Course analysis template

After the course has ended, the course leader fills in this template.

Course code	Course title	Credits
5HI001	Computer Applications in Health Care and Biomedicine (10hp)	10
Semester	**Period**	
1	2	

Course leader	Examiner
Stefano Bonacina	Sabine Koch
Other participating teachers	**Other participating teachers**
Sabine Koch	

Number of registered students	Number passed after regular session	Response rate for course survey (%)
43	**39**	**79,07%**
Methods for student influence other than course survey Feedback and comments on the schedule and the agenda, while the course is running.		
How will the results from the course analysis be communicated to students The course analysis will be published on the course website on Canvas and submitted to the Board of Education at LIME Department.		

1. Description of any implemented changes since the previous course

In HT23 edition of the course main topics have been organized according to a session for lecture, one or more sessions to exercise in the class, by group works. Then, the assignment was the occasion for the students to provide solutions to similar exercises individually. Then, compared with the previous edition of the course, requests in the individual assignments have been modified and instructions updated. A different guest lecturer was invited for the session on mobile health app. Group works on Public Health Informatics have been presented by oral presentations.

2. A brief summary of the students' evaluations of the course

(Based on the students' quantitative answers to the course evaluation and comments. Quantitative compilation and possible graphs attached. Enclose results from the course evaluation)

Thirty-four (34) out of 43 students have completed the course evaluation survey. Twenty-eight have clinical/medical education background, while six have “technical” education background. For each question of the survey, mean, standard deviation and coefficient of variation, as a percentage, are presented in Table 1.

In Table 1, the mean value of the answers varies from 3.4 to 4.0, while the standard deviation ranges from 0.9 to 1.1. Finally, the coefficient of variation ranges from 24.1.6 to 32.5 per cent. From those numbers, it appears that respondents' views are quite heterogeneous.

Table 1. Mean, standard deviation and coefficient of variation for questions of the survey.

#	Question	Mean	Standard Deviation	Coefficient of Variation (%)
1	In my view, I have developed valuable expertise/skills during the course.	3.7	1.0	26.5
2	In my view, I have achieved all the intended learning outcomes of the course.	3.7	0.9	25.7
3	In my view, there was a common theme running throughout the course – from learning outcomes to examinations.	3.8	1.1	27.7
4	In my view, the course has promoted a scientific way of thinking and reasoning (e.g., analytical and critical thinking, independent search for and evaluation of information).	3.8	1.0	26.1
5	In my view, during the course, the teachers have been open to ideas and opinions about the course's structure and content.	4.0	0.9	22.8
6	Teaching was based on real examples to develop students' professional knowledge.	3.9	1.0	24.9
7	My previous knowledge was sufficient to follow the course.	3.9	1.0	24.1
8	The course was challenging enough for me.	3.4	1.1	32.4
	Average	3.8	1.0	26.3

3. The course-responsible reflection on the course implementation and results

The course describes the structure, functionality and use of information systems or computer applications (e.g., medical record systems, clinical decision support systems, consumer health, and telemedicine applications) in health care. Computer applications in heterogeneous settings for Clinical Informatics, Consumer Health Informatics, and Public Health informatics will be considered, also considering interoperability, organizational, and ethical and legal aspects. The course was implemented by 35 sessions: 29 of two hours, five of three hours, and one of one hour. Six of them were online, involving international guest lecturers. Three in-person sessions involved guest lecturers. A study visit was done at a company developing clinical decision support systems. The implementation of the course was satisfying, improvements can be done according to the received feedback from the students.

Guest lectures needs to be according to the availability of guest lecturers. Consequently, arrangements to the schedule are needed.
As for the results, 16 students got “A” grade, 21 got “B” grade, two got “C” grade, and three need to take re-examination of the Individual Assignment 1. Ninety per cent of the students passed the course after regular session.

Course strengths:

1. Class activities and group works.
2. Guest lectures and study visit
3. Real life examples and practical application of previous knowledge
4. Learning environment.

Course weaknesses:

1. Clarify the progress of the course.
2. Select different problems for the group works in the class.
3. "Clarity/Length" of Instructions about the assignments.
4. More content/ more guest lecturers

4. Other comments

As for Group composition, in the current edition of the course groups were composed according to student preferences. In future edition, other modalities could be applied.

5. The course-responsible conclusions and any proposals for changes

(If any changes are proposed, please specify who is responsible for implementing these and a time schedule.)

In Table 2, reflections on weaknesses and proposals for changes are presented. Responsible for changes is the course director.

Table 2. Reflections on weaknesses and proposals for changes

#	Topic/short summary	Teacher reflections	Actions for improvement
1	Clarify the progress of the course	The course is divided in main topics, composed by different sessions. Timeline mirrors the progression of the topics, but single sessions might be arranged according to specific needs, e.g. guest lecturers.	The progression of the course will be more explained, highlighting that specific arrangements are needed, according to the calendar/ guest lecturers’ needs. The mapping between sessions and topics will be provided.

2	Select different problems for the group works in the class.	In the class sessions, problems for the group works have been provided. While for conceptual modelling by Unified Modelling Language class diagrams solutions were heterogenous, it appears that for modelling production rules from recommendations of clinical practice guidelines quite similar solutions were provided, with less opportunity of discussions.	Different clinical practice guidelines will be considered for modelling production rules from recommendations.
3	"Clarity/Length" of Instructions about the assignments	Instructions include technical concepts (that might not be known at the publication date of the assignment).	Instructions will be clarified; however, the usage of technical concepts in the text of the assignment is indispensable.
4	More content/ more guest lecturers	The content of the course is designed according to the knowledge acquired in the previous courses of the programme. Increasing the topics/ go deeper in technical aspects might require consistent background knowledge. Governmental / European Organizations are contacted for giving guest sessions. It appears that their internal processes require long time for a decision. After Covid-19, it appears difficult to get more guest lecturers.	More technical/ additional contents might be added, according to the results of the introductory course. Consolidated guest lecturers will be contacted for the new edition of the course. Waiting for an answer from a European public health organization for arranging a study visit in their premises, in Stockholm.