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ME 406-001: Mechanical Laboratory III

Balraj Mani

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NEWARK COLLEGE OF ENGINEERING

ME 406 MECHANICAL LABORATORY - III

September 02, 2020 Fall 2020

COURSE ADMINISTRATIVE INFORMATION

Course Name: Mechanical Laboratory – 3 (1-2-2)

Course-Section Number: ME406-001 (Wednesday)

Class meeting room / laboratory: MEC-110 – (online Asynchronous mode)

After Class office room: WebEX (on demand) – we will meet weekly by

Instructor's Name: B. S. Mani
Office Telephone: (973) 596-3339

Cell Phone : (630) 345-0558 **e-mail id:** mani@njit.edu

Teaching Assistants ME406-001: **Ms. Hongling Deng**, hd242@njit.edu

Engine Lab Support: Mr. Joseph Glaz, glaz@njit.edu

Class meeting hours: | Wednesday: 11:00 AM to 1:50 PM (Section 001)

After Class office hours: On WebEX, by schedule, by team

Complaints / Compliments: Dr. Joga Rao, i.j.rao@njit.edu, (973) 596-3330

TEXTBOOK

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

COURSE DESCRIPTION

Laboratory covering the testing and evaluation of complete mechanical systems.

Prerequisites: ME 405, ME 407.

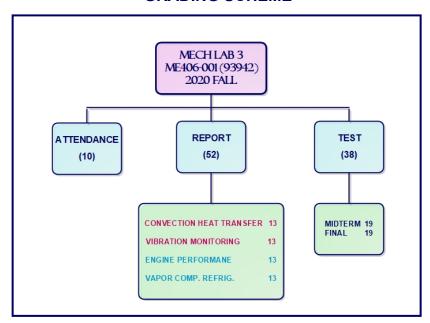
LABORATORY REPORT

All reports shall be <u>individually completed</u> and submitted on schedule Penalty for late submission: 10%

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 – 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 https://www.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf

ME 406-001 : FALL 2020 CLASS PLAN

| # | DATE | DAY | ACTIVITY | SUBMISSION DUE |
|----|----------|-----------|---|--|
| 1 | 09/02/20 | Wednesday | Start - Syllabus - Report writing | |
| 2 | 09/09/20 | Wednesday | Convection Heat Transfer - Lecture | |
| 3 | 09/16/20 | Wednesday | Convection Heat Transfer - Discuss data | |
| 4 | 09/23/20 | Wednesday | Vibration Analysis - Lecture | |
| 5 | 09/30/20 | Wednesday | Vibration Analysis - Discuss data | |
| 6 | 10/07/20 | Wednesday | Open room (attendance not taken) | |
| 7 | 10/14/20 | Wednesday | Review For exam | Vibration. Analysis - Report Due |
| 8 | 10/21/20 | Wednesday | Midterm Exam (attendance not taken) | Heat Transfer - Report Due Midterm Exam |
| 9 | 10/28/20 | Wednesday | Vapor Compression (Refrigeration) | |
| 10 | 11/04/20 | Wednesday | Vapor Comp. (Refrig.) -Discuss data | |
| 11 | 11/11/20 | Wednesday | IC Engine - Lecture | |
| 12 | 11/18/20 | Wednesday | IC Engine - Discuss data | |
| | 11/25/20 | Wednesday | Open room (attendance not taken) | Monday classes meet |
| 13 | 12/02/20 | Wednesday | Review For exam | Vapor Compression - Report Due |
| 14 | 12/09/20 | Wednesday | Final Exam (attendance not taken) | IC Engine - Report Due Final Exam |
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