



King Saud University

College of Engineering

Department of Mechanical Engineering

COURSE REPORT

ME 371 Thermodynamics-I

Academic Year 2011-2012

Second Semester

Course Report

Institution :	King Saud University
College/ Department :	College of Engineering – Department of Mechanical Engineering

A Course Identification and General Information

1. Course title and code: Thermodynamics-I, ME 371
2. If course is taught in more than one section indicate the section to which this report applies
2. Year and semester to which this report applies. Academic Year 2011-2012, Second semester
4 Location (if not on main campus)

B- Course Delivery

1 Coverage of Planned Program			
Topics	Planned Contact Hours	Actual Contact Hours	Reason for Variations if there is a difference of more than 25% of the hours planned
1. Introduction and Basic Concepts	6	6	
2. Types of Energy Transfer, and General Energy Analysis	6	6	
3. Properties of Pure Substances	3	3	
4. Energy Analysis of Closed Systems	6	6	
5. Mass and Energy Analysis of Control Volumes	6	6	
6. The Second Law of Thermodynamics	3	3	
7. Entropy, Carnot cycle and the reversed Carnot cycle	6	6	
8. Rankin cycle	3	3	
9. Vapor compression refrigeration	6	6	

cycles				
<p>2. Consequences of Non Coverage of Topics</p> <p>For any topics where significantly less time was spent than was intended in the course specification, or where the topic was not taught at all, comment on how significant you believe the lack of coverage is for the program objectives or for later courses in the program, and suggest possible compensating action if you believe it is needed.</p>				
Topics (if any) not Fully Covered	Significance of Lack of Coverage	Possible Compensating Action Elsewhere in the Program		
Non				
<p>3. Effectiveness of Planned Teaching Strategies for Intended Learning Outcomes set out in the Course Specification. (Refer to planned teaching strategies in Course Specification and description of Domains of Learning Outcomes in the National Qualifications Framework)</p>				
Domains	List Teaching Strategies set out in Course Specification	Were these Effective?		Difficulties Experienced (if any) in Using the Strategy and Suggested Action to Deal with Those Difficulties .
		No	Yes	
a. Knowledge	<ol style="list-style-type: none"> 1. Knowledge is delivered through the course lectures and tutorial hours. 2. Interactive learning process through questions and answers in lectures and tutorial. 3. Tutorials to help students to understand and ask about the course materials and solve problems 4. Use internet to carry out independent study on some contemporary issues such as global warming and sustainable energy. 		<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>	
b. Cognitive Skills	<ol style="list-style-type: none"> 1- Lectures include numerous examples, some of which are practical in nature. 2- Tutorials and hours are used for further explanations and applications on different problems. 3- Engage students in classroom interaction with questions and answers. 		<p>Yes</p> <p>Yes</p> <p>Yes</p>	

c. Interpersonal Skills and Responsibility	1- Special attention and mark rewards are pointed to the submitting of organized technical lab reports and homework reports. 2- Assignments are given to the students at regular intervals for them to solve and submit. 3- Participation of students in classroom discussions.		Yes Yes Yes	
d. Numerical and Communication Skills	1. Encourage students for submitting their assignments and project reports in neat and professional way. 2. Emphasizing the importance of final result in engineering issues and the use of correct units. 3. Encourage the students to search the internet for relevant information, and case studies in engineering materials.		Yes Yes Yes	
e Psychomotor Skills (if applicable)	Not applicable			

4. Summarize actions you recommend for improving teaching strategies as a result of evaluations in table 3 above.

Students are recommended to be more aware about solving their duties according to what it is given to them.

- A follow up is needed
- Tutorial should be run in different ways.

C. Results

1 Number of students commencing the field experience: NA
2 Number of students completing the field experience: NA
3 Result Summary:
Passed: No: 41 Percent : 89 % Failed No: 5 Percent : 11 %
Did not complete No : 7 Percent : 13%

4 Distribution of Grades (If percentage marks are given indicate numbers in each 5 percentile group)

	No		%	No	%	No
A		OR	95-100	2	70-74	5
B			90-94	1	65-69	6
C			85-89	3	60-64	11
D			80-84	7	< 60	5
F			75-79	6		
Denied Entry			Denied Entry			2
In Progress			In Progress			NA
Incomplete			Incomplete			3
Pass			Pass			41
Fail			Fail			5
Withdrawn			Withdrawn			2

5 Special factors (if any) affecting the results

6. Variations from planned student assessment processes (if any) (See items C 4 and 5 in the Course Specification.)

a. Variations (if any) from planned assessment schedule (C5 in Course Specification)

Variation	Reason

b. Variations (if any) from planned assessment processes in Domains of Learning (C4 in Course Specification)

Variation	Reason

7 Verification of Standards of Achievement (Eg. check marking of a sample of papers by others in the department. See G4 in Course Specification) (Where independent report is provided a copy should be attached.)

Method(s) of Verification	Conclusion

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D Resources and Facilities

<p>1. Difficulties in access to resources or facilities (if any)</p> <p>Smart board failure (sometimes) The names of the persons, who are responsible for the computer-based smart teaching system should be posted in the classrooms.</p>	<p>2. Consequences of any difficulties experienced for student learning in the course.</p>
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E. Administrative Issues

<p>1 Organizational or administrative difficulties encountered (if any)</p> <p>None</p>	<p>2. Consequences of any difficulties experienced for student learning in the course.</p>
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H Course Evaluation

<p>1 Student evaluation of the course: (Attach Survey Results if available)</p>	<p>The survey and its results are attached.</p>
<p>a List the most important criticisms and strengths</p> <p>Communication with students regarding the language, level is variable from one student to another (Some of them are disinterested just to be upgraded).</p>	
<p>b Response of instructor or course team to this evaluation</p>	
<p>2. Other Evaluation -- What evaluations were received? Specify and attach reports where available. (eg. By head of department, peer observations, accreditation review, other stakeholders etc):</p>	

a List the most important criticisms and strengths

b Response of instructor or course team to this evaluation

I Planning for Improvement

1. Progress on actions proposed for improving the course in previous course reports:

Actions proposed in the most recent previous course report(s)

1. New practical homework assignments have been given and more problems have been solved during the lecture.
2. Previous final exam and its solution have been provided to the students with a thorough discussion during the lecture.

State whether each action was undertaken, the impact, and if the proposed action was not undertaken or completed, give reasons.

1. More practical homework assignments have been prepared and discussed with full participation of the class during the studio hours.
2. Previous final exams were solved and posted on the websites of the instructors. The common mistakes in approaching the solutions were identified and discussed during the studio hours.

2. Other action taken to improve the course this semester/year

Provide a brief summary of any other action taken to improve the course and the results achieved. (For example, professional development for faculty, modifications to the course, new equipment, new teaching techniques etc.)

3. Action Plan for Next Semester/Year

Actions Required	Completion Date	Person Responsible
<ul style="list-style-type: none"> - Ad-hoc Committees should review deficiencies based on the student evaluation, faculty input, course file, and program assessment. - Feedback from industry advisory board, employers and alumni surveys and graduating students input are used to identify any deficiencies in students 	Throughout the semester	Instructors
	Throughout the semester	Instructors
4. Recommendations to Program Coordinator (if Required)		
(Recommendations by the instructor to the program coordinator if any proposed action to improve the course would require approval at program, department or institutional level or that might affect other courses in the program.).		

Name of Course Instructor: ___ Prof. Mohamed Ali and Dr. Mohamed Hassan Morsys

Signature: _____ Date Report Completed: 3 /6 /2012

Received by Program Coordinator Date: _____



