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Fall 2019

# ME 406-001: Mechanical Laboratory III

B. S. Mani

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# NEWARK COLLEGE OF ENGINEERING

# ME 406 MECHANICAL LABORATORY - III

September 05, 2019

Fall 2019

#### **COURSE ADMINISTRATIVE INFORMATION**

Course Name: Course-Section Number: Class meeting room / laboratory: After Class office room:	<b>Mechanical Laboratory – 3 (1-2-2)</b> ME406-001 MEC-110 MEC 330
Instructor's Name: Office Telephone: Cell Phone : e-mail id:	B. S. Mani (973) 596-3339 (630) 345-0558 <u>mani@njit.edu</u>
Teaching Assistant: e-mail id:	Mr. Islam Benouaguef <u>ib43@njit.edu</u> Tel: <b>(917) 819-9274</b>
Engine Lab Support:	Mr. Joseph Glaz
Class meeting hours:	Wednesday: 11:30 AM to 2:20 PM
After Class office hours:	Monday 11:30 AM to 12:55 PM Thursday11:30 AM tom12:55 PM
Complaints / Compliments:	Dr. Joga Rao; (973) 596-3330 <u>i.j.rao@njit.edu</u>

#### **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.

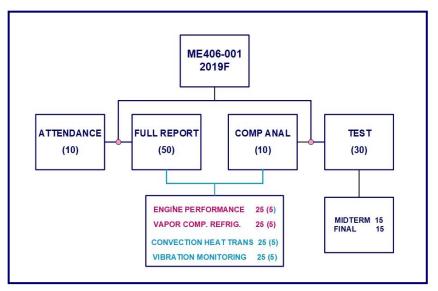
Prerequisites: ME 405, ME 407.

#### LABORATORY REPORT

All reports shall be *individually completed* 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

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#### **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
C	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>

# FALL 2019

ME 406-001 (CRN 93947); MECHANICAL LABORATORY III

#	DATE	DAY	TEAM-1	TEAM-2	TEAM-3	TEAM-4	<b>HIGHLIGHTS / REMARKS</b>
100	09/04/19 Wednesday Lecture	ednesday	Lecture	Lecture	Lecture	Lecture	Lecture: Syllabus, Reports,
N	09/11/19 Wednesday	ednesday			Refrigeration: TA	Engine Perf.:Mani/Glaz	Lecture Engn Perf & Refrign.
e	09/18/19 Wi	ednesday	09/18/19 Wednesday Refrigeration: TA	Engine Perf.:Mani/Glaz	Analysis & Report	Analysis & Report	
4	09/25/19 W	ednesday	09/25/19 Wednesday Engine Perf.:Mani/Glaz	Analysis & Report	Analysis & Report	Refrigeration: TA	
2	10/02/19 Wi	ednesday	10/02/19 Wednesday Analysis & Report	Refrigeration: TA	Engine Perf.:Mani/Glaz	Analysis & Report	
9	10/09/19 Wi	ednesday	10/09/19 Wednesday Analysis & Report	Analysis & Report	Analysis & Report	Analysis & Report	
7	10/16/19 Wi	ednesday	10/16/19 Wednesday Reports+Midterm exam	Reports+Midterm exam	Reports+Midterm exam	Reports+Midterm exam	All Group 1 Reports due
8	10/23/19 Wednesday Lecture	ednesday	Lecture	Lecture	Lecture	Lecture	Lecture: Heat Transfer&Vibn.
6	10/30/19 Wi	ednesday	10/30/19 Wednesday Vibrations:TA	Heat Trans: Mani			
10	11/06/19 W	ednesday	11/06/19 Wednesday Analysis & Report	Analysis & Report	Vibrations:TA	Heat Trans: Mani	
	11/11/19 Monday	onday					Withdrawal Deadline
7	11/13/19 W	ednesday	11/13/19 Wednesday Heat Trans: Mani	Vibrations:TA	Analysis & Report	Analysis & Report	
12	11/20/19 W	ednesday	11/20/19 Wednesday Analysis & Report	Analysis & Report	Heat Trans: Mani	Vibrations:TA	
	11/27/19 W	ednesday	11/27/19 Wednesday Friday Schedule	Friday Schedule	Friday Schedule	Friday Schedule	
13	12/04/19 Wi	ednesday	12/04/19 Wednesday Analysis & Report	Analysis & Report	Analysis & Report	Analysis & Report	All Group 2 Reports due
14	12/11/19 W	ednesday	12/11/19 Wednesday Reports+Final exam	Reports+Final exam	Reports+Final exam	Reports+Final exam	
	GRADING SCHEME	IEME				REPORT SET 1	REPORT SET 2
	Report -Full length #1	gth #1	25	Mid Term Exam (1)	15	Engine Perf. (Long)	Refrigeration (Long)
	Report - Full length #2	ngth #2	25	Final Exam (1)	15	Heat Transfer (Long)	Vibration (Long)
	Computational Anal #1	Anal #1	ى ى	Attendance (14 meetings)	10	Refrigeration (Short)	Engine Perf. (Short)
	Computational Anal #2	Anal #2	ß	Total	100	Vibration (Short)	Heat Transfer (Short)
ST	RUCTOR: B. S	S. Mani ma	<b>VSTRUCTOR:</b> B. S. Mani mani@njit.edu, (x 3339), (630) 345-0558	345-0558	<b>TEACHING ASSISTANT: N</b>	TEACHING ASSISTANT: Mr. Islam Benuaguef, ib43@njii.edu, (917) 819-9274	iit.edu, (917) 819-9274
U	NE PERFORM	AANCE TE	ENGINE PERFORMANCE TEST: Mr. Joeseph Glaz (x 3320), joseph.glaz@njit.edu	0), joseph.glaz@njit.edu			

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B. S. Mani

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09/05/2019