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# ME 406-001: Mechanical Lab III

Balraj Mani

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# NEWARK COLLEGE OF ENGINEERING

# ME 406 MECHANICAL LABORATORY - III

#### September 05, 2023

Fall 2023

## **COURSE ADMINISTRATIVE INFORMATION**

Course Name:	Mechanical Laboratory – 3 (1-2-2)	
Course-Section Number:	ME406-001 (Wednesday) (CRN: 94852)	
Class meeting room / laboratory:	MEC-110	
After Class office room:	MEC 330	
Instructor's Name:	B. S. Mani	
<b>Office Telephone:</b>	(973) 596-3339	
Cell Phone :	(630) 345-0558	
e-mail id:	mani@njit.edu	
Teaching Assistant:	Yassine Tissaoui	
Teaching Assistant: e-mail id:	Yassine Tissaoui yt277@njit.edu Tel: (267) 243-3024	
0		
e-mail id:	yt277@njit.edu Tel: (267) 243-3024	
e-mail id: Engine Lab Support:	yt277@njit.edu Tel: (267) 243-3024 Mr. Orlando Castillo & Mr. David Bailey	

## TEXTBOOK

J. P. Holman, *Experimental Methods for Engineers*, 8<sup>th</sup> Edition, McGraw Hill, 2012

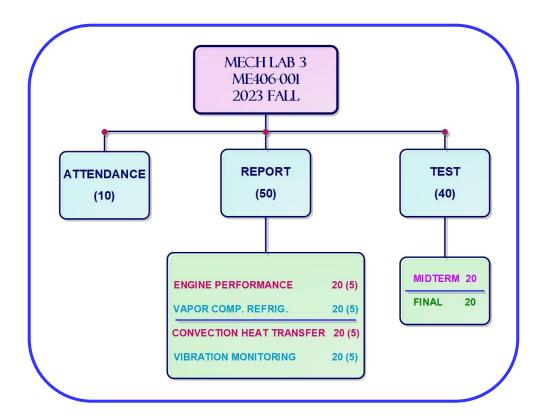
## **COURSE DESCRIPTION**

Laboratory covering the testing and evaluation of complete mechanical systems.

Prerequisites: ME 405, ME 407.

### LABORATORY REPORT

All reports shall be <u>individually completed</u> and submitted on schedule <u>Penalty for late submission: 10%</u> Group discussion is encouraged but not writing 'Group Report' Grade for identical reports or very similar reports, will be divided among the number of students involved Laboratory report must follow the formal report format suggested Grades in case of resubmitted reports (if allowed), will be averaged with the original grade NO cheating in any manner in any laboratory report(s) / test(s) will be tolerated



### **GRADING SCHEME**

LETTER GRADE	QUANTITATIVE REQUIREMENT	QUALITATIVE ACHIEVEMENT	
Α	90% & above	Superior Achievement	
B plus	85% to 89.99%	Excellent Achievement	
В	80% to 84.99%	Very Good Achievement	
C plus	75% to 79.99%	Good Achievement	
С	70% to 74.99%	Acceptable Achievement	
D	60% to 69.99%	Minimum Achievement	
F	59.99% and below	Inadequate Achievement	

#### **GENERAL REQUIREMENTS**

Regular attendance to all lecture classes is required Staying attentive to lectures during class is expected 30 minutes or more delay in arriving at the lecture/lab session will be treated as absence Assignments shall be submitted on schedule – *penalty for late submission(s): 10%* Reasonably equal participation in team Laboratory Experiment is expected Team working for all general homework is highly encouraged Taking the Midterm & Final Examination is *mandatory to receive a final course grade* Safety instructions inside the laboratory shall be obeyed IPOD and Cell Phone use during Class or Laboratory will NOT be allowed Make-up examination, except for authentic medical reason(s), will NOT be allowed No tolerance for *cheating* in any manner in any test OR in report preparation Any student found copying a report will be awarded zero for that report – with no option to resubmit Any student found *cheating during a test* will be awarded a course grade of 'F.' Please refer to the University Policy on Academic Integrity at <u>https://www.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf</u>

#### ME 406-001 (CRN 94852): MECHANICAL LABORATORY III

FALL 2023

11/22/23     Wednesday       11/22/23     Wednesday       12     11/29/23     Wednesday       13     12/06/23     Wednesday       14     12/13/23     Wednesday       15     Vednesday     Reports Due       12     12/25/23     Monday       GRADING SCHEME     Final exam       Report - long (#1)     20       Report - long (#2)     20			TEAM-4	HIGHLIGHTS / REMARKS
2     09/13/23     Wednesday       2     09/20/23     Wednesday     Refrigeration: TA       3     09/20/23     Wednesday     Refrigeration: TA       4     09/27/23     Wednesday     Analysis & Report       5     10/04/23     Wednesday     Refrigeration: TA       6     10/11/23     Wednesday     Repine Perf.:Mani/Bailey       6     10/11/23     Wednesday     Review + Analysis & Report       7     10/18/23     Wednesday     Lecture       9     11/01/23     Wednesday     Analysis & Report       10     11/08/23     Wednesday     Analysis & Report       11     11/12/23     Wednesday     Heat Trans: Mani       11/12/123     Wednesday     Review + Analysis & Report       12     11/12/23     Wednesday     Review + Analysis & Report       13     12/06/23     Wednesday     Reports Due       15     Image: State	Lecture	Lecture	Lecture	Lecture: Syllabus, Reports,
3     09/20/23     Wednesday     Refrigeration: TA       4     09/27/23     Wednesday     Analysis & Report       5     10/04/23     Wednesday     Engine Perf.:Mani/Bailey       6     10/11/23     Wednesday     Review + Analysis & Report       7     10/18/23     Wednesday     Review + Analysis & Report       8     10/25/23     Wednesday     Submit Reports+Midtern       9     11/01/23     Wednesday     Vibrations:TA       10     11/02/23     Wednesday     Analysis & Report       11     11/15/23     Wednesday     Heat Trans: Mani       11     11/12/23     Wednesday     Review + Analysis & Report       12     11/22/23     Wednesday     Review + Analysis & Report       13     12/20/6/23     Wednesday     Reports Due       14     12/13/23     Wednesday     Final exam       15     Image: Mean State     Final exam       15     Image: Mean State     State       16     Report - Image: #1)     20       172/25/23     Monday     G	Lecture	Lecture	Lecture	IC Engines
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11/08/23     Wednesday     Analysis & Report       11/13/23     Monday     Heat Trans: Mani       11     11/15/23     Wednesday     Heat Trans: Mani       11     11/12/23     Wednesday     Heat Trans: Mani       12     11/22/23     Wednesday     Analysis & Report       13     12/06/23     Wednesday     Reports Due       14     12/13/23     Wednesday     Reports Due       15     Image: Mean State S	Lecture	Lecture	Lecture	Lecture: Heat Trans+Vibratio
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11 11/15/23 Wednesday Heat Trans: Mani   11/22/23 Wednesday    12 11/29/23 Wednesday Analysis & Report   13 12/06/23 Wednesday Review + Analysis & Repr   14 12/13/23 Wednesday Reports Due   15 Image: Media Science Final exam   16 GRADING SCHEME Science   17 Report - long (#1) 20   18 Report - long (#2) 20	Analysis & Report	Vibrations:TA	Heat Trans: Mani	
11/22/23     Wednesday       11/22/23     Wednesday       12     11/29/23     Wednesday       13     12/06/23     Wednesday       14     12/13/23     Wednesday       15     Image: Comparison of the				Last day to Withdraw
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13 12/06/23 Wednesday Review + Analysis & Rep   14 12/13/23 Wednesday Reports Due   15 Image: Comparison of the point				Friday schedule
14     12/13/23     Wednesday     Reports Due       15     Image: Comparison of the	Analysis & Report	Heat Trans: Mani	Vibrations:TA	
15     Monday     Final exam       12/25/23     Monday     Grades Due       GRADING SCHEME         Report - long (#1)     20        Report - short (#1)     5	ort Review + Analysis & Report	Review + Analysis & Report	Review + Analysis & Report	Review for Final
12/25/23     Monday     Grades Due       GRADING SCHEME        Report - long (#1)     20       Report - long (#2)     20       Report - short (#1)     5	Reports Due	Reports Due	Reports Due	1 Long +1 Short Reports due
GRADING SCHEME       Report - long (#1)     20       Report - long (#2)     20       Report - short (#1)     5	Final exam	Final exam	Final exam	On exam date
Report - long (#1)     20       Report - long (#2)     20       Report - short (#1)     5	Grades Due	Grades Due	Grades Due	Grades due
Report - long (#2)     20       Report - short (#1)     5			REPORT SET 1 (PINK)	REPORT SET 2 (TEAL)
Report - short (#1) 5	Mid Term Exam (1)	20	Engine Perf. (Long)	Refrigeration (Long)
	Final Exam (1)	20	Heat Transfer (Long)	Vibration (Long)
	Attendance (15 meetings)	10	Refrigeration (Short)	Engine Perf. (Short)
Report - short (#2) 5	Total	100	Vibration (Short)	Heat Transfer (Short)

B. S. Mani

CAUTION: PLEASE DO NOT FOLLOW AVERAGES SHOWN ON CANVAS

09/06/2023