

Staff-Student Consultative Committee  
Minutes for Meeting No. 1 of 2015/2016

Date: 20<sup>th</sup> November 2015

Time: 1.30 pm

Venue: Room 518, CYM Physics Building, HKU

Present:

Dr. J. J. L. Lim (Chairman, Staff representative)

Dr. C. C. Ling, Dr. M. K. Yip (Staff representative)

All undergraduate and graduate representatives, as well as representative from Physics Society

(Dr. J. C. S. Pun and Dr. Jenny Lee were conducting lectures.)

Note:

Prior to the meeting, based on the agenda circulated to all members, Dr. J. Lee (Physics laboratory coordinator) responded in writing to issues regarding laboratory experiments. Dr. J. Lee's responses are included in the minutes. Following the meeting, Dr. Yip discussed with the 1<sup>st</sup>-yr student representative in greater detail on one of the issues raised during the meeting. Dr. Yip's written report on the essence of this discussion also is included in the minutes.

1. 1<sup>st</sup>-year student representative.

- 1<sup>st</sup>-year physics students have to complete two laboratories, one on mechanics and one on electricity. They are randomly assigned to one of two experiments in mechanics, and one of three experiments in electricity. The laboratory manuals for the different experiments can be vastly different in length, as well as level of difficulty. The students perceive such vast differences in the amount of preparation required by different students for different experiments to be unfair.

Action item: Committee will communicate concern directly to Dr. J. Lee, the Physics Laboratory coordinator.

Response from Dr. J. Lee: The lab manuals are being revised to be more "fair" and to have a similar standard among different experiments in the same year level. The revised manuals are planned for use from the 2016-2017 academic year.

- Solutions to some problems sets in both the lectures and tutorials in PHYS1250 Fundamental Physics can be difficult to follow, especially for students with limited physics background.

Action item: Dr. Yip, the course coordinator, will discuss with the 1st-year representative in more detail after the meeting on how to improve the clarity of the solutions presented in the lectures and tutorials.

Response from Dr. Yip: I further discussed with my students in PHYS1250 and found out the main reason other than students' diverse background in math and physics. They commented that there are a lot of tutorial problems (totally over 120) in this course, and the levels vary widely, from elementary questions to very difficult problems. It turns out that they have no idea about what level they have to achieve at the end of semester and thus it increases their workload on this course. They also commented that they cannot identify which problems are essential for their study, which are harder problems and which are for further reading (i.e. the challenging problems) only.

I truly agree with their concerns. My motivation to prepare a big question bank for them has dual purposes, i.e. more examples and more exercises for their revision, though submission is not required and the solutions will be posted after the class. To improve the situation, I would like to grade the problems with indicators, e.g. \* and \*\* in the coming semester, such that students can distinguish the harder problems and the challenging problems (for further reading only). I will also add new remarks to the solutions of the problem sets for clearer presentation. Hope that it would be a great help for them.

2. 2<sup>nd</sup>-year student representative.

- Some laboratories are scheduled before lectures that cover the concepts used in the laboratory are delivered.

Action item: Committee to notify Dr. J. Lee, the Physics Laboratory coordinator. The committee supposes that it may be difficult to address this concern because of limited laboratory space.

- Mismatch between level of difficulty of questions posed in assignments/tutorials and examinations in PHYS2250 Introductory Mechanics, as well as PHYS2260 Heat and Waves. In PHYS2250 Introductory Mechanics, the assignments/tutorials are significantly harder than the examination. In PHYS2260, the reverse is true.

Action item: Committee to notify Dr. M. K. Yip, the course coordinator for PHYS2250, and Dr. F C. C. Ling, the course coordinator for PHYS2260. (Action taken)

Response from Dr. Yip: The HW problems have a broad range of difficulty. The harder problems aims to stimulate students' deep understanding in the subject and enhance the problem solving skills. Such training is essential to most students who plan to take the further course PHYS3350 "Classical Mechanics". The tutorial problems includes warm up exercises, exam type problems and harder problems. Full solutions will be posted for students' reference. The training in HW assignment and tutorial

class is appropriate for students to meet the learning outcomes and prepare for the final examination.

