

Program	Department/ Division
Degree level	Faculty/ College

Report on Course Implementation

Na	me of Institution King Mongkut's University of Technology North Bangkok
Ca	mpus/Faculty/Dept/Division
	Section 1: General Information
1.	Course code and course title
2.	Total credits X (x-x-x)
	X credits (x-x-x)
3.	Curriculum and course category:
	Curriculum: e.g. (Bachelor ofin)
	Course category: (e.g. general education, required, major elective, free elective)
4.	Course coordinator/ Instructors
	Course coordinator
	Instructors
5.	Semester/ year of study
6.	Pre-requisite (if any)
7.	Co-requisites (if any)
8.	Venue of study
	Faculty/ College KMUTNB
9.	Information for quality assurance in education
	This course shows evidence of:
	lacktriangle Development of implementation from previous practices, e.g. the improvement of
	class teaching, course content, content classification and methods used for learning
	assessment
	lacktriangle Involvement from professional bodies/ external agencies in instruction; thus enhancing
	student academic and professional experiences



Degree level		Faculty/ College		
☐ Integration of re	search or creative activities wit	h instruction; use	e of research-based	
learning manage	ement; knowledge managemen	t practices for le	arning improvement	
=	cademic services and course im		- ,	
☐ Combination of	cultural heritage preservation e	· efforts into instru	ıction or student	
activities	3 1			
10. Date of latest revision				
Section 2	2: Teaching Implementation i	n relation to Pla	anning	
	epancies occur between actua		-	
,	•	3	·	
0 0 0	1/ 1/16			
2. Define topics uncover	ed/ uncompleted (if any)			
3. Report on the support	provided for enhancing learn	-		
	Being carried out	entation outcor		
Support domains	being carried out	out	Improvement plan	
Preparing up-to-date	Indicate the academic year o	f		
teaching documents	latest revision			
2. information technology	Indicate the IT system used			
	for enhancing instructional efficiency			
2. Problem	Explain			
acknowledgement scheme				
3. Student counseling				
I. Others (specify)				
4. Course Learning Outcor	nes (CLOs):	I		
Students should be able	to: (Please refer to OBE section	on 2.4)		
CLO 1. Explain				
CLO 2. Analyze				
CLO 3. Solve problems				
CLO 4. Apply				
CLO 5. Perform				

(Items can be included or deleted as appropriate)



Program	Department/ Division
Degree level	Faculty/ College

5. Effectiveness of teaching methods and evaluation that leads to predetermined learning outcomes, as referred to in OBE3 section 3

Course Learning Outcomes (CLOs)	Determining CLOs Achievement (Yes/ No) (Tick ✓)	Teaching methods/ implementation on the basis of CLOs	Appropriateness of teaching methods (Yes/ No) (Tick ✓)	Evaluation of learning outcomes based on CLOs	Appropriateness of evaluation (Yes/ No) (Tick ✓)	Development guidelines to ensure student attainment of CLOs; suggestions for effective implementation and evaluation
CLO1	X	Lecture-based learning, case studies, assignments	X	- Midterm examination - Assignment assessment		Issue 1: Thirty percent of students are unable to interpret variance analysis results Problem based-improvement, according to the cause, issue 1 Assigning tasks to students so they can appropriately interpret analysis of



Program	
Degree level	

Department/ Division
Faculty/ College

Course Learning Outcomes (CLOs)	Determining CLOs Achievement (Yes/ No) (Tick ✓)	Teaching methods/ implementation on the basis of CLOs	Appropriateness of teaching methods (Yes/ No) (Tick ✓)	Evaluation of learning outcomes based on CLOs	of evaluation	Development guidelines to ensure student attainment of CLOs; suggestions for effective implementation and evaluation
						variance results; conducting more assessments on the issue • Placing a focus on interpreting the results of ANOVA • implement question and answer sessions in the classroom to check students' comprehension



