclear or rationale for selecting them over other options may not always be apparent.	Design strategy and device description are confusing, vague, or incomplete. Team may omit critical components of device design or cover the components only cursorily. Reader has significant questions about how device will work or why the team chose this approach over other options.
Quality of device implementation plan	Team has a well thought out plan for implementing the device. Regulatory hurdles (specifically FDA approval) have been thoroughly researched and integrated into the plan in its own section (or reasons for not needing FDA approval is described).	Plan is vague or incompletely defined. Reader has occasional questions about whether the plan is feasible. Team has not fully investigated or explained the potential impact of regulatory requirements.	Plan is nonexistent or incompletely thought out. No effort has been made to research the potential regulatory hurdles of launching the device.
Use of figures	Figures are included to explain and organize content and help reader visualize device operation and function. Figures are numbered and referenced in text, and figure content is appropriately labeled and easy to read. Captions explain the figures thoroughly.	Figures are used but may have a few of the following problems: do not aid understanding of device operation or function; are not explained well; are not numbered, labeled, referenced in text, or appropriately captioned.	Figures have several of the problems listed in Col. 2 or are used ineffectively or sporadically in the document.
Professionalism/ Formatting	Organizes document for readability. Transitions logically between topics, leads with assertions, and provides clear forecasting sentences and subheads to guide reader through the document. Grammar and spelling is not distracting.	Document contains some distracting formatting or grammar problems. Organization may not aid understanding or help readers skim the document. Writing (sentence structure and transitions) may fail to guide reader.	Transitions and other cues to guide reader are absent. Document may be incomplete, sloppily organized, or poorly written.
Response to comments and previous grading	Team has thoughtfully considered feedback and input from graders in prior cycles. Work in this cycle demonstrates team's effort actively improve the document, going above and beyond specific points called out by the grader.	Team has incorporated most of the specific changes made by graders, but revisions do not address deep or more substantive problems with the document.	Team has ignored grader feedback or taken only minimal steps to improve the document.