

## **SYDE461 - Panel Exam and Technical Demo**

10% of course grade - Team

10% of course grade - Individual

Due Date:

Exams scheduled during the weeks of Nov. 21st-Dec. 2nd, 2022

Presentation Slides due by 8pm on Sunday, Nov. 20th, on LEARN in PDF format.

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

Team Presentation (10 minutes):

The team presentation is to be a maximum of 10 minutes, including a short technical walkthrough (not a full hands-on demo) of the current prototypes - your prototype submission due Dec. 3rd will allow for a more in depth look at your work. 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 demonstration of problem space understanding.

You should justify/defend claims, approaches, outcomes, and design decisions, as presented in 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, Nov. 21st, on LEARN in PDF format. No changes in slide content from what is submitted are allowed.

Note: All team members must be present. The panel exam will be held on MS-Teams as a video-conference and will include your Advisor and possibly other external examiners.

Please practice your presentation using the MS-Teams platform to help eliminate technical issues.

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

Each student will be asked 1-2 questions directly 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 TEAM PRESENTATION**

10% Team Grade

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	1	2,5	3	3,5	4	5	/5
Design Outcomes	2	5	6,5	7,5	8,5	10	/10
Prototype Walkthrough	2	5	6,5	7,5	8,5	10	/10
Conclusions and Recommendations	1	2,5	3	3,5	4	5	/5
Oral Presentation	1	2,5	3	3,5	4	5	/5
Visual Presentation	1	2,5	3	3,5	4	5	/5
<b>TOTAL</b>							<b>/45</b>

Comments:

## RUBRIC FOR PANEL EXAM INDIVIDUAL SUBMISSION AND QUESTIONS

10% Individual

Team #:                      Student Name:

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)

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.

Provide one overall numeric score out of 10 evaluating the student's response to questions.

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

<b>Numeric Grade</b>	<b>U</b>	<b>M</b>	<b>S</b>	<b>G</b>	<b>E</b>	<b>O</b>	<b>Score</b>
Overall Grade	2	5	6	7,5	8,5	10	

Comments: