IHC - Master of Science (MSc) in Business Administration and Innovation in Health Care

Preamble

Pursuant to section 33 of Ministerial Order no. 1328 of 15 November 2016 on Bachelor Programmes, Academic Postgraduate Programmes and Master's (Candidatus) Programmes at Universities (the University Programme Order); section 2(2) and section 10(2) of Ministerial Order no. 106 of 12 February 2018 on Admission and Enrolment on Academic Postgraduate Programmes at Universitites and Master's (Candidatus) Programmes at Universities and Artistic Higher Education Institutions (Kandidatadgangsbekendtgørelsen); section 29 of Ministerial Order no. 1062 of 30 June 2016 on University Examinations and Grading (the Examination Order); and section 20 of Ministerial Order no. 114 of 3 February 2015 on the Grading Scale and other forms of assessment of educations within the sphere of the Ministry of Higher Education and Science (the Grading Scale Order), the Dean of Education, acting on a proposal prepared by the study board, has approved the following programme regulations.

Content

Part 1: Programme specific regulations

Part 2: General regulations for master's (candidatus) programmes

12. Teaching and examination language
13. Prerequisites for participating in the exam: compulsory activities
14. Registration for and withdrawal from courses and exams
15. Re-exams
16. Study activity requirement
17. Extraordinary re-exams and offers of re-assessment / re-exam
18. Entrepreneurs
19. Examination forms
20. Examination rules
21. Examination aids
22. Examinations under special circumstances
23. Sitting examinations abroad

24. Assessment
25. Announcement of results
26.-27. Pass requirements and exam attempts
28. Diploma
29. Leave
30. Programme regulations
31. Exemption from the programme regulations
32.-35. Credit transfer

Part 3: Complaints

Commencement and transition regulations

Part 1: Programme specific regulations

Degree title and duration

1. Students who successfully complete the programme earn the degree *Master of Science (MSc) in Business Administration and Innovation In Health Care*, in Danish *cand.merc. i sundhedsinnovation* (candidatus/candidata mercaturae), abbreviated *cand.merc.(si.)*.

(2) This programme is governed by The Study Board for the Master of Science in Business Administration and Innovation in Heath Care.

(3)The master's (candidatus) programme is a two-year full-time programme, corresponding to 120 ECTS credits. The deadline for completing the programme is the rated time of study + one year after the student commenced the programme. Leave periods, if any, are not included in this time frame. Level of qualification: Master's degree at NQF/EQF Level 7 referring to Second Cycle in the Bologna QF.

(4) The programme duration refers to the number of student full-time equivalents according to which the programme is structured. A full-time equivalent corresponds to one year of work by a full-time student and corresponds to an annual workload of 1650 working hours corresponding to 60 ECTS credits (European Credit Transfer System). The workload includes scheduled classes, preparation for classes, completion of written assignments, other teaching activities, independent study as well as preparation for, and participation in examinations.

Admission requirements and qualifying degrees

1A. No bachelor degree gives the right to admission to the MSc in Business Administration and Innovation in Health Care programme.

(2) The following bachelor degrees give access to admission to this programme, see however subsections (4) and (6):

From CBS:

- HA almen
- HA i projektledelse
- BSc in International Business
- BSc in Business Administration & Service Management
- BSs in International Shipping & Trade
- BSc in Business Administration & Sociology
- HA(psyk.)
- HA(fil.)
- HA(it.)

- HA(jur.)
- HA(mat.)
- BSc in Business, Language & Culture
- BSc in Business, Asian Language & Culture
- BSc in International Business & Politics
- BA in Information Management.

From other educational institutions:

- HA Almen (SDU)
- HA Almen (RUC)
- BSc in Business Administration (RUC)
- HA Almen (AU)
- BSc in Economics & Business Administration (AU)
- HA Almen (AAU)
- BSc in Economics and Business Administration (AAU)
- Bachelor i kommunikation og IT (KU)
- Professional bachelor degree in nursing (sygeplejerske)
- Bachelor i folkesundhedsvidenskab
- Bachelor i IT og sundhed (KU)
- Bachelor i medicin
- Bachelor i medicin og teknologi (KU/DTU)
- Bachelor i molekylær biomedicin
- Bachelor i molekylær medicin
- Bachelor i farmaci.

(3) Admission to the MSc in Business Administration and Innovation in Health Care programme requires a relevant bachelor degree or other relevant Danish or foreign degree at the same level. During the education the applicant must have covered the following academic disciplines to a sufficient degree on an overall, individual assessment:

Min. 30 ECTS-points within one or more of the following areas:

- Organisation

- Quantitative methods
- Economics
- IT
- Epidemiology
- Human biology
- Pathology
- Physiology/anatomy
- Biochemistry/organic chemistry.

