



***Dissertation Seminar***  
**Fostering Innovation in Clinical Practice**

*Academic Year:* **2017/2018**

*Semester:* **1st**

*Instructor(s):* **Inês Mendonça**

*Max. Number of Students:* **6**

*Seminar Description:*

Many of the behaviour and practices that occur in health care facilities are done simply because “that’s the way it has always been done”. This practice can be costly, inefficient and unproductive. In a health care setting, there are numerous processes that occur every day, many of which could be improved, and a new trend is to find efficiency through IT design, health care professional training through human behavior management.

From understanding supply chains and financial aspects of health care operations to best practices in scheduling and inventory management, this seminar is focused on human behavior management, for instance, knowledge about work system can be used for understanding the relationship between employee safety and patient safety. This knowledge will be essential for the employee health department of healthcare organizations. Another example is purchasing departments of healthcare organizations need to have knowledge about usability and user-centered design in order to guarantee that the equipment and devices are unambiguously designed.

Risk management, for example, represents the front-line of patient safety accidents, and is imperative to understand human errors and other mechanisms that involved accidents. The operating room is another example of a healthcare setting in which teamwork coordination and collaboration are critical for patient safety, human behavior management of team training are very pertinent for this type of care setting.

Improvements in the quality and safety of health care can be achieved by better integrating human behavior and systems engineering expertise throughout the numerous layers and units of healthcare organizations.

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*Seminar Content:*

Students are expected to start with a literature review on the main topic: foster innovation in clinical practice, IT design and health care professional training through human behaviour management. After that they must identify a relevant research question to be tested through a suitable methodology.

The ultimate objective is to introduce students to relevant topics for practitioners based on the scientific rigour of academic research.

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Seminar Objectives:

Have a combination of workshops to help students doing research and writing their thesis around some major topics: strategy, process design and analysis of health care operations, managing health care operations quality, and planning and controlling health care operations.

Each student needs to choose a topic that has faced an interesting health care problem and will develop all his work around this issue using human behaviour management.

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Bibliography / Recommended Textbook(s) / Additional Readings:

Recommended Textbook:

- Fisher, Colin (2010), *Researching and Writing a Dissertation: An Essential Guide for Business Students*, UK: Pearson Education Limited (3<sup>rd</sup> edition).
- Saunders, Mark N. K., Lewis, Philip & Thornhill, Adrian (2015), *Research Methods for Business Students*, UK: Pearson Education Limited (7<sup>th</sup> edition).

Additional Readings:

- Kehoe, Bob (2011), *Quality Measurement Tools and Collaborations Drive Success. Healthcare Facilities Management*, 45-48.
- Kaplan, Robert S., and Anderson, Steven R. "The Innovation of Time-Driven Activity-Based Costing." *Journal of Cost Management* 21, no. 2 (March–April 2007): 5–15.
- Bisgaard, Søren (2009), *Solutions to the Healthcare Quality Crisis: Cases and Examples of Lean Six Sigma in Healthcare*. Milwaukee, WI: ASQ Quality Press.
- Jesso-White, J. & Mazur, G. H. (2010), "QFD to Re-design New Physician Orientation and Induction: Connecting New Physicians into a Healthcare Community."
- Furrey, R. (2011), "Increasing Patient Flow Using Lean Six Sigma and Information Technology." Presentation at the Mayo Clinic Conference on Systems Engineering and Operations Research Applied to Health Care, Rochester MN.

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Biography:

Inês Mendonça is innovation project manager at Luz Saúde in the Department of Organization and Processes. Currently, she moreover teaches Operations Management and Mathematics at the Undergraduate as an Invited Assistant Professor. She received her M.Sc. in Operations Research and Systems Engineering from IST-UTL and her Ph.D. in Engineering and Management from IST-UTL also. Her key projects include creating new work flow designs, achieving appropriate workload management, making revisions to the organizational structure, ensuring inter-departmental coordination, specifying work methods and procedures, and scheduling staff to meet patients' needs.



Presently, her research interest area is at behavioral and human relations approach at clinical practice.

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Contact(s) and Office Hours:

By appointment ([mi.mendonca@ucp.pt](mailto:mi.mendonca@ucp.pt));  
Individual support is available by appointment.

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Schedule:

In each session all students will present their findings to their peers. There will be additional sessions booked ad hoc. The following sessions are mandatory:

Session # 1: September 13 (Wednesday) 5.00-6.30pm Room TBD  
Presentation of Main Idea/Motivation/Objectives  
Start writing the individual research proposal

Session # 2: October 11 (Wednesday) 5.00-6.30pm Room TBD  
Research Group Progress Meeting: Main Idea/Data/Methodology  
Start writing the final draft

Session # 3: November 15 (Wednesday) 5.00-6.30pm Room TBD  
Research Group Progress Meeting: Summarize Previous Sections and Results  
Thesis draft delivered

Session # 4: December 13 (Wednesday) 5.00-6.30pm Room TBD  
Final Presentation

Session # 5: December 20 (Wednesday) 5.00-6.30pm Room TBD  
Closing Presentation  
Final Thesis delivered

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Deadlines:

The full list of dates and deadlines can be consulted [here](#).