Program	
Degree level	

Department/ Division
Faculty/ College

Course Learning Outcomes (CLOs)	Determining CLOs Achievement (Yes/ No) (Tick ✓)	Teaching methods/ implementation on the basis of CLOs	Appropriateness of teaching methods (Yes/ No) (Tick ✓)	Evaluation of learning outcomes based on CLOs	of evaluation	Development guidelines to ensure student attainment of CLOs; suggestions for effective implementation and evaluation
						Issue 2: Thirty percent of students are able to transform data provided into mathematical equations, but they cannot solve the equations correctly. Problem based-improvement, according to the cause, issue 2 Review of the foundations of mathematics needed



Program	
Degree level	

Department/ Division
Faculty/ College

Course Learning Outcomes (CLOs)	Determining CLOs Achievement (Yes/ No) (Tick ✓)	Teaching methods/ implementation on the basis of CLOs	Appropriateness of teaching methods (Yes/ No) (Tick ✓)	Evaluation of learning outcomes based on CLOs	Appropriateness of evaluation (Yes/ No) (Tick ✓)	Development guidelines to ensure student attainment of CLOs; suggestions for effective implementation and evaluation
						 Supplementary assignments related to mathematical problem solving and applying mathematics
CLO2	√	Project-based learning)	√	- Assessing group presentations and group	√	Issue 1: Twenty percent of students are



Program	
Degree level	

Department/ Division
Faculty/ College

Course Learning Outcomes (CLOs)	Determining CLOs Achievement (Yes/ No) (Tick ✓)	Teaching methods/ implementation on the basis of CLOs	Appropriateness of teaching methods (Yes/ No) (Tick ✓)	Evaluation of learning outcomes based on CLOs	Appropriateness of evaluation (Yes/ No) (Tick ✓)	Development guidelines to ensure student attainment of CLOs; suggestions for effective implementation and evaluation
				projects		still unable to effectively
				- Assessing assigned		deliver presentations in front
				exercises		of the class; class presentation
						cannot meet teacher
						expectations
						Problem based-improvement
						Teachers create a class
						presentation rating rubric, which
						should be distributed to
						students no less than 2 weeks
						before the speech delivery.



Program	Department/ Division
Degree level	Faculty/ College

Course Learning Outcomes (CLOs)	Determining CLOs Achievement (Yes/ No) (Tick ✓)	Teaching methods/ implementation on the basis of CLOs	Appropriateness of teaching methods (Yes/ No) (Tick ✓)	Evaluation of learning outcomes based on CLOs	of evaluation	Development guidelines to ensure student attainment of CLOs; suggestions for effective implementation and evaluation
CLO 3	√	Group discussion, project presentation	√	Using peer assessmentto evaluate teamworkTeacher's monitoringgroup work activities		

N.B.

- Teachers are able to demonstrate at least one problem that arises through the course of each semester; for instance, students could not attain the CLO according to the specified criteria; or students encountered certain issues related to their learning experiences.
- For consecutive semesters, teachers are able to define problems and use problem solving approaches to generate a solution.

^{*} The Department specifies criteria to determine the percentage of students who fulfilled the criteria for each CLO.



Program	Department/ Division
Degree level	Faculty/ College

Section 3: Learning Outcome Evaluation

1. Is there a Formative Evaluation?			
Yes (Please add details in the table)			□ No
		ere a	
Implementation of Formative Evaluation	plan?		Quality development guidelines
	Yes	No	
a. A well-defined evaluation period			
b. Tools/ approach for evaluation. Please			
specify			
e.g. quizzes, questioning in the classroom,			
homework assignments			
c. Feedback provided to individual student			
(specify)			
d. Use of evaluation results for student			
development			

2. Summative Evaluation

Standards and quality assurance for learning outcomes assessment

Assessment practices		nere ny ment on?	Quality development guidelines
	Yes	No	
1. Examination			
a. Setting a table of specification			
b. Exam review before usage			
c. Exam analysis			
d. Creating test banks			
2. Developing a scoring rubrics for assessment			



