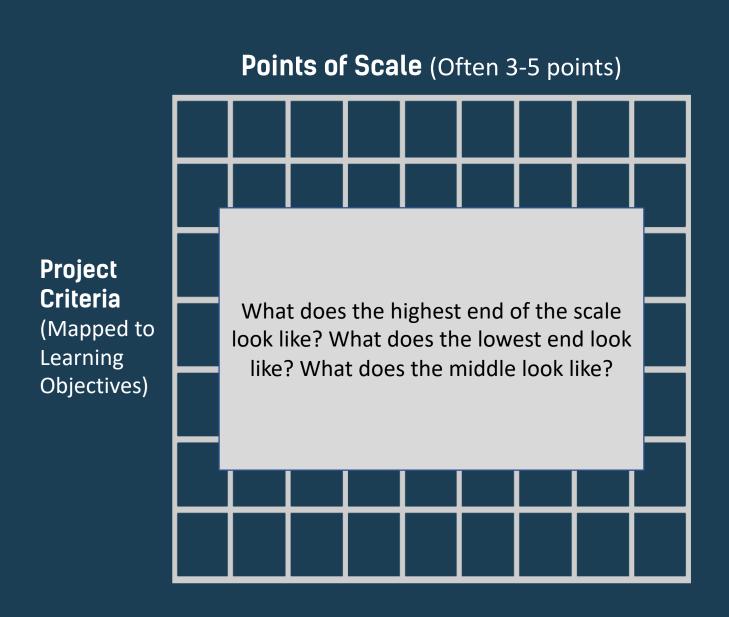# Makerspace FLC: Creating Rubrics

A rubric is a useful tool for assessing complex projects that have difficult-to-quantify components. When creating a rubric, find alignment between the rubric criteria, project characteristics, and stated learning objectives.

Points of Scale (Often 3-5 points)

Project Criteria (Mapped to Learning Objectives)

What does the highest end of the scale look like? What does the lowest end look like? What does the middle look like?

See the next page for specific examples from Makerspace FLC courses!

Makerspace FLC: Creating Rubrics

See examples below of rubrics from two different maker-integrated courses.

Criteria	Needs Improvement	Meets Expectations	Exceeds Expectations
Clearly organized paper with attention to structure	The paper is not logically organized, lacks internal organization and structure, or needs considerable revision and restructuring.	The paper is organized logically and has a distinct, intentional structure for the most part, with some parts that need revision or restructuring.	The paper is very well organized, has an intentional structure, and does not need major revision or restructuring.
Attention to course materials and conversations	Course materials and conversations are absent from the paper.	Course materials and conversations are occasionally brought in to supplement the topics covered in the paper.	Course materials and conversations are integrated throughout the paper, making it clear the writer has used these to better reflect on their own practices.
Attention to the design process [DESIGN PRAXIS]	Little or no attention is given to the design process. The paper is written only as an end-product description, and not a narrative of a work-in-progress.	The design process is evident in writing, but key steps are ignored. Half or fewer of the elements of design praxis are evident in the paper.	The design process is clearly described throughout the paper. More than half of the elements of design praxis are evident and it is clear that the product was enhanced through the process.
Attention to knowledge transfer [TRANSFERS KNOWLEDGE]	The paper contains little or no mention of the educative nature of the final product or how stakeholders gained new knowledge throughout the project.	The paper has evidence of stakeholder knowledge gains and the educative nature of the final product, but does not focus on these elements throughout.	The paper has a strong focus on knowledge transfer and makes mention of the educative nature of the final product. Furthermore, gains in stakeholder knowledge are evident throughout the paper.

EDUC567:
Postmodern Children's Lit.
(Jocelyn Glazier)

GEOL101L: Planet Earth
(Megan Plenge)

Aspect of project being graded	1 point	2 points	3 points	4 points	5 points
Model (25 points total)					
Usefulness of Model (5 points)	You made a model: but why?	Model is a demonstration rather than a tool, and a poor demonstration for answering your research question	Model is a demonstration rather than a tool, but an excellent demonstration for answering your research question	Model is a tool for answering your question, but a different tool may have been more effective	Model is an excellent tool for answering you research question/ testing your hypothesis
Planning/design of model (10 points)	The design of the model is unable to test your hypothesis	The model design is missing at least one major element and cannot sufficiently test your hypothesis	The model design is missing at least one minor element for being able to test your hypothesis	The model design is capable of testing your hypothesis	The model was well though-out: the design is a great one for testing your hypothesis!
Functionality of model (10 points)	The model was designed but never created, so functionality cannot be tested, though the design/ plans look as though they would work	The model does not function as designed and cannot be made to work, and no back-up was created	The model does not function as designed, but data collection is flawed, OR a back-up of the model was used but did not collect data sucessfully	The model functions, but not as intended, and data collection is flawed, OR a back-up plan for the model was implemented and able to collect (flawed) data	The model functions as designed, OR a back-up plan for the model was sucessfully implemented
Write-up (50 points)					
Background, research question, and hypothesis (10 points)	You provide background, your research question, and your hypothesis, but 2 of the 3 do not seem explicitly connected	-- May be awarded at discretion of TA	You provide background, your research question, and your hypothesis, but 2 of the 3 do not seem explicitly connected	-- May be awarded at discretion of TA	The background provided makes it easy to see why this question needs to be answered and leads directly to your hypothesis
Hypothesis testing (5 points)	Collected data and method of collection do not clearly relate to hypothesis	Collected data or method of collection does not clearly relate to hypothesis	Collected data relates to hypothesis, but this data alone will not support/ repudiate hypothesis	Collected data clearly relates to hypothesis, and is sufficient to support/repudiate hypothesis	Collected data clearly relates to hypothesis and ALL relevant data necessary for