

## **SYDE462 - Panel Exam and Technical Demo**

**20% of course grade - Team**

**10% of course grade - Individual**

### **Due Date:**

- Exams will be scheduled March 27th - April 6th, 2023
- Presentation Slides due by 8pm on Sunday, March 26th, on LEARN in PDF format.

### **Panel exam (60 Minutes)**

#### **Team Presentation (15 minutes):**

The team presentation is to be a maximum of 15 minutes, including a technical walk through and a 5 minute demo of the final prototype. A hands-on demonstration is encouraged. The presentation should present a clear overview of the project motivation, scope, and evidence of project progress by way of engineering methods used, project outcomes, prototype demonstration, and identification of major conclusions and recommendations.

Its members will be asked to justify/defend claims, approaches, outcomes, and design decisions, as presented in the presentation and/or the team conference paper. Use the rubric and the conference paper as a guide for the expectations for the content of this presentation.

Teams must submit their presentation slides by 8pm on Sunday, March 26th, on LEARN in PDF format. No changes in slide content from what is submitted are allowed.

Note: All team members must be present.

**RUBRIC FOR PANEL EXAM TEAM PRESENTATION**

Team #:                      Project Title:

Missing components = 0

U = Unsatisfactory (clearly below standard for a 4th year level SYDE student)

M = Marginal (meets minimum expectations)

S = Satisfactory (demonstrates basic competence for the project undertaken)

G = Very Good (good demonstration of engineering knowledge and design skills)

E = Excellent (excellent work, above average design skills and real insight into the problem)

O = Outstanding (showcase worthy work, well above expectations)

<b>Components</b>	<b>U</b>	<b>M</b>	<b>S</b>	<b>G</b>	<b>E</b>	<b>O</b>	<b>Score</b>
Project Scope and Objectives	1	2,5	3	3,5	4	5	/5
Design Methods and Analysis	2	5	6	7,5	8	10	/10
Design Solution and Outcomes	2	5	6	7,5	8	10	/10
Prototype Demonstration	2	5	6	7,5	8	10	/10
Conclusions and Recommendations	2	5	6	7,5	8	10	/10
Oral + Visual Presentation	1	2,5	3	3,5	4	5	/5
<b>TOTAL</b>							<b>/50</b>

Comments:

**Individual Student Questions (10 minutes each):**

Each student will be asked 3-4 questions related to their contributions to the project.

General Individual Questions (example questions):

1. Explain the main theory or engineering principle related to your engineering analysis task(s).
2. Discuss the alternatives you considered for moving forward with your engineering analysis tasks.
3. How did your evaluation on a specific component inform design decisions?
4. Describe the overall system and how the components interact.

If required, individual students may be asked to attend an additional individual meeting, at a later time, to allow the evaluators to ask more questions.

## RUBRIC FOR PANEL EXAM INDIVIDUAL QUESTIONS

Team #:                      Student Name:

Missing components = 0

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M = Marginal (meets minimum expectations)

S = Satisfactory (demonstrates basic competence for the project undertaken)

G = Very Good (good demonstration of engineering knowledge and design skills)

E = Excellent (excellent work, above average design skills and real insight into the problem)

O = Outstanding (showcase worthy work, well above expectations)

Since not all components may be covered in the questions, please only indicate with a check mark or a dot the rating on components which were demonstrated.

Components	U	M	S	G	E	O
System Understanding						
Technical Understanding						
Individual Contribution						
Ability to Justify a Design Decision						
Extend Ideas and Draw Connections						
Individual Response to Questions						

Numeric Grade	U	M	S	G	E	O	Score
Overall Grade	2	5	6	7	8	10	

Comments: