

Course analysis (course evaluation) – Biomedicine Bachelor Programme

Course code 1BI049	Course title Molecular Medicine - Oncology	Credits 15 ECTS
Semester Autumn	Period 2020-08-31 – 2020-11-01	

Course coordinator Nick Tobin (NT)	Examiner Nick Tobin (NT)
Teacher in charge of component Veronica Höiom (VH; PBLs) Ingemar Ernberg (IE; Labs) Samuel Lapworth (SL; Biostatistics)	Other participating teachers A range of teachers, both from within and outside the Onk-Pat and MTC, including both clinicians and researchers (from both KI and KS).

Number of registered students during the three week check 44	Number approved on the last course date 42	Response frequency course valuation survey 14, 31.11%
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Other methods for student influence (in addition to concluding course evaluation)

Students were repeatedly encouraged to provide ongoing feedback to the course coordinator (NT) who was present at all lectures (both physical and online) for the duration of the course. NT also sought opinions from the students before or after lectures, often using the Zoom voting tool. In addition, students were reminded that they could contact their class representatives with their views for discussion at a course council. The council was held towards the end of the course with a class representative.

Feedback reporting of the course valuation results to the students

The 2019 course survey was made available on the course webpage (Canvas) and Drupal for the incoming 2020 students, although the latter came after the semester start owing to a change in course admin and the steep learning curve in the many digital tools we use. At the course introductory presentation NT highlighted the strengths of the course and what changes that had been made to improve upon the perceived weaknesses - as taken from the 2019 survey. The importance of receiving feedback on the course was also discussed along with demonstration of how feedback from previous years has helped to shaped the structure and content of course in its current form.

Note that...

The analysis should (together with a summarising quantitative summary of the students' course valuation) be communicated to the education committee at the department responsible for the course and for programme courses also the programme coordinating committee.

The analysis was communicated to the education committee on: 4th Feb 2021

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1. Description of any conducted changes since the previous course occasion based on the views of former students

- **New exam structure:** Students have been frustrated that the grade for the entire course was dependent on the final written exam only. To try and improve this we introduced two new measures: 1. Participation and completion of labs resulted in 10% towards the final course grade and 2. The students received an exam question on their final PBL that they worked together to prepare ahead of time (thus, in keeping with the “spirit” of PBLs). The question was added to the written exam and was worth 10% of the final grade.
- **Biostatistics project:** In previous years, the week-long biostatistics part of the course was assessed through an examination where students who failed had to take December and June repeats in order to pass the course. Students and teachers alike have been frustrated at this requirement particularly as biostatistics only represents one week of a 10-week course. This year, in collaboration with the new IMM biostatistician Samuel Lapworth, we changed the format to a biostatistics project which the students had one week to complete. Those whose project report did not meet the required standard were provided with specific feedback and given a chance to resubmit.
- **Lecturers:** New lecturers were introduced to the course to 1. Replace previous lecturers who had received low scores/poor feedback two years in a row and 2. Introduce new subject material e.g. Childhood cancer
- **Decrease lab group size:** In order to plan for the future, the number of lab days for Lab 2 were increased whilst reducing the number of students in each group. This means that we can cater for an influx of students in the coming years.
- **Decrease PBL group size:** Similarly, we increased the number of PBL groups in order to keep the number of students in each group small. Groups were very small this year (approx. 4 per group), but this means we can now cater for more students in coming years

2. Brief summary of the students’ valuations of the course

(Based on the students’ quantitative responses to the course valuation and key views from free text responses. Quantitative summary and any graphs are attached.)

The quantitative feedback on the course was in general very positive. Students felt that they developed valuable skills and expertise, achieved the intended learning outcomes for the course and were aware of the common themes running through the course. Importantly they felt their feedback was listened to and that they had someone to turn to when they had problems with the course or its content. Finally, the structure and workload of the course were perceived as good and in line with course learning outcomes.

Some constructive feedback was also given, this included working on the biostatistics aspect of the course to make the lectures more interactive and give the students a better project outline. The students felt that switching Lab 1 to a “lecture-based” lab (owing to Covid-19) did not work very well and some were critical of the ethics and biostatics modules in digital format.

3. The course coordinator’s reflections on the implementation and results of the course

Strengths of the course:

- The course structure and organisation is very strong, this was mentioned by a number of students in the course feedback

- We are very good at communicating with the students and they are left with the impression that we are engaged in their learning and understanding
- The connection to the oncology clinic with numerous lecturers and PBLs containing a clinical focus is central to the success of the course and highly appreciated by students
- The mix of lecturers, labs, PBLs and seminars has the combined effect of stimulating life-long learning. Often the students receive similar information but from clinical and research viewpoints, encouraging a deep understanding of the subject matter

Weaknesses of the course:

- Some lectures can still be improved on, specifically by adding summary/ conclusions slides its clearer to the students what they are expected to know
- We need to provide better information on the Biostatistics project for next year
- It has been very difficult to find willing teachers to be involved in the lymphoma lectures and patient demonstrations (proposed resolution detailed in Section 5 below)
- We timed the biostatics project deadline poorly this year, this is easily fixed (proposed resolution detailed in Section 5 below)

4. Other views

The general atmosphere amongst the course leadership and organisation is one of positivity. The feedback we have received from students along with lecturers is both encouraging and motivating. We did a great job of transitioning to online learning at short notice, it was essentially seamless. We seem to have found a good balance between biological and clinical molecular oncology as well as between the number and structure of lectures, PBLs, seminars and labs.

5. Course coordinator's conclusions and any suggestions for changes

(If changes are suggested, state who is responsible for implementing them and provide a schedule.)

The overarching conclusion from the 2020 MM-O course should be one of positivity and optimism for future iterations on the basis of a strong and well organised foundation. The following changes will be made however with the aim of improving the course on the basis of student and teacher feedback:

- There is some uncertainty regarding the long-term future of Lab 2, now is a good time to rectify this (Responsible: Nick Tobin, Ingemar Ernberg)
- Lecturers will be reminded to add a summary slide on what subject matter is the most important from their presentation in order to make the lecture intended learning outcomes clearer. In addition, all lecturers will be given the feedback written by the students in the interest of continued improvement (Responsible: Nick Tobin)
- A better introduction to the biostatistics project will be given (Responsible: Samuel Lapworth)
- If possible, the course will switch to a digital exam in 2021 (Responsible: Nick Tobin)
- The biostatistics project will be timed to finish after the final exam to give students more time to complete it (Responsible: Nick Tobin, Samuel Lapworth)
- We will swap out lymphoma for lung cancer in the course, this will result in changes to: PBLs, Lectures and patient demos, in addition to exam questions (Responsible: Nick Tobin, Advice from: Kristina Viktorsson)

Appendices:

Course survey HT20