

**Indian Institute of Technology Kanpur
Department of Mechanical Engineering**

Thermodynamics (ESO201A)

Semester: 2022-23-I

Lecture: M W F 10:00 AM -10:50 AM L-7

Tutorial: Th 10:00 AM -10:50 AM T103-T112, L-3

Instructor: Dr. P.S. Ghoshdastidar (ME Dept.)

Office: FB358

**Tel: 7019(Office)
8543(Residence)**

Syllabus: Definitions and Concepts. Properties of Pure Substances. First Law of Thermodynamics and its Consequences. First Law Application to Chemically Reacting Systems. Second Law of Thermodynamics and its Applications. Thermodynamic Property Relations. Power Cycles. Refrigeration Cycles.

Textbook: Yunus A. Cengel and Michael A. Boles, Thermodynamics, 7th Edition, McGraw-Hill, New York, 2011.

Availability of Course Materials: On HelloIITK Courses or over e-mail.

Grading: Mid Sem Exam (2 hours): 30%
End Sem Exam (3 hours): 45%
Quizzes of 30-min duration each (1 & 2): 15%
Attendance in Tutorials: 10%

Schedule of Quiz#1: 25.8.22 (Thursday), Time: 10:15 AM - 10:45 AM, Venue: Tutorial Block.

Schedule of Quiz#2: 3.11.22 (Thursday), Time: 10:15 AM - 10:45 AM, Venue: Tutorial Block.

Tutors' List and Tutorial Room Numbers

| Name of the Tutor | Room No. for the Tutorial/Section |
|---|--|
| Mr. Keesanth Singh C (AE Dept.) (keesanth@iitk.ac.in) | T103 (Section E1) |
| Mr. Ranjay Kumar Singh (AE Dept.) (ranjay20@iitk.ac.in) | T104 (Section E2) |
| Mr. Jithin Sreekumar (AE Dept.) (jithins@iitk.ac.in) | T105 (Section E3) |
| Dr. Jayant Kumar Singh (ChE Dept.) (jayantks@iitk.ac.in) | T106 (Section E4) |
| Mr. Krishna Jaiswal (ChE Dept.) krishnaj@iitk.ac.in) | T107 (Section E5) |
| Mr. Varad Jayant Daoo (ChE Dept.) (varaddaoo20@iitk.ac.in) | T108 (Section E6) |
| Ms. Deeksha Pandey (ChE Dept.) (deekshap@iitk.ac.in) | T109 (Section E7) |
| Dr. Pankaj Apte (ChE Dept.) (papte@iitk.ac.in) | T110 (Section E8) |
| Ms. Deepti Sachan (ME Dept.) (deeptim@iitk.ac.in) | T111 (Section E9) |
| Mr. Abhishek Kumar Gupta (ME Dept.) (abhikg@iitk.ac.in) | T112 (Section E10) |
| Dr. (Ms.) Madhusree Kole (ME Dept.) (madhuk@iitk.ac.in) | L-3 (Section E11) |

Have a nice semester