(4) The requirements for language skills are available on CBS' homepage: cbs.dk/graduateadmission.

(5) Standard assessments of a number of degrees from CBS or other universities are available on cbs.dk/graduateadmission.

(6) In the event that there are more applicants who fulfil the admission requirements than there are places offered at this programme, the selection shall be made according to criteria laid down in advance and published on cbs.dk/graduateadmission.

(7) Available at cbs.dk/graduateadmission are the application and admission procedures, including deadlines, as well as information about the date when the offer or the rejection of a place of study is made and about the requirement to accept a place of study.

Purpose

2. The Master of Science (MSc) in Business Administration and Innovation in Health Care, cand.merc.(si.), is a theory-based graduate-level programme, emphasizing the training of actionable innovation skills.

(2) The objective of MSc (IHC) is to offer a distinctive, new set of skills to employers in the Danish and international healthcare systems. These skills will be targeted specifically at the public and private organizations of the system which over the coming decades will take health care through a major transformation. The buildings blocks of that transformation will come from a multitude of innovations at all levels of the health care system, involving both its public and commercial parts and new interdependencies between the two. MSc (IHC) graduates will be trained to select, initiate, manage and implement innovations in this complex setting.

(3) Innovations in health care have economic and organizational dimensions. They must fit into complex institutional and regulatory settings. They have a strong design component and, and they often involve IT. The objective of the program is to provide students with relevant analytical and actionable skills allowing them to innovate while taking these different perspectives into account.

(4) Health care innovations typically involve a variety of disciplines and organizations. It is essential that students are prepared to operate in highly heterogeneous setting. The program must train students in complex, multidisciplinary problem solving.

(5) Through participation in the program, students should also acquire the ability to collaborate with people from different professions in working with and solving problems that involve a variety of fields.

Competency profile

3.The Study Board has developed a qualification profile, which describes the expected learning outcomes of this degree program. It is available here on CBS' website.

Content and structure

4. The master program in Innovation in Health Care offers courses and training in within the economics and management of Innovation in Health Care.

(2) The program is interdisciplinary, taught in English, and integrates the learning of a range of analytical approaches and tools with direct application to business practices.

(3) Courses in the first semester present the main disciplinary building blocks: Two 7.5 ECTS courses introduce students to the quantitative methodological skills and to the models of innovation challenges and process, followed by two 7.5 ECTS courses in a comparative approach to health care systems, and in the organization of health care innovation, respectively. Throughout the second semester, students work on an innovation project, organized in a 15 ECTS project course. This course also includes workshops on specific innovation tools referring e.g. to market analysis or IPR. Alongside the project course, students follow courses introducing them to digital health and to innovations in clinical processes.

(4) In the third semester the student chooses between a number of elective tracks (of 30 ECTS). The first track is focused on digital health, the second on advanced quantitative tools for health care innovation.

(5) The student chooses the entire track as a package.

Structure

(6) The below table lists the structure of the program and the ECTS credits of the individual courses. The course descriptions are available in the online course catalogue.

1st year courses

Course	ECTS
Health Care Innovation Management	7.5
Business Statistics for Health Care Innovation	7.5
The Organization of Health Care Innovation	7.5
Health Systems and Innovation	7.5
Foundations of Health Care IT	7.5
Innovation in Clinical Processes and Health Care Delivery	7.5
The Health Care Innovation Project	15

2nd year courses

Course	ECTS
Elective Track	30
Master's Thesis	30

(7) In third semester the student can chose between the following elective tracks:

- Track 1: Digital Innovation in Health Care
- Track 2: Advanced Quantitative Methods for the Analysis of Health Care Innovation

Both tracks include one course at University of Copenhagen (UCPH).

Elective track on Digital Innovation in Health Care (Track 1) :

Course	ECTS
Frontiers of Digital Healthcare	7.5
Digital Services and Innovation in Health Care	15
Register Based Epidemiology (at UCPH) http://kurser.ku.dk/course/sitk18007u/2019-2020	7.5

Elective track on Advanced Quantitative Methods for the Analysis of Health Care Innovation (Track 2):

Course	ECTS
Empirical Methods in Health Care Innovation	7.5
Health Innovation Assessment and Advanced Cost Benefit	15
Register Based Epidemiology (at UCPH) http://kurser.ku.dk/course/sitk18007u/2019-2020	7.5

4A. EIT Labelling

The programme has obtained an EIT labelling, which means that presently the programme can offer 20 grants a year and hereby give the students the possibility to follow two tracks abroad; they will follow 15 ECTS in Copenhagen and the remaining 15 ECTS in Lisbon, Portugal (track 2) or in Coimbra, Portugal (track 3 - see below)

(2) The EIT labelling involves that a separate EIT certificate will be issued in addition to the diploma for MSc in Innovation in Health Care.

Track 2: Lisbon, Portugal Platform

Semester module on Advanced Quantitative Health Care Innovation - Lisbon University

1st quarter, Lisbon

Course	ECTS
Health Quality Assessment	3
Value in Health Care	6
Entrepreneurship Project in Health Care	6

2nd quarter, Copenhagen

Course	ECTS
Register Based Epidemiology (at UCPH) http://kurser.ku.dk/course/sitk18007u/2019-2020	7.5
Empirical Methods in Health Care Innovation	7.5

Track 3: Coimbra, Portugal Platform

Semester module on Health Care Entrepreneurship - Coimbra University

1st quarter, Coimbra

Course	ECTS
Management Health Innovation	7
Health Governance	4
Health Outcomes Measurement	4

2nd quarter, Copenhagen

Course	ECTS
Finance and Accounting in Bio-Business	7.5
CASES in Strategic Management of Innovation and Technology	7.5

(3) As there are only 20 seats/grants offered for the exchange program, there will be a selection process made on following criteria:

- A motivational letter where you should explain which tracks you select. We advise you to make a prioritized selection of the tracks. In your letter, you should demonstrate an interest for innovation and entrepreneurship in the field of health innovation and specifically explain your motivation for the chosen track and reflect on how you can contribute with your knowledge.
- CV
- References
- Grades from the 1st semester.

Master's thesis

4B. The master's (candidatus) thesis must document skills in applying scientific theories and methodologies to a clearly defined academic topic. The thesis must be placed at the second year of study of the master's candidatus programme.

(2) The Programme Director, or the person the Programme Director has empowered to do so, approves the research question of the master's thesis and at the same time determines a submission deadline for the thesis, see subsection (3), and a plan for the thesis supervision. The deadline for submitting the thesis contract is 15 November in the student's 3rd semester, by submission of the thesis contract; see however section 14(3). See also section 19(7).

(3) The deadline for submitting the thesis is 15 May in the student's 4th semester, and it is not possible to withdraw from the exam once the thesis contract has been approved. If the student does not submit within the deadline, the student has used one examination attempt, unless a dispensation has been granted under section 14(7).

(4) If the student does not submit the thesis within the time frame specified in subsection (3), the Programme Director, or the person the Programme Director has empowered to do so, approves a modified problem formulation within the same field and lays down a new three-month deadline for submission at the same time. If the student does not submit the thesis by the new deadline, the student may be granted a third examination attempt, see the Examination Order, in accordance with the same rules which applied to the second examination attempt.

(5) The rules in subsection (4) also apply for a master's thesis for which the student has not obtained at least the grade 02, see the Grading Scale Order.

(6) For more information regarding the content of the master's thesis, please see the study homepage at my.cbs.dk.

(7) The thesis project must address a practical challenge in healthcare innovation. Students must interact and collaborate with a "problem owner" in industry or in healthcare organizations to secure practical relevance of the topic of the thesis and of its contributions to the solution to that problem.

Examinations

5. The program consists of the examinations listed below. The learning objectives and the regulations of the individual examinations are prescribed in the online course catalogue. Direct links to the individual examinations are inserted in the table below.

1st year's examinations

Exam name	Exam form	Gradingscale	Internal/external exam	ECTS
Health Care Innovation Management	Written sit-in exam on CBS' computers	7-point grading scale	Internal exam	7.5
Business Statistics for Health Care Innovation	Home assignment - written product	7-point grading scale	Internal exam	7.5
The Organization of Health Care Innovation	Home assignment - written product	7-point grading scale	Internal exam	7.5
Health Systems and Innovation	Oral exam based on written product	7-point grading scale	Internal exam	7.5
Foundations of Health Care IT	Oral exam based on written product	7-point grading scale	External exam	7.5
Innovation in Clinical Processes and Health Care Delivery	Home assignment - written product	7-point grading scale	External exam	7.5
The Health Care Innovation Project	Oral exam based on written product	7-point grading scale	Internal exam	15

2nd year's examinations

Exam name	Exam form	Gradingscale	Internal/external exam	ECTS
Electives	See the individual course descriptions	See the individual course descriptions	See the individual course descriptions	30
Master's Thesis	Oral exam based on written product	7-point grading scale	External exam	30

The exams amount to 120 ECTS credits in total.

