This algebra based Physics course will cover the topics listed below. The main concentration of this course is on understanding physical concepts. We will also spend time on discussion of Physics problems and their solutions. This is important for students who intend to take MCAT. Three quizzes (tests) will be given during the session. The final examination is scheduled for the end of the semester. The final grade will depend on test results (45-50%), final exam (40%) and activity in the class (10%-15%).

**Topics to be covered in this course**

1) Simple harmonic motion and elasticity
2) Waves and Sound
3) The Principle of Linear Superposition and Interference Phenomena
4) Electric Forces and Electric Fields
5) Electric Potential Energy and the Electric Potential
6) Electric Circuits
7) Magnetic Forces and Magnetic Fields
8) Electromagnetic Induction
9) Alternating Current
10) Electromagnetic Waves
11) The Reflection of Light: Mirrors
12) The Refraction of Light: Lenses and Optical Instruments
13) Interference and The Wave Nature of Light
14) Particles and Waves
15) The Nature of the Atom, Nuclear Physics, Radioactivity