

will be willing to offer his time for discussion. However, in order to avoid inconvenience students are advised to call up (ext 3674) or email him (tlyoon@usm.my) before rushing into his office. His door is always open to any one who are keen to explore physics.

General Comments

Modern physics is one of the most interesting subject offered to USM undergraduates. Most of the concepts introduced, such as Einstein's notion that space and time is a relative concept, and that microscopic particles are intrinsically behaving like waves (as expounded in quantum theory), are both intellectually intriguing and somewhat counter-intuitive.

Textbooks

The following textbooks are required or strongly recommended. There exist many good textbooks on the topics of modern physics. I have decided to select the following as my main reference texts. Lecture material are written based on them. It is strongly advised that students should not be contented with the lecture material supplied from the lecturer alone. They should make reference to these suggested texts and do the reading on a consistent manner. You gonna prepare to think in an intellectual manner in order to comprehend the essential concepts I wish to convey in this course. To people who are expecting to make only mechanical memorisation and pass with flying colour, please be prepared for disappointment.

Main Text:

1. Modern Physics, 2nd ed., by Kenneth Krane, John. Wiley & Sons.
2. Concepts of Modern Physics, 6th ed., by Arthur Beiser, McGraw-Hill.
3. Modern Physics, 3rd ed., by Serway, Moses and Moyer, Thomson 2005.
4. Understanding Physics, by Karen Cummings et. al., John Wiley and Sons, 2004 (used for special theory of relativity only)

Others references:

Advanced texts for hard-core physics enthusiasts: