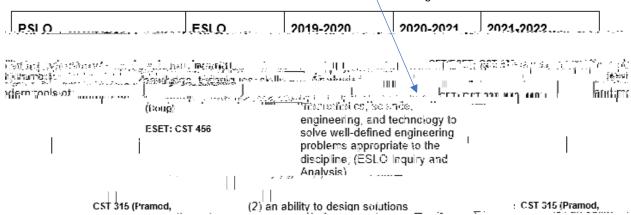
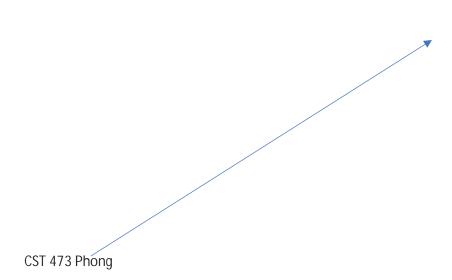


# 2020-21 Program Assessment Embedded Systems Portland Metro, Wilsonville

### CST 162 Phong





## Assessment Map and Measure

F – Foundation – introduction of the learning outcome, typically at the lower-division level.

P - Practicing - reinforcement and elaboration of the learning outcome, or

C – Capstone – demonstration of the learning outcome at the target level for the degree

For each outcome, programs should identify at least 2 direct measures (student work that provides evidence of their knowledge and skills), and 1 indirect measure (student self-assessment of their knowledge and skills) for each outcome.

For every program, data from the Student Exit Survey will be an indirect measure at the capstone level.

Term Name: Summer 2021

Course Code CST 162

1. An ability to apply knowledge, techniques, skills and modern tools of math, science, engineering and technology to solve well-defined engineering problems appropriate to the discipline;

Assignment Name: Full Adder HW/Quiz/Lab

Type: Direct Assessment

Created by: Phong Nguyen

Assessment Method:

Use rubric below to assess student full understanding of basic logic design from paper design to final design using Verilog on a DE10 Lite board

## Assessment strategy for CST 162 Digital Logic

Learning Objectives	Learning Activities	Assessments		
What should students be able to do?	How will students learn (assimilate, interpret, practice, and demonstrate) what is necessary to succeed on the	What evidence would be acceptable to show that student have achieved the objectives?		
	assessments?	Formative Assessment Summative	Summative Assessment	

Use the Sum of Product (SOP) Digital Design process to design a Logic Diagram of a logic device using AND, OR and Inverter gates On paper, begin with a block diagram with appropriate inputs and outputs for a logic device. Next on paper, provide the Truth Table (TT) 541iati

# Assessment strategy for CST 162 Digital Logic

Learning Objectives	Learning Activities	Assessments
What should students be able to do?	How will students learn (assimilate, interpret, practice, and demonstrate)	
	what is necessary to succeed on the	
	assessments?	

Term Name: Spring 2020

Course Code CST 473

4. An ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes;

Assignment Name: Lessons Learned Paper

5. An ability to function effectively as a member on a technical team;			
Course/Event	CST 372/373		
Legend	C- Capstone		

Assessment Measure

2. Teamwork	(Assists others, accepts assistance, respects opinions,	
	cooperates, resolves conflicts effectively, motivates others)	
3. Workload	(Assigned fair share, accomplishes assigned work,	
	willing to take on extra work to accomplish tasks)	
4. Work quality	(Completed work is of highest standard)	
5. Reliability	(Accepts hard work, completes assigned work promptly	
	and effectively, accepts responsibility for work quality)	
6. Communicat	ion (Listens to others, establishes clear expectations of	
	others, understand clearly written/verbal correspondence)	
7. Time manage	ement (Attends all required functions, not procrastinate,	
	schedules work eff estat2 (n)5.2 (sv)2.2 (ael)5.3 (y]Tbe)1	0.9 ()5.3 (i)2.7 (wo)-3.6nstastrtt2 (n)5.27

#### **COMBINED DATA**

### Name/score

	а	b	С	d	е	Average
Attitude	9	9	9	8	6	8.2
Teamwork	9	9	9	7	5	7.8
Workload	8	9	9	6	5	7.4
Work quality	8	8	9	4	4	6.6
Reliability	8	10	10	4	4	7.2
Communication	9	8	9	6	5	7.4
Time manage	7	7	9	4	4	6.2
Tech						
proficiency	8	9	8	7	7	7.8
Improve/adapt	8	8	8	5	6	7
Documentation	8	7	7	4	5	6.2
TOTAL	82	84	87	55	51	

### OVERALL GRADE:

Team A - A

Team B - F

### **ANALYSIS OF RESULT:**

This is NOT a representative year due to Covid. The lack of in-person meeting on top of the stress of all aspects of life for one team with two team members directly destroyed one team. Have to reassess this on a non\_covid year.