

Academic Year	1920	Semester	2
Course Coordinator	Dr Leek Meng Lee		
Course Code	PH4604		
Course Title	Topics in Applied Physics I		
Pre-requisites	Division Approval (To be decided by faculties teaching the courses)		
No of AUs	3		
Contact Hours	39		
Proposal Date	7 th Aug 2019		

Course Aims

This course aims to expose you to the latest research topics in applied physics. Faculty who are involved in applied physics research will lead this course to provide you with opportunities to learn about their research and perhaps to join their research groups. For those of you who already have the pre-requisite knowledge, you may even start on the research during the course. Through this course, you will become up-to-date in your knowledge and skills in applied physics.

Intended Learning Outcomes (ILO)

By the end of this course, you (as a student) would be able to:

1. Discuss cutting-edge experimental techniques and data analysis in frontier applications in applied physics.
2. Employ advanced experimental skills and data analysis techniques conducting research.

Course Content

Due to the nature of the courses, the course content will be decided by the faculties teaching the courses.

Assessment (includes both continuous and summative assessment)

Component	Course LO Tested	Related Programme LO or Graduate Attributes	Weighting	Team/Individual	Assessment Rubrics
1. Final Examination	-		60%	Individual	Appendix 2
2. Continuous Assessment (CA): Assignment	-		40%	To be decided by the faculty teaching	Appendix 1
Total			100%		

Formative feedback

To be decided by the faculty teaching. For example: the CA could comprise of written tests so that the students can test their competency and instructors are assess the competency of the students. It could also comprise of an experimental project where students can test out their experimental and data analysis skills and instructors can assess how students perform in an actual laboratory setting.

You will receive feedback throughout the course. In particular, you will receive feedback after each assessment.

Learning and Teaching approach

To be decided by the faculty teaching.

Reading and References

To be decided by the faculty teaching.

Course Policies and Student Responsibilities

*Suggested fields for this portions include **general policies with regards to students' assignment, punctuality absenteeism, etc.***

Example for a course using Team-based Learning:

(1) General

You are expected to complete all assigned pre-class readings and activities, attend all classes punctually and take all scheduled assignments and tests by due dates. You are expected to take responsibility to follow up with course notes, assignments and course related announcements for seminar sessions they have missed. You are expected to participate in all class discussions and activities.

(2) Absenteeism

In-class activities make up a significant portion of your learning experience. Absence from class without a valid reason may affect your overall course performance. Valid reasons include falling sick supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies. There will be no make-up opportunities for in-class activities.

If you miss a class session, you must inform me via email (include email address) prior to the start of the class.

For another example, please refer to <http://www.ntu.edu.sg/tlpd/ta/Pages/Policy.aspx>

Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that you recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip

yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you are uncertain of the definitions of any of these terms, you should go to the [academic integrity website](#) for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

Course Instructors

To be decided by the division.

Planned Weekly Schedule

To be decided by the faculty teaching.

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Appendix 1: Assessment Criteria for Continuous Assessment

By mark range

Marks	Criteria
> 90%	Demonstrates understanding and very deep skills in carrying out experimental work and has the ability to carry out detailed data analysis of the experimental results.
75% to 89%	Demonstrates understanding and deep skills in carrying out experimental work and has the ability to carry out most of the data analysis of the experimental results.
65% to 74%	Demonstrates some understanding and reasonable skills in carrying out experimental work and has the ability to carry out some data analysis of the experimental results.
50% to 64%	Demonstrates some understanding and shallow skills in carrying out experimental work and requires assistance to carry out data analysis of the experimental results.
< 50%	Shows no understanding and lack of skills in carrying out experimental work and unable to carry out data analysis of the experimental results.

Appendix 2: Assessment Criteria for Final Examination

By mark range

Marks	Criteria
> 90%	Demonstrates understanding and very deep skills in carrying out experimental work and has the ability to carry out detailed data analysis of the experimental results.
75% to 89%	Demonstrates understanding and deep skills in carrying out experimental work and has the ability to carry out most of the data analysis of the experimental results.
65% to 74%	Demonstrates some understanding and reasonable skills in carrying out experimental work and has the ability to carry out some data analysis of the experimental results.
50% to 64%	Demonstrates some understanding and shallow skills in carrying out experimental work and requires assistance to carry out data analysis of the experimental results.
< 50%	Shows no understanding and lack of skills in carrying out experimental work and unable to carry out data analysis of the experimental results.