

ZCE 111

Computational

Approach in Physics

Learning

Instructor

Yoon Tiem Leong

School of Physics

Universiti Sains Malaysia

11800 USM, Penang, Malaysia

Elearning portal

- All course materials are to be made available in the ZCE 111 E-learning portal.
- Assignment submissions
- Lecture materials
- Assignment materials.
- Coursework grades
- Etc.

Problem-based learning

- Wil try to make ZCE 111 a problem-based learning process
- Expect to do a lot of self-learning
- Use 'HELP' in Mathematica – this will be your major reference.
- Lecture materials and reference codes are given, and you are expected to write your own lines of Mathematica code to solve physics and mathematical problems.
- Peer-assisted learning and group discussions are strongly encouraged.

Hardware requirement

- Existing Linux cluster computers are provided
- We will refer to the computers (PC) in the Rocks Computer Cluster as “compute nodes”.
- However, your own laptops are preferred (for the sake of your convenience)

Internet connection

You need to get connected to the internet for this course

USMSecure (weak signal in the computer lab)

tlyoon 2 (passwd: katalaluan)

Wired LAN cable on the table
(limited)

Mathematica installation

For legal installation of Mathematica, see the instruction in <http://comsics.usm.my/tlyoon/configrepo/Mathematica%20Installation%20in%20USM.pdf>

Acessment

- 100% coursework
- 2 + 2 hours contact hours per week
- Continuous assessment in the forms of on-the-spot assignments and weekly assignments
- Special assignment(s) – for more challenging tasks
- All assignments and tests are 'open-book'

OTSE

- Every 2-hour lecture slot will occasionally be ended with an 'on-the-spot exercise' (OTSE). A very short exercise will be given at the end of occasional lecture slot. You have to submit them 'on the spot' via online submission to E-learning before going back home.

VERY IMPORTANT RULES TO OBEY

- All the pc in the computer lab are used for running research projects by the researchers from computational research groups when the ZCE 111 classes are not being conducted.
- So they must always be switched on 24 hours.

VERY IMPORTANT RULES TO OBEY

- NEVER SWITCH OFF THE PC
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- NEVER UNPLUG THE PC's POWER POINT SOCKET
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- PLUG OUT ONLY THE MONITOR's POWER POINT SOCKET
WHEN YOU WANT TO USE IT
- FOR YOUR OWN LAPTOPS.
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