(2) Elective tracks

Assessment at Track 1: Digital Innovation in Health Care (30 ECTS)

Exam name	Exam form	Gradingscale	Internal/external exam	ECTS
Frontiers of Digital Healthcare	Oral exam based on written product	7-point grading scale	Internal exam	7.5
Digital Services in Innovation in Health Care	Oral exam based on written product	7-point grading scale	Internal exam	15
Register Based Epidemiology (UCPH)	See links below	See links below	See links below	7,5

Assessment at Track 2: Advanced Quantitative Methods for the Analysis of Health Care Innovation (30 ECTS)

Exam name	Exam form	Gradingscale	Internal/external exam	ECTS
Empirical Methods in Health Care Innovation	Oral exam based on written product	7-point grading scale	Internal exam	7.5
Health Innovation Assessment and Advanced Cost Benefit	Oral exam based on written product	7-point grading scale	Internal exam	15
Register Based Epidemiology (UCPH)	See links below	See links below	See links below	7,5

Links to the exams in Register Based Epidemiology at UCPH can be found here: http://kurser.ku.dk/course/sitk18007u/2019-2020 and here: http://kurser.ku.dk/course/sitk18007e/2019-2020 (exam description).

The exams under the Portugal Platform

(3) Details regarding the exams in the Lisbon and Coimbra universities are stipulated in the appendix in part 4 of these programme regulations.

(4) Exams in the 2nd quarter, in Copenhagen:

Exam name	Exam form	Gradingscale	Internal/external exam	ECTS
Track 2, EIT				
Register Based Epidemiology (UCPH)	See links in s. 5(2)	See links in s. 5(2)	See links in s. 5(2)	7,5
Empirical Methods in Health Care Innovation	Oral exam based on written product	7-point grading scale	Internal exam	7.5
Track 3, EIT				
Finance and Accounting in Bio-Business	Oral exam	7-point grading scale	External exam	7.5
CASES in Strategic Management of Innovation and Technology	Oral exam	7-point grading scale	Internal exam	7.5

Prerequisites for registering for the exam – compulsory activities

5A. The following courses have compulsory assignments or other compulsory activities, see section 13. Further specifications and regulations are listed in the relevant course description in the online course catalogue, see the below link(s).

Course	Number of mandatory activities
Health Care Innovation Management	1
The Health Care Innovation Project	1

Body of external examiners

6. This degree program is covered by the body of external examiners for the business administration programs.

Pass requirements

7. The general pass requirements are stipulated in section 26.

Precondition for participating in the Health Care Innovation Project exam

8. If the number of students outnumbers the number of places for external collaborations, students will be given the possibility to write a literature based project.

(2) Learning obtained in first semester courses bears directly on the skills the student can offer as part of a second semester innovation project carried out in collocation with an external partner. If a student has not passed the four first semester courses before the start of the second semester innovation project the study programme reserves the right to cancel the collaboration. The student will instead write a literature based project, see however subsection (3).

(3) Students who have not passed all four first semester courses but has participated in both the ordinary and the re-exam within the same exam period will be given the opportunity to write a term paper instead in order to fulfill the precondition. Further information about the term paper can be found on MyCBS.

9-10. (Not in use.)

Part 2: General regulations for master's (candidatus) programmes

11. The teaching is organised in a collaboration between the Programme Director, the course coordinators and the teachers. The Study Board approves the organisation of the teaching.

Examination language

12. Examinations are conducted in English; see however subsection (2).

(2) If a course has been taught in a language other than English, the examination is conducted in that language.

(3) The Study Board may decide to deviate from the rules stipulated in subsections (1)-(2), except when documenting the student's skills in a specific other language is part of the objective of the examination.

(4) The provisions in subsections (1)-(2) apply to oral and written sit-in examinations and to all types of written take-home assignments (seminar papers, projects etc.) subject to assessment.

Prerequisites for participating in the exam: compulsory activities

13. Besides the examinations listed in section 5, which are included in the final grade point average, on some courses there are one or more compulsory activities. That means that as part of the teaching, one or more written assignments must be submitted for assessment and/or one or more oral presentations etc. must be carried out. In order for students to participate in the final examination of the course in question, it is a condition that, within a set deadline, the required number of compulsory activities have been submitted/carried out and have been assessed approved. A blank submission is not regarded as having participated in the activity. Students who do not fulfil the requirements for participating in the examination have used an examination attempt, see section 14(6). Further specifications regarding the number of compulsory activities, format etc. are stated in the course description of the individual course.

