



TABLE OF SPECIFICATIONS

Phys 21n – Mechanics and Thermodynamics

1st Semester AY 2021-2022

Examination: ☒ Midterm ☐ Final

Date of Examination: 01/28/2022

| Content | No. of Meetings | Course Outcome/ Learning Outcome (CO/LO) | % | Taxonomy of Objectives | | | | | | Total Items |
|---------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------|---------------|----------|-----------|------------|----------|-------------|
| | | | | Remembering | Understanding | Applying | Analyzing | Evaluating | Creating | |
| | | | | 45% | 30% | 10% | 5% | 10% | 0% | |
| Physical Quantities and Vectors | | 1. Convert different units of physical quantities. 2. Integrate and apply different vector analysis in solving calculus-based problems. | | | | | | | | |
| Physical Quantities | 5 | Describe the nature of physics. Explain the significance of measurement. Convert units and apply dimensional analysis in solving problems. | 30% | 9 | 3 | | | | | 12 |
| Vector and Vector Analysis | 2 | Distinguish between a scalar and a vector. Evaluate vectors and addition of vectors. Calculate and apply: vector sum and vector difference, scalar product and vector product. | 15% | 4 | 2 | | | 2 | | 8 |
| Kinematics | | Describe, prove equations and solve kinematics and dynamics involve in a body or particle. | | | | | | | | |
| Straight Line Motion | 9 | Describe straight-line motion in terms of frame of reference, average velocity, instantaneous velocity, | 50% | 9 | 8 | 4 | 1 | 1 | | 23 |