Program	Department/ Division
Degree level	Faculty/ College

Assessment practices			nere ny ment	Quality development guidelines
		ation? Yes No		
3. Establis	3. Establishing clear evaluation criteria			
4. Applyin	4. Applying a qualified, standards-based			
grading sys	grading system			
☐ Criterion-referenced assessment				
	Norm-referenced systems			
assessment				
Others, specify				
5. Validation of assessment and learning				
outcomes				



Program	Department/ Division
Degree level	Faculty/ College

Section 4: Overview of Assessment Results

1. Course Evaluation outcomes. Capture the screenshot from the measurement report summary page. Here is an example:

สารศึกษาที่ 2 ปีการศึกษา 2562 ชา Acoustics วิทัสริชา 040313436 ชาม 3 หนายทิต ตอนที่ 1 จำนวนนักศึกษาทั้งหมด 14 คน วายผูสอน สุเมธ อำชิด	าวิทยาลัยเท	แบบสรุปการวัดผล คโนโลยีพระจอมเกล	กาพระนครเหนือ	1			กราฟเ	เสดงก	ท ร วัด	เผล	
รายละเอียด รายละ Midterm Exam 40 Glass Attendance 10 Report and Presentation 20 รวม 100 สดิตีที่วัด คาสดิติ คะแนนเลลีย (Mean) 65.07 คะแนนเลลีย (Mean) 56.00 คะแนนเลลียด (Minimum) 77.00 อะแนนเลลียด (Minimum) 77.00 อะแนนเลลียด (Maximum) 77.00 อะแนนเลลียด (Maximum) 77.14 B+ 70 - 74.99 2 14.29 B 65 - 69.99 5 35.71 C+ 60 - 64.99 1 7.14 C 55 - 59.99 5 35.71 D+ 50 - 54.99 0 0.00 F 0 - 44.99 0 0.00 Fe 0 0.00 Fe 0 0.00 Fe 0 0.00	การศึกษาที่ 2 ชา Acoustics :	ปีการศึกษา 2562 หหัสวิชา 040313436			Rep					f Mar	ks
### #################################	3	ายละเอียด	รอย	ละ							
inal Exam 30 lass Attendance 10 eport and Presentation 20 รวม 100 สถิติที่รัด คาสถิติ ะนนนเลี้ย (Mean) 65.07 วนเบียงเบนมาตรฐาน (S.D.) 6.78 ะนนนจุลัด (Minimum) 56.00 ะนนนจุลัด (Maximum) 77.00 lass GPA 2.75 น ๆ รักษะแนน รักษะแนน คื 1 7.14 B+ 70 - 74.99 2 14.29 B 65 - 69.99 5 35.71 C+ 60 - 64.99 1 7.14 C 55 - 59.99 5 35.71 D+ 50 - 54.99 0 0.00 F 0 - 44.99 0 0.00 Fe 0 0.00 Fe 0 0.00 I 0 0.00	lidterm Exam					95-					
อโลรร Attendance 10 Report and Presentation 20 หาสถิติ คาสถิติ คะแนนแล่ย (Mean) 65.07 คะแนนเล่าลุด (Minimum) 56.00 คะแนนสุรสุด (Minimum) 77.00 อะแนนสุรสุด (Maximum) 77.00 อะแนนสุรสุด (Maximum) 77.00 อะแนนสุรสุด (Maximum) 77.00 อะสนุนสุรสุด (Maximum)	inal Exam		30	0	4	90-					
รวม 100 สถิติที่วัด คาสถิติ เอนนานถิสัย (Mean) 65.07 เวนเบียงเบนมาตรฐาน (S.D.) 6.78 เอนนานสำสุด (Minimum) 56.00 เอนนานสูงสุด (Maximum) 77.00 เปลรร GPA 2.75 เปลรร GPA 2.75 เปลรร GPA 1 หาา รับแกรด ร้านวนคน ผล 75 - 100 1 B+ 70 - 74.99 2 B 65 - 69.99 5 C+ 60 - 64.99 1 C+ 60 - 64.99 1 That 7.14 C 55 - 59.99 5 D 45 - 49.99 0 D 45 - 49.99 0 D 45 - 49.99 0 That 10 0 10 0 10 0	lass Attendanc	e	10	0		85-					
