

Evaluation report: Integrative Design of Biomedical Products – 2013/2014

Course code: 191150700
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The evaluation committee has evaluated the course Integrative Design of Biomedical Products by sending an online questionnaire to 61 students. 31 students filled in the questionnaire, which gives a response of 51%.

This course scores an average of 3.5 which is sufficient for a master course. But there are some points that can improve. The tempo of the lectures was a bit slow and students mention that there was little to learn because there was not much new content. Also the groups are too big for the assignments. At last but not least students think that it is very suspicious that every group received the same grade and that all the different assignments were graded within a week. They also would appreciate to get some feedback on their work.

These are the main conclusions of the evaluation. The interpretation is based on the remarks of the respondents. For an overview of the results, see the graph at the end of this report.

Recommendations of last evaluation

The last evaluation was in 2010/2011

- Don't make this course obligated for Industrial Design Engineering students doing an Emerging Technology Design track in Biomedical engineering. These respondents following this course all felt that they had a similar course during their first Bachelor year.

Recommendations by the committee:

The quality of the course can be improved. Based on the results of the questionnaire, some recommendations for improvement are provided. The most important recommendations are:

- Give feedback on the reports.
- Remove the part about 'group roles', it is a lot of unnecessary work and does not fit in a master course.
- Make the groups smaller. A lot of time is lost in communication and discussion.

Reactie docent:

The tempo of the lectures was a bit slow and students mention that there was little to learn because there was not much new content.

It is difficult to teach every student new content during every lecture. We have students BME, ME, IDE, TM. They all lack knowledge that is necessary to work as a multidisciplinary team and to solve a medical problem. But students ME know most of the content of lecture 1, students BME of lecture 2, etc.

This is indeed a disadvantage. On the other hand, this is a unique course, because it is the first time that students with a different background work together, so they form a truly multidisciplinary team. We think that this experience is much more important than the disadvantage to have a repetition during one lecture.

The groups are too big for the assignments.

The detailed comment was that much time was lost in communication and discussion. But learning to communicate and discuss in an effective and efficient way is one of the learning goals in this course. So we deliberately made the groups this size to practice these aspects. Since many problems in team work occur due to miscommunication, practicing this is certainly not a loss of time.

Students think that it is very suspicious that every group received the same grade and that all the different assignments were graded within a week.

I have included the detailed grades. As you can see, there were distinct differences between the groups, but some performed better during their oral presentation, others scored better for their written report. This year most groups ended with the same final grade, which is rather unusual.

The reason why we finished the grading within one week was to finish before our summer holiday. So we all worked hard to finish it in time, and we succeeded! I have to say that it is a bit disappointing that this behavior is judged as 'suspicious'.

They also would appreciate to get some feedback on their work.

We advised the students to make an appointment for feedback after the summer holidays. No appointment was made yet.

Remove the part about 'group roles', it is a lot of unnecessary work and does not fit in a master course.

For several students these team roles are new for them.

Moreover, it is an essential part of the course. Without a group role analysis you cannot expect a team to function properly.

From numerous students we hear as feedback, that they are surprised that this analysis really works. The problems that you predict, when certain team roles lack, indeed become prominent during the project.

Overview:

- All marks are given on a Likert-scale from 1-5. For master courses, a mark of 3.5 or higher is sufficient.
- The height of the bars in the graph represents the mark. The thin line at the top of the bars gives the standard deviation.

Marks	
First impression rating	3.0
Ability to study	3.5
Relevancy	3.1
Quality of education	3.4
Coordination / planning	3.7
Examination / Assignments	3.7
Average	3.5

Explanation of marks:

- Total 'first impression rating' is the mark given to the question: Overall appreciation.
- Ability to study is the average point of the marks given to the part of study material.
- Relevancy is the mark given to the question: Relevancy of the course.
- Quality of education is the average point of the marks given to the parts "lectures" and "practices".
- Coordination / Planning is the average point of the marks of "Adequate Information on Blackboard" and "Teacher available for questions".
- Examination / Assignments is the average point of the marks given to the Examination /Final Assignment part.
- Average is the mean of all given marks.

