

**SITA11011U HealthZup****Volume 2014/2015****Course information**

Language	English
Credit	15 ECTS
Level	Full Degree Master
Duration	2 blocks
Placement	Block 3 And Block 4
Schedule	B (Mon 8-12 + Tues 13-17 + Fri 8-12)
Course capacity	30 participants
Study board	Study board of Health and IT

Contracting department

- Department of Public Health

Course responsible

- Anne Frølich (anne.frolich@dadlnet.dk)

Saved on the 02-05-2014

Education

MSc in Health Informatics

Content

On the basis of Stanford Universitys Biodesign innovation process, the students will be introduced to various aspects of health and assisted living technology innovation. That includes clinical needs analysis, market analysis, ideation, prototyping, regulatory and business plan development. Lectures will be provided from different faculties and invited guest speakers from the health technology industry.

The students will work in interdisciplinary project teams that perform field studies in clinical environments. During their project industrial partners will mentor them. Students are expected to present their needs finding and screening process/ needs statement, stakeholder and market analysis, concept mapping and an early prototype to a panel of lecturers, physicians and industrial partners at the end of the course.

Learning Outcome

To give the students theoretical and practical knowledge and experience with the aspects of health and assisted living technologies innovation. The expected outcome of the course is that each participant develops an interdisciplinary thinking and culture of cooperation and thus has a practical understanding and skills as part of their training.

At the end of the course, the student should be able to:

- Describe how to effectively search for and summarize disease state fundamentals to aid the needs screening process.
- Describe and differentiate between observations, problems and needs.
- Describe how to translate a problem into a clinical need statement that is accurate, appropriate in scope and solution independent.
- Describe how the identified needs correlate to existing treatment options.
- Explain how to perform a gap analysis that can lead to identification of opportunities within the treatment landscape.
- Discuss the clinical setting and the identified needs and how the aim of the prototype is identified.
- Discuss the stake holder/market analysis in connection with the innovation.
- Explain how to develop a needs ranking system.
- Explain how to cluster and organize the output of an ideation session so it can be presented and analyzed in a meaningful way (concept mapping).
- Discuss the prototyping process for the innovation.
- Explain how to search for existing patents, freedom to operate and prior art.
- Discuss the how to choose the appropriate business model based on the unique characteristics of the innovation and its customers.

Teaching and learning methods

Lectures, field studies and project work

Academic qualifications

Master students from the faculties of Medicine and Health Sciences, Faculty of Science and the Danish Technical University. It is required to have some knowledge about the Human body e.g courses in Human biology or Human physiology.

Sign up

Self Service at KUNet

Exam

<i>Credit</i>	15 ECTS
<i>Type of assessment</i>	Oral examination, 30 minutes Oral exam based on written report. No preparation time.
<i>Exam registration requirements</i>	Approved presentation of project report during the course.
<i>Aid</i>	All aids allowed
<i>Marking scale</i>	7-point grading scale
<i>Censorship form</i>	External censorship

Criteria for exam assessment

To achieve the maximum grade of 12, the student shall be able to:

- Describe how to effectively search for and summarize disease state fundamentals to aid the needs screening process.
- Describe and differentiate between observations, problems and needs.
- Describe how to translate a problem into a clinical need statement that is accurate, appropriate in scope and solution independent.
- Describe how the identified needs correlate to existing treatment options.
- Explain how to perform a gap analysis that can lead to identification of opportunities within the treatment landscape.
- Discuss the clinical setting and the identified needs and how the aim of the prototype is identified.
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- Discuss the how to choose the appropriate business model based on the unique characteristics of the innovation and its customers.

Workload

Category	Hours
Exam	0,5
Field Work	30
Lectures	76
Class Instruction	33
Practical exercises	20
Preparation	252,5
Total	412,0

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