สถิติที่วัด คาสถิติ กะแนนเลลีย (Mean) 65.07 กะแนนเดื่อง (Minimum) 56.00 กะแนนสูงสุด (Minimum) 77.00 กะแนนสูงสุด (Maximum) 77.00 วัง 55 กัน า 50 หลับ า 50 กัน า 45 ผล 75 - 100 1 B+ 70 - 74.99 2 B+ 70 - 74.99 2 C+ 60 - 64.99 1 C+ 60 - 64.99 1 D+ 50 - 54.99 0 D 45 - 49.99 0 D 0 - 44.99 0 0 0.00 10 0 5- 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10 0 10	Report and Pres	entation	20	0		80-					
สถิติทีวัด กะแนนเลื่ย (Mean) 100.000 100.0000 100.000 100.000 100.000 100.000 100.000 100.000 100.0000 100.000 100.000 100.000 100.000 100.000 100.000 100.0000 100.000 100.0000 100.0000 100.0000 100.0000 100.0000 100.0000 100.0000 100.0000 100.0000 100.0000 100.0000 100.00000 100.00000 100.00000000		รวม	10	0		75	1				
ระแนนเลลีย (Mean)		สถิติที่วัด	ค่าส	ถิติ	å		i				
รานาร์ยงเบนมาตรฐาน (S.D.) 6.78 กะนนนท์สุด (Minimum) 56.00 กะนนนสูงสุด (Maximum) 77.00 Class GPA 2.75 กับ า ชั้นเกรด ช่วงคะแนน จำนวนคน ร้อยละ A 75 - 100 1 7.14 B+ 70 - 74.99 2 14.29 B 65 - 69.99 5 35.71 C+ 60 - 64.99 1 7.14 C 55 - 59.99 5 35.71 D+ 50 - 54.99 0 0.00 D 45 - 49.99 0 0.00 F 0 - 44.99 0 0.00 Fe 0 0.00 Fe 0 0.000 Fe 0 0.000	าะแนนเฉลี่ย (Me	ean)	65.	07	ω	70	1 1	2			
ะแนนเพ็กลุด (Minimum) 56.00 ะแนนสูงสุด (Maximum) 77.00 class GPA 2.75 เน้า ะพันเกรด ช่วงคะแนน จำนวนคน ร้อยละ A 75 - 100 1 7.14 B+ 70 - 74.99 2 14.29 B 65 - 69.99 5 35.71 C+ 60 - 64.99 1 7.14 C 55 - 59.99 5 35.71 D+ 50 - 54.99 0 0.00 D 45 - 49.99 0 0.00 F 0 - 44.99 0 0.00 F 0 0.00 F 0 0.00 F 0 0.00 I 0 0.00	ส่วนเบี่ยงเบนมาตรฐาน (S.D.)		6.78		*	65	Ť				_
T7.00 T7.0	คะแนนต่ำสุด (Minimum)		56.00			60	1			-	_
Table Tabl	คะแนนสูงสุด (Maximum)		77.00		U	55	1 1				
Table Tabl	Class GPA		2.7	75	Ş. ₫	50					
ENUM Control C	นๆ				Ma						
B+ 70 - 74.99 2 14.29 B 65 - 69.99 5 35.71 C+ 60 - 64.99 1 7.14 C 55 - 59.99 5 35.71 D+ 50 - 54.99 0 0.00 D 45 - 49.99 0 0.00 F 0 - 44.99 0 0.00 F 0 0.00 F 0 0.00 F 0 0.00 F 0 0.00	ะดับเกรด	ช่วงคะแนน	จำนวนคน	รอยละ		45					
B 65 - 69.99 5 35.71 C+ 60 - 64.99 1 7.14 C 55 - 59.99 5 35.71 D+ 50 - 54.99 0 0.00 D 45 - 49.99 0 0.00 F 0 - 44.99 0 0.00 T3N 14 100.00 Fe 0 0.00	A	75 - 100	1	7.14		40-					
C+ 60 - 64.99 1 7.14 C 55 - 59.99 5 35.71 D+ 50 - 54.99 0 0.00 D 45 - 49.99 0 0.00 F 0 - 44.99 0 0.00 73N 14 100.00 Fe 0 0.00 1 0 0.00	B+	70 - 74.99	2	14.29		35-					
C 55 - 59.99 5 35.71 D+ 50 - 54.99 0 0.00 D 45 - 49.99 0 0.00 F 0 - 44.99 0 0.00 TYN 14 100.00 Fe 0 0.00 I 0 0.00	В	65 - 69.99	5	35.71		30-		4			
C 55 - 59.99 5 35.71 D+ 50 - 54.99 0 0.00 D 45 - 49.99 0 0.00 F 0 - 44.99 0 0.00 T3N 14 100.00 Fe 0 0.00 I 0 0.00	C+	60 - 64.99	1	7.14		25					
D 45 - 49.99 0 0.00 F 0 - 44.99 0 0.00 TAN 14 100.00 Fe 0 0.00 I 0 0.00	С	55 - 59.99	5	35.71	14.						
F 0 - 44.99 0 0.00 73N 14 100.00 Fe 0 0.00 1 0 0.00	D+	50 - 54.99	0	0.00		20-					
Fe 0 0.00 5-		45 - 49.99	0	0.00		15-				-	
Fe 0 0.00 5-	F					10-					
1 0 0.00 1 0 0.00		รวม									
0 1 2 3						33					
0 000							1	2	3	4	_
Number of Students	-progress		0	0.00		U	N			-	
		z									