- Not enough problem sets in PHYS 2055, Introduction to Relativity.

Action item: Committee to notify Dr. K. M. Lee, the course coordinator. (Action taken)

3. 3<sup>rd</sup>-year student representative.

- Reduce reuse of past assignments and tutorial questions.

Discussion: There is a desire to have more stimulating questions, allowing self-exploration. One of the main concerns regarding this issue, however, is cheating by students, especially if the assignments count for a major fraction of the course grade.

Action item: Committee to notify course coordinators about creating more stimulating questions, and guarding against the possibility of cheating in situations where the assignments count for a major fraction of the course grade.

- More problem sets in PHYS3551 Introductory Solid State Physics and PHYS3705 Laser and Spectroscopy. Explain concepts better in Introductory Solid State Physics.

Action Item: Committee to notify Prof J. Gao, the course coordinator for PHYS3551 Introductory Solid State Physics, and Prof. S. J. Xu, course coordinator for PHYS3705 Laser and Spectroscopy. (Action taken)

- Marker pens often run out in lectures.

Action item: Committee to notify course coordinators to bring their own marker pens.

- Timetable clash between advanced level courses. For example, in the 1st semester of 2015-2016, PHYS3150 Theoretical Physics and PHYS3551 Introductory Solid State Physics shared the same time slots. Both courses are offered only in the 1st semester of every academic year, and they are supposed to be taken by students during the 3rd year of their studies. Moreover, some courses are held only once every two years, limiting opportunity to take these courses. For example, PHYS4654 General Relativity is only offered biannually, but students would like to see this course offered annually.

Action item: Committee to notify Faculty on course timetabling, and Department on wish for certain courses to be offered annually.

- Lack of experience in error analysis. Students are expected to write full reports starting from all level 3 courses. Therefore, it is suggested that all Year 3 students, or even Year 2, be given a mini lecture about error analysis.

Action item: Dr. J Lee provides the notes on error analyses for all students. The notes are also posted on the lab webpage. It is planned, from 2016-2017 academic year, to have a mini-lecture on error analyses during the Lab Introduction section held at the beginning of semester.

#### 4. 4th-year student representative.

- No concerns were expressed. The Committee asked whether 4<sup>th</sup>-year students think that there is adequate support from the Department for job hunting, and the representative indicated that there is.

#### 5. Graduate representative

- There is no clear guideline about which seminars graduate students should attend as part of PHYS8950 Postgraduate Seminar course. For example, attendance is required for overseas speakers, but it is not clear whether attendance is required for PhD candidates.

Action item: Committee to notify Prof. J. Wang, the course coordinator for the Physics Seminar course. (Action taken)

- Notify students about seminars a few hours before the seminar.

Action item: Committee regards that sufficient number of notifications are given to students. Nevertheless, the committee can ask the department office whether they can email notification a few hours before the meeting.

- Students think it a waste of time to attend seminars not in their own fields, as they do not understand the material presented in part because of the lack of sufficient introduction.

Action item: The department might consider categorizing the seminars by subject matter, setting a guideline on how many seminars outside their fields students should attend, and then allowing the students to choose which seminars outside their field to attend.

- Many typos in lectures notes for the courses PHYS4651 Selected Topics in Astrophysics and PHYS4653 Cosmology, including even equations in examinations.

Action item: Committee to notify Dr. K. S. Cheng, the course coordinator for both courses.  
(Action taken)

#### 6. Physics Society representatives

- Lectures, tutorial questions, and assignments too difficult for PHYS1250 Fundamental Physics. This is the same issue raised by 1<sup>st</sup>-year representative.

Action item: See above response to this issue.

- Request for room for Physical Society.

Action item: This is a perennial request, but only one the Department can address when there is space available.

- Request for more lockers.

Action item: Will explore whether more lockers can be made available. (Request made, but rejected.)