UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

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Participants of 1032S

Course information sheet for 1032S 2022 – General Physics B

PHY1031F and PHY1032S are two semesterised half courses taken by students who do not plan to continue beyond the first year in Physics. The courses are mainly for students majoring in chemical, biological and environmental subjects, who need Physics as an auxiliary subject.

PHY1031F/1032S should NOT be taken by students who want to continue with Physics. Students who expect to continue with Physics should register for PHY1004W in their first year.

In this course you will encounter a wide variety of topics split over 4 modules and a laboratory and tutorial component.

Eligibility: *All students participating must have successfully completed 1031F. If you have failed 1031F without being awareded a supp, you must actively deregister from this course to avoid fees implications.*

Lectures: PHY1032S lectures are held daily in the third period (10h00-10h45) in RW James LT 3A, starting on Monday 22nd July.

- Electromagnetism 1 (EM 1): Static electric and magnetic phenomena. — Prof. Heribert Weigert
- Thermodynamics and Optics (OP/TP). — Dr. Zina Ndabeni.
- Electromagnetism 2 (EM 2): Time dependent electric and magnetic phenomena — Dr. Mawande Lushozi
- Modern Physics (MP). Topics ranging from quantum mechanics and relativity. — Moses Mlangeni

Each module consists of 15 lectures.

Laboratory and tutorials:

The tutorial/practicals cycle is spread over three days, on two consecutive weeks: Wednesday OR Thursday OR Monday afternoons (14h00 to 17h00). Students are required to select one of these days for the remainder of the semester and make sure they are free to attend on the selected day throughout.

Laboratory and tutorials will run in alternate weeks with a schedule to be made available via the vula course site. We begin the rotation with a tutorial.

This should be the same rhythm you are familiar with from PHY1032F and it might be best to choose the same day you had during that course.

All questions regarding the laboratory organisation should be directed to Mr Mark Christians, the Lab Attendant, in the first instance. His office is in the Physics I Lab behind the large chalkboard.

Students who have previously attended PHY1032S (or an equivalent UCT Physics course) may apply for exemption from the practical component of the course – **note that exemption will not be given for the tutorial component**. Exemption is NOT granted automatically. Students wishing to apply for exemption must complete a lab exemption form (available on Amathuba within the 'Course Administration' unit) and submit it to Mr Mark Christians within the first two weeks of term by email (mark.christians@uct.ac.za).

Tutorials will alternate with laboratory (or practical) activities. During tutorial sessions, students will tackle unseen

problems with assistance from tutors.

Tutorial questions and weekly problem sets:

All weekly problem sets will be provided as pdf files via amathuba. Typically on Fridays of the tutorial week. Completed problem sheets must be handed in by 10h00 on the following Friday for grading by the course tutors.

The course tutors for PHY1032S are Moses Mlangeni and Sumari Faul.

Textbook:

The prescribed textbook for the course is College Physics from OpenStax, ISBN 1938168003, www.openstax.org/details/college-physics. This book is available for free to view on the web or to download in PDF format. Print versions will be available for purchase through the Department of Physics.

A recommended textbook for the course is Knight, Jones & Field: College Physics (Pearson). This was the textbook used in previous years and would be a good resource.

Assessment:

There will be two in person class tests. A final exam covering all 4 modules will take place during the examination period. Weekly problem set marks will complement this part of the assessment. Lab reports and a laboratory test will cover the laboratory portion of the course.

Specific modalities of the individual activities will be announced via amathuba and email.

Students who are not able to write the tests on medical grounds will be given the opportunity, on production of a medical certificate, to write the test at another time. Students will not be excused from tests.

The supplementary examination will be held in January 2024. The mark obtained in the supplementary examination will replace the mark scored in the final examination and will then be averaged with the class record to determine the final aggregate after the supplementary.

Students whose final aggregate after the supplementary is 50% or higher will be graded as 50 UP SP – a so-called "unclassified" pass in the subject. Those students whose final aggregate after the supplementary is below 50% will fail the course (such a student with, e.g., a result of 47 FS before the supplementary will have their final result after the supplementary recorded as 47 SF).

Assessment contributions and weights:

Two class tests	$2 \times 12\%$	24%
Exam		50%
Weekly problem sets		6%
Laboratory reports		10%
Laboratory test		10%

The pass mark is 50%. There is no exam subminimum.

Duly Performed (DP) requirement:

In order to qualify for writing the final examination, the following DP requirements must be met: minimum of 40% in class record; attendance at all tests including the lab test; completion of all laboratory reports; completion of 75% of the problem sets. Students with aggregate between 45% and 49% may be awarded supplementary assessment likely to be scheduled in January 2021.

Course administration and communication:

- Dates for tests, exams and any announcements will be communicated via the PHY1032S amathuba site and your UCT email. Please ensure that you check your UCT email account regularly, or else set up an auto-forward to your preferred email account.
- It is the individual student's responsibility to contact the course convenor in case they are unable to participate in an assessment. *Use 1032S and a short description of the issue in the subject line of your email.*

I wish you all an interesting and educational experience with this course.

Sincerely,

Heribert Weigert
Associate Professor, Director CTMP