

This document outlines the guidelines for your Module 5 poster presentation. You are strongly encouraged to read the entire document before beginning the design and development of your poster.

## Overview

### *Learning Outcomes*

Through the poster presentation, you will further learn how to create a technical poster to showcase your design process to multiple audiences (engineering professors and TAs, technical communication professors, peers, and/or other visitors). Specifically, you will

- organize the components of the poster clearly and logically, highlighting your team's designs, prototypes and decision-making process, as well as your final claw retrieval system
- produce clear and concise text blocks
- create effective and appropriate visuals and engineering drawings
- use font size, font style, colour, white space, and page design for visual effectiveness

### *Tasks, Purposes, and Audiences*

For APSC 101 Module 5, you are to showcase the claw retrieval system you have designed, and present your design process. The audience in this case is comprised of the course instructors, teaching assistants, and your classmates. The purpose of your poster is to provide a visual narrative (story) of your design project. Your goal is to communicate the process that you went through, and your final design product.

Your poster should include both text and graphics, organized and displayed in an easy-to-view manner. It should include the following components:

- the design concepts you considered,
- the prototypes you built,
- results from experimental tests on your prototypes,
- your reasons for selecting the final design, and
- engineering drawings of your final design.

Your poster should be clear and attractive to the audience. It will be evaluated primarily for its effectiveness in communicating your design process. **You will not be required to present the poster formally**, but you are expected to stand by your poster to answer questions from the audience.

## Detailed Instructions

### *Materials*

All posters are to use a 48" wide x 36" high three-panel (two-fold) presentation board as a base. You will have to purchase your own board, it will not be provided to you. Most stores that sell office

supplies, including the UBC Bookstore, Staples (there is one in the university village on Allison Rd.), Office Depot, and others sell these boards for approximately \$10.

It is our expectation that teams will construct their poster by affixing computer-printed 8.5"x11" sheets of paper to the poster board. This is to simplify poster creation for you, but you are not limited to this approach to make your poster.

You will also require access to a printer. On-campus printing is available both in black-and-white and colour. Instructions to set up an account for new users can be found here:

<http://services.library.ubc.ca/computers-technology/copy-print-scan/pay-for-print-students-faculty-staff/>.

### **Required Elements**

Your poster requires the following elements

- a title banner, centred at the top of the middle panel,
- a team number (minimum 6"x6"), placed on the top left side panel, and
- a team roster showing the names of team members, placed on the left panel (you may also include your photos, if you wish).

In addition, the primary evaluation of your poster will be on the following elements

- a section showing a range of promising concepts your team generated (early concept sketches),
- a section summarizing the prototypes that you decided to build,
- a section summarizing elements of risk associated with your designs, the tests you performed to evaluate risk, and the test results
- a section justifying your decisions that lead to you final claw designs,
- an engineering drawing of the final claw design (can be hand drawn)
- (optional) a section describing what you would do differently knowing what you know now.

### **Display**

To create a professional-looking technical poster, make sure that

- the title is clear, informative, and large enough to be legible from a reasonable distance,
- all fonts used are simple, clear and readable,
- the flow of information naturally follows the columns and rows of the poster, allowing viewers to navigate the poster easily,
- text blocks are clear and concise,
- listed items follow a grammatically similar structure,<sup>1</sup>
- spelling and grammar have been checked, and
- all graphics are presented with a number and label.

### **Answering Questions**

When interacting with your audience, you should show confidence and maintain eye contact. Avoid having one person do all the speaking for the team. When you respond to questions, speak clearly and succinctly. You are not to prepare any formal material to present during the poster session, but are meant to practice listening to questions and providing concise, appropriate answers in a technical environment.

---

<sup>1</sup> For example, in the current list, all items are statements which complete the stem "make sure that" For more examples of this concept, see [owl.english.purdue.edu/owl/resource/623/01/](http://owl.english.purdue.edu/owl/resource/623/01/)

### ***Peer-to-Peer Feedback***

As an engineer, giving and receiving feedback will be an important part of your career. Like all skills, being able to deliver concise feedback in an appropriate manner requires practice, and being able to receive feedback is important for self-improvement, however it can be harder than it sounds. During the poster showcase, there will be a peer-to-peer feedback activity where each student will practice both giving and receiving feedback. More details will be provided closer to the showcase date.

## **Rubric**

The rubric on the following page will be used to evaluate your poster presentation. This rubric will be duplicated on Connect for grading purposes.<sup>2</sup> As you prepare your poster, make it easy for the grader to give you high marks by clearly addressing each of the rubric elements. Also note the different criteria weights. Please see the poster rubric from Module 1 for relevant examples of previous posters.

---

<sup>2</sup> In the event of a discrepancy between this rubric and the one on Connect, this one will be considered the official rubric.

## APSC 100 Module 5 Poster Rubric

Criteria	Weight	Below expectations: major errors	Marginal: some noticeable errors	Meets expectations: a few minor errors	Exceeds expectations: clear, appealing, and appropriate
		0 marks	2 marks	3 marks	4 marks
<b>Information and Audience</b>	5%	The poster content is not informative; it does not describe the unique design / engineering work of the team to either technical or nontechnical audiences.	The poster content is somewhat informative but trivial details may be emphasized over key aspects of the design; it is appropriate for either a technical or a non-technical audience, but not both.	The poster content is informative and appropriate for a technical audience, but some concepts may be difficult for a nontechnical audience to understand, some key technical details may be lacking.	The poster content is highly informative and appropriate; it is interesting to a technical audience but still clear and accessible to a non-technical audience.
<b>Organization</b>	5%	It is difficult to identify main points or navigate sections of content; poster is compromised by sloppy construction or chaotic design	Design creates occasional confusion or distraction; construction may suggest a need for more careful assembly	Visually unified design allows viewers to navigate the poster with little difficulty, identifying main points and major evidence	Poster layout integrates all elements into a harmonious, purpose-apparent design; specific headings help to reveal organization
<b>Visuals (drawings and sketches)</b>	15%	The poster uses non-technical or irrelevant visuals; there are either too many or too few visuals. Engineering drawings are not used.	Some technical visuals are used, but they lack labels or captions; some sketches are overly decorative or unclear. Engineering drawings do not follow conventions.	The poster has all the technical visuals and sketches required; the quality could be improved with more attention to accuracy or detail. Engineering drawings do not use the proper perspective, or are not dimensioned properly.	Visuals and sketches convey relevant technical information, yet remain accessible to non-technical viewers; labels and captions are properly included. Engineering drawings follow conventions, and are dimensioned properly.
<b>Language</b>	5%	The poster uses an excessive amount of text; there are many grammatical errors making it hard to view or understand.	The poster has more text than visuals; there are frequent errors or poor formatting choices that make elements of the poster difficult to understand; listed items sometimes do not follow a	Text is generally used appropriately; there are a few errors but they do not affect understanding of the design; listed items follow a grammatically parallel	Text allows viewers to understand the design: text is visually appealing, clear, concise, and error free; listed items follow a grammatically parallel

			grammatically parallel structure.	structure.	structure.
<b>Design Process</b>	20%	The poster does not show evidence that a formal design process was used; or design process stages are represented on the poster but they are contradictory or important elements are missing.	The poster provides some evidence that most stages of a formal design process were used; the major stages of the process are presented but they do not flow together – output from one stage of the process is not used as input to the next stage; significant issues may be present in terms of appropriate emphasis or consistency in information.	The poster shows evidence that a formal design process was used; all stages of the process are represented, but the flow from one stage to the next may not be explicit; minor issues may be present in terms of appropriate emphasis at each stage or consistency in information.	The poster convincingly demonstrates that a formal design process was rigorously followed; outcomes from one stage are clearly presented as inputs to the next stage; emphasis at each stage is appropriate for the project.
<b>Alternative Conceptual Solutions Presented</b>	10%	Alternative solutions are not presented; only the final design is shown.	Only one alternative design solution is presented, or all alternative design solutions are similar to the final design or are very unlikely to work.	Several plausible alternative design solutions are presented in addition to the final design; the diversity of solutions is somewhat limited.	A wide range of plausible alternative design solutions are presented in addition to the final design; alternatives include common solutions as well as novel solutions.
<b>Prototyping and Experimentation</b>	20%	No evidence of prototypes. No evidence of risk assessment or experimental tests.	Few prototypes were constructed, and did not contribute to final design. Experimental tests results do not provide information to inform any decisions or do not relate to risk assessment.	Several prototypes were constructed, but were limited in capacity to evaluate claw performance. Experimental tests support design decisions, but are only loosely related to areas of risk.	Several prototypes were constructed to evaluate key aspects of the claw. Experimental tests evaluate key areas of risk, and were critical in decision justification.
<b>Decision Justification</b>	20%	Most key decision decisions are neither described nor supported.	Most key design decisions are acknowledged or implied, and are only weakly/implicitly supported by information on the poster.	Most key design decisions are described, and are supported by information on the poster.	All key design decisions are clearly described, and are strongly and explicitly supported by information on the poster.

Elements of this Rubric drawn from the Electronic Poster Competition Rubric for IPCC 2013  
(sites.ieee.org/pcs/files/2012/11/poster\_-rubric\_IPCC\_2013.pdf)