Program Degree level		OF TE	Departme			
2. Contributing factors to	o grading dis	crepancies.	(If any)			
3. Discrepancies from incongruities of time fra		-		ed in Cou	rse Specific	ation, e.g.
Lasaria Contanta	Metho		Week of e	valuation	Weight	•
Learning Outcomes	evalu Planned	Actual	Planned	Actual	evalu Planned	Actual
	ramea	7101001	- turricu	, ictuat	· tariirea	7101001
4. Verification of stude ☐ Setting up a comexamination, grad ☐ Review of stude committee ☐ Randomized scocurriculum perform ☐ Others (specify)	nmittee to in ing practices ents' scoring ring validation random ch	spect stude and perform and evalu	ents' learning nance apprais uation by th by experts/	outcomes, al e Faculty/	e.g. an inve	academic
Section	on 5: Proble	ms and Effe	ects on Cour	se Impleme	entation	
1. Problems associated v	with resource	es availabili	ty, equipme	nt and facil	ities (if any)	



	gram
2 . 	Management and administrative challenges (if any)
••••	Section 6: Course Evaluation
1.	Course evaluation results by students (Please attach documents) 1.1 Key comments from student evaluation results
	1.2 Lecturer responses/ opinions on the issues raised in 1.1
2.	Results of course evaluation from other evaluation methods 2.1 Key comments from other evaluation methods
	2.2 Lecturer responses to the issues raised in 2.1
••••	Section 7: Improvement Plan

- 1. Actions for improvement (Other than those specified in Section 2) Example:
- A 360-degree assessment conducted by students is recommended. Respondents are encouraged to offer ideas and suggestions.



