

## Assessment of OUTCOME 2

### EOC4422 OCEAN WAVE MECHANICS.

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Student names not given to protect privacy; instructor shall keep a record with names	<b>Outcome 2</b> “An ability to identify, formulate, and solve engineering problems by applying knowledge of mathematics, science and engineering” includes: (i) using mathematical and scientific principles to formulate models of processes in ocean engineering, (ii) applying calculus /linear algebra to engineering problems, (iii) relating theory to engineering applications and (iv) interpreting mathematical and scientific terms.	
Name	Grade	Remarks and Rubric
1.	A	<b>Assessment Method:</b> The assessment is based on student’s performance in the quizzes and tests. As of 11/7/09, three quizzes and two tests were given to the class. The problems test not only the overall understanding of the present subject but also the ability to apply knowledge of mathematics (in particular, calculus and differential equations), science (in particular, physics) and engineering (in particular, dynamics and fluid mechanics) to formulate and solve the problems in ocean wave mechanics.
2.	B	
3.	A	
4.	A	
5.	A	
6.	B	
7.	B	
8.	B	
9.	C	<b>Grade A:</b> This grade reflects the student’s full and thorough understanding of the subject and the strong background in basic sciences and mathematics to be able to solve almost all the problems in all the tests correctly.
10.	B	
11.	C	<b>Grade B:</b> The grade B reflects student’s good understanding of the present subject and reasonably strong background in basic sciences and mathematics. With additional effort, the students in this group are capable of achieving the intended outcome to the full extent.
12.	D	
13.	B	
14.	B	
15.	D	<b>Grade C:</b> Performance indicates that the student has not fully understood subject. A rather weak background in mathematics and science subjects may be another reason why the students who got the grade of C are not able to grasp the subject fully.
16.	C	
17.	B	
18.	B	
19.	B	<b>Grade D:</b> Background in science and mathematics and the performance in the present subject are both unsatisfactory. One of the two students who received this grade has been a part-time (non-degree seeking) student returning to school after many years. The student will have to be advised to review or re-take basic courses such as Physics, Engineering Mechanics and Engineering Mathematics. The other student who received this grade seems to have good background in science and mathematics but appears to have lost the interest or focus on the subject.
20.	B	
21.	B	
22.	B	
23.	A	
24.	A	
<b>NOTE:</b> The course grade will depend on student’s performance in term projects and experiments which are not used for the present assessment.		<b>Grade F:</b> This grade would reflect poor understanding of the subject and inadequate background in mathematics and science. None in the present class falls in this category.