



## Course analysis

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

<b>Course code</b> 5HI002	<b>Course title</b> Health Care Organization and Management [in the Digital Age]	<b>Credits</b> 7.5
<b>Semester</b> Ht 2020	<b>Period</b> 26 Oct 2020 – 27 Nov 2020	

<b>Course leader</b> <i>Natalia Stathakarou</i>	<b>Examiner</b> Sabine Koch
<b>Other participating teachers</b>  <b>Anna Tisäter, RN, Academic Specialist Center, Center for Rheumatology, SLSO</b>  <b>Carl Johan Sundberg, Licensed Physician and Professor at the Department of Physiology and Pharmacology. Head of the Department of Learning, Informatics, Management and Ethics (LIME). KI</b>  <b>Fredrik Gustafsson, Country Manager, Digital Siemens Healthineers</b>  <b>Göran Tomson, Senior Professor of International Health Systems Research, MMC/LIME and GPB, KI</b>  <b>Joel Freilich, MD, doctoral student at MMC/LIME and physician at Roslags Näsby Husläkarmottagning</b>  <b>John Øvretveit, Professor of health care improvement implementation and evaluation, MMC/LIME</b>  <b>Kenneth Ilvall; medical officer of MediCheck</b>  <b>Kristina Palm, PhD, Researcher at MMC/LIME and Head of the department of Applied Mechanical Engineering at KTH</b>  <b>Karin Pukk Härenstam, MD, researcher at the MMC/LIME and lead physician at the Pediatric Emergency Department, Karolinska University Hospital</b>  <b>Kay Sundberg, Assistant professor, Department of Neurobiology, Care Sciences and Society (NVS), Karolinska Institutet</b>  <b>Mats Brommels, Professor of Health Services Management, MMC/LIME</b>  <b>Mariano Salazar, PhD, MD, social epidemiologist,</b>	<b>Other participating teachers</b>



<p><b>Research Coordinator at GPH, KI</b></p> <p><b>Nasim Farrokhnia, MD, PhD, Director of research and education, KRY</b></p> <p><b>Natalia Stathakarou, MSc, PhD candidate &amp; project coordinator, course leader, HIC/ LIME, KI</b></p> <p><b>Panos Bamidis; Prof. in the Lab of Medical Physics, School of Medicine of the Aristotle University of Thessaloniki, Greece</b></p> <p><b>Peter Bolin; Region Stockholm (Stockholms läns landsting)</b></p> <p><b>Patrik Hidefjäll, PhD, affiliated researcher at MMC/LIME Investigator at the National Board of Health and Welfare</b></p> <p><b>Panos Sarigiannidis, Associate Professor in the Department of Electrical and Computer Engineering, University of Western Macedonia</b></p> <p><b>Susanne Karlfedt, research coordinator at the Academic Specialist Center, Center for Rheumatology, SLSO</b></p> <p><b>Stathis Konstantinidis, Assist. Prof. in e-Learning and Health Informatics, Digital Innovations in Healthcare and Education (DICE) Research Group, University of Nottingham UK</b></p> <p><b>Thomas Ehrengren, VD of MediCheck</b></p> <p><b>Tobias Perdahl, MD, Co-founder &amp; CMO Doktor24; Founder of Vårdmaktpodden.</b></p>	
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Number of registered students	Number passed after regular session	Response rate for course survey (%)
21	19	57.14%
<p><b>Methods for student influence other than course survey</b>            The course leader had an ongoing dialogue with the students discussing possible improvements and changes for the course with special focus on identifying and testing the methodology that could support the students the best during COVID-19 situation.</p>		
<p><b>How will the results from the course analysis be communicated to students</b>            The analysis shall be communicated to students via Canvas. Moreover the course analysis will be submitted to LIME educational committee.</p>		

## 1. Description of any implemented changes since the previous course

The course was launched digitally due to the COVID-19 situation. Every session was recorded after requiring permission of everyone participating and was uploaded in Canvas after the lecture. The course leader discussed this method with the students at the course introduction day and it was perceived positively. To support students joining the online lectures from various countries most lectures were scheduled at 14:00 CET that usually works well for most timezones. The course leader checked with the enrolled students at the introduction day whether this was applicable.

The assignments were reduced, from 3 to 2 assignments in total since last time: one individual assignment and one group assignment. Instead, more mandatory attendance lectures were added. That was influenced by the small rate of students attending the lectures last year. However most of the students were attending and participating to all lectures anyhow.

## 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)

The course was overall appreciated by the students. The survey was answered by 12 students For each question of the survey, mean, standard deviation and coefficient of variation, as a percentage, are presented in Table 1.

#	Question	Mean	Standard Deviation	Coefficient of Variation (%)
1	In my view, I have developed valuable expertise/skills during the course.	4.3	0.6	14.6 %
2	In my view, I have achieved all the intended learning outcomes of the course.	4.3	0.7	15.0 %
3	In my view, there was a common theme running throughout the course – from learning outcomes to examinations.	4.0	0.9	21.3 %
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).	4.4	0.5	11.7 %
5	In my view, during the course, the teachers have been open to ideas and opinions about the course's structure and content.	4.7	0.5	10.6 %

6	Teaching was based on real examples to develop students' professional knowledge.	4.5	0.5	11.6 %
9	The course was challenging enough for me.	3.0	1.1	36.5 %
	Students' suggestions and ideas regarding the web-based teaching were taken into consideration.	4.7	0.6	13.7 %
	The digital learning environment such as Canvas, Zoom etc. during the web-based course was adequate.	4.4	0.8	18.0 %
	Possible changes in the content of the course as a consequence of the current situation (regarding Covid-19) were communicated clearly.	4.4	0.7	15.1 %
	Possible changes in the examination forms of the course as a consequence of the current situation (regarding Covid-19) were communicated clearly.	4.4	0.9	20.4 %
	The set-up and activities of the web-based teaching were relevant to the learning outcomes.	4.3	0.8	18.0 %
	Prior to the web-based examination, I received clear instructions regarding, for example, systems (Canvas, Inspera), set-up and times.	4.5	0.9	20.1 %
	In my view, I could demonstrate my knowledge in the web-based examination just as well as in an ordinary examination.	4.3	0.8	18.0 %
	I have experienced anxiety or had difficulty engaging, as a consequence of the current situation (regarding Covid-19).	1.9	1.0	54.7 %



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

#### *Course strengths:*

- The guest lectures, both from academia and industry; national and international speakers.
- The clarity of assignments and the instructions
- Real life examples and problems presentation
- The digital format of the course and particularly the recording of the live online lectures so that students can watch them again.

#### *Course weaknesses:*

- Lack of possibility for study visits (eg to the hospital, to companies)
- A final wrap-up lecture where what was learned is discussed since the course is introducing various aspects of healthcare organization and digitalization that need to be compiled together at the end of the course

### 4. Other comments

Overall the course was perceived positively by the students and there were not any major challenges related to the COVID-19 situation. The remote nature of the course as well as the recording of the live lectures were appreciated by the students.

### 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.)

I am not going to conduct any major changes. However following the feedback of the students I am going to include a workshop at the end of the course where we summarize all course content and allow the students to reflect on the course and ask questions.