Program Degree level	Department/ Division
-Take advantage of IT-based integration assessmen rubrics for student feedback	t, e.g. using Google Forms to create digital
2. Suggestions for improvement from course curriculum	instructors to faculty in charge of the



Program	Department/ Division
Degree level	Faculty/ College

Instruction for OBE 5 Preparation

Section 1: General Information

Topic	Description
1. Course code/ title	XXXXXXXXX Course title (Thai and English)
2. Prerequisite	XXXXXXXXX Course title (Thai and English)
3. Coordinator, instructors,	Dividing into sections
sections	
5. Semester / year of study	Indicate semester / year of study, following the curriculum
	planning.
8. Venue of study	Define on and off-campus learning locations.
10. Information for	Check marks (Tick √) in appropriate boxes.
educational quality	
assurance	

Section 2: Class Implementation in Comparison with the Designed Lesson Plan

Topic	Description
1. Number of actual	Provide topics and number of intended teaching hours and
teaching hours compared to	actual teaching hours. State justification if the disparity exceeds
those stated in the lesson	25%.
plan	
2. Topics that were not	Identify topic(s) that were not completed as planned and
covered as planned	significant effects on learning outcomes. Suggest alternatives to
	remedy the issue.
3. Providing support for	Explain, e.g. providing handouts, utilizing information technology;
learning effectiveness	arrangement of problem acknowledgement and student
	counseling practices. Define an improvement plan if no action
	has been taken.
4. Course Learning	Outline CLOs in compliance with OBE3 section 2.4
Outcomes (CLOs)	



Program	Department/ Division
Degree level	Faculty/ College

Topic	Description
5. Effectiveness of learning	Indicate methods of learning implementation to achieve each
implementation and	CLO domain; explain evaluation methods implemented as
evaluation methods carried	specified in OBE3 section 3; state whether CLOs can be attained
out as to achieve the	and whether the implementation is appropriate. Suggest
specified CLOs	development guidelines for learning implementation and
	evaluation.

Section 3: Learning Outcome Evaluation

Topic	Description
1. Formative Evaluation	Formative evaluation for learning involves a continuous way of
	monitoring with aims to improve teaching and student
	attainment. Formative assessment instruments are e.g. a test,
	a quiz, questions and homework.
	- Indicate the applicable evaluation process and development
	guidelines.
2. Summative Evaluation	Summative evaluation aims at evaluating student learning and
	understanding at the end of an instructional unit, e.g. midterm
	and final examinations.
	- Indicate the applicable evaluation process and development
	guidelines.

Section 4: Overview of Assessment results

Topic	Description
1. Measurable learning	Capture the screenshots (summary grade report online and
outcome after	evaluation of teaching).



Program	Department/ Division
Degree level	Faculty/ College

Topic	Description
implementing and	
completing a course	
2. Factors causing the	Identify the factors, compared with grade distribution of previous
disparities in grade	classes.
distributions (If any).	
6. Discrepancies (in time	Identify discrepancies from evaluation plan as indicated in course
frame / evaluation	specification (OBE3) Section 4.2
methods) between	
planned and actual	
assessment (If any).	
7. Verification of	Clarify the verification process as established in OBE3, section 6.4
student's achievement	

Section 5: Implementation Challenges and Impacts

Topic	Description
1. Problems relating to	Identify problems and effects upon student learning
educational resources	
2. Management issues	Identify issues and impacts on learning

Section 6: Course Evaluation

Topic	Description
1. Critical comments	Identify both positive and negative aspects
from student evaluation	
2. Critical comments	Identify both positive and negative aspects
from other evaluation	
methods	



Program	Department/ Division
Degree level	Faculty/ College

Section 7: Improvement Plan

Topic	Description
1. Actions for	Briefly identify improvement methods e.g. changing of teaching
improvement of	methods in the semester; use of new types of instructional
learning and teaching	resources to improve student attainment of learning outcomes.