week	hours	Required learning outcomes	Unit name/topic	Teaching method	Evaluation method
1	2hours	The student understands the subject	General concepts: physics method and standards; thermodynamic system and system properties	Presented lectures in PowerPoint format and written lectures	Daily exam
2	2hours	The student understands the subject.	Principle of conservation of energy; application of thermodynamics; zeroth law	Presented lectures in PowerPoint format and written lectures	Daily exam
3	2hours	. The student understands the subject	Pressure; Temperature and Temperature Scales [Celsius, Fahrenheit, Kelvin temperature equations for an ideal gas	Presented lectures in PowerPoint format and written lectures	Daily exam
4	2hours	The student understands the subject	Heat and energy effects; work and mechanical forms of work; power	Presented lectures in PowerPoint format and written lectures	Daily exam
5	2hours	The student understands the subject	The first law of thermodynamics; Boyle's law and Charles's law; practical exercises.	Presented lectures in PowerPoint format and written lectures	Daily exam
6	2hours	The student understands the subject	The Second Law of Thermodynamics; Reversible and Irreversible Processes	Presented lectures in PowerPoint format and written lectures	Daily exam
7	2hours	The student understands the subject	Entropy and enthalpy; internal energy; heat capacity and adiabatic process	Presented lectures in PowerPoint format and written lectures	Daily exam
8	2hours	The student understands the subject	The relationship between pressure, volume and temperature in an adiabatic process.	Presented lectures in PowerPoint format and written lectures	Daily exam
9	2hours	The student understands the subject	Fundamentals of Physics: Kinetic Theory of Gas; Electromagnetic Waves	Presented lectures in PowerPoint format and written lectures	Daily exam
10	2hours	The student understands the subject	Maxwell's equations; physical optics.	Presented lectures in PowerPoint format and written lectures	Daily exam

11	2hours	The student understands the subject	Radiation: Kirchhoff's Law; Planck's Law; Stefan-Boltzmann Law; Wien's Law	Presented lectures in PowerPoint format and written lectures	Daily exam
12	2hours	The student understands the subject	Black body and reflection; heat transfer (radiation, convection, conduction.(	Presented lectures in PowerPoint format and written lectures	Daily exam
13	2hours	The student understands the subject	X-ray production and X-ray spectra; X-ray absorption; UV and IR effects	Presented lectures in PowerPoint format and written lectures	Daily exam

14	2hours	The student understands the subject	Medical and biological effects of radiation; radiotherapy.	Presented lectures in PowerPoint format and written lectures	Daily exam
15			monthly exam		