(2) A student who, within the deadline determined under subsection (1), is short on having one or more activities approved as regards the required number of approved activities in the course may, to a reasonable extent, be given one or more extra assignments/participate in one or more extra activities, prior to the ordinary examination (1st examination attempt) in the final examination in the course, see however subsection (3). However, it is a precondition that the student has participated in all set activities, unless it can be documented that lack of submission/participation was caused by illness or similar circumstances. If necessary for practical reasons, a different type of activity may be decided.

(3) In courses where the number of set activities during the teaching period is higher than the number of activities that are required to be approved (x number of y number set activities must be approved), the student may not be given extra assignments/participate in extra activities prior to the ordinary examination in the final examination in the course; this also applies in cases of illness or similar circumstances.

(4) A student who, prior to the re-exam (2nd examination attempt) in the final examination in the course, is still short on having one or more activities approved as regards the required number of approved activities in the course may, to a reasonable extent, be given extra assignments/participate in extra activities prior to the re-take examination. However, it is a precondition that the student has

participated in all set activities, unless it can be documented that lack of submission/participation was caused by illness or similar circumstances. Further specifications regarding the number of compulsory activities, format etc. are stated in the course description of the individual course.

(5) For a student who is to participate in a re-exam under programme regulations which are entered into force after the first time the student was registered for the course in question, the student shall not be subject to any new requirements about compulsory activites resulting from the newer programme regulations.

Registration for and withdrawal from courses and exams

14. CBS registers the student for the 60 ECTS comprising the coming year of study, and in addition CBS makes a semestrial registration for the student to any not completed courses from previous years of study.

(2) The students register for electives via the Self Service. Students not registered for mandatory courses and electives for a total of minimum 60 ECTS in a year of study, must register for electives, including summer school courses, corresponding to the lacking ECTS in the coming year of study, resulting in the student being registered for a minimum of 60 ECTS in the coming year of study.

(3) If the registration made under subsection (1) is more than 60 ECTS for the student's second year of study, the student may withdraw from elective courses, so that the student is registered for no more than a total of 60 ECTS, or the student may apply for an individual study plan.

(4) The student can be deregistered from one or more courses or course elements where 1) the students is an elite athlete, or where 2) there are extraordinary circumstances, including impairment, and where the student will be unable to fulfil the registration requirement, or where 3) the student is an entrepreneur, see section 18, or where 4) the student is the chairperson of a voluntary organisation under *Dansk Ungdoms Fællesråd (DUF)* and where the student will be unable to fulfil the registration requirement. Deadlines for submitting dispensation applications are determined on the student intranet.

(5) When selecting students for elective courses, a draw is made among the students who fulfil the conditions for taking the elective course in question if there are more applicants for the course than there are available places. For certain electives the selection is not made by lot, but on the basis of a motivational essay; this will be stated on the list with the offered electives on cbs.dk.

(6) Students are automatically registered for an examination or examinations when they are registered for a course or course element with which one or more examinations are associated. Withdrawal from the ordinary exam (1st examination attempt) is not possible, and students have used an examination attempt, see section 27(1), unless an exemption has been granted pursuant to subsection (7). Students who do not fulfil the requirements for participating in the examination as laid down by the university, see section 13(1), have used an examination attempt, see section 27(1), unless an exemption has been granted pursuant to subsection (7).

(7) The university may grant exemptions from the rules set out in subsection (6) where 1) the students is an elite athlete, or where 2) there are extraordinary circumstances, including impairment, or where 3) the student is an entrepreneur, see section 18, or where 4) the student is the chairperson of a voluntary organisation under *Dansk Ungdoms Fællesråd (DUF)*, see the University Programme Order. Deadlines for submitting dispensation applications are determined on the student intranet.

Re-exams

15. Students are automatically registered for the re-exam (2nd and 3rd examination attempt) when the student has not passed the exam in question. Within a deadline, the student can withdraw from a re-exam (2nd and 3rd examination attempt), see subsection (5). However, it is not possible to withdraw from the 2nd and 3rd examination attempt as regards the master's thesis. If the student has not withdrawn within the deadline, the student has used and examination attempt, see section 27(1).

(2) On programmes with two annual examination periods (semester examinations), students who have not passed an ordinary examination are automatically registered for the re-exam (2nd examination attempt) in the same examination period or immediately thereafter.

(3) On programmes with more examination periods than in subsection (2), students who have not passed an ordinary examination are automatically registered for the re-exam (2nd examination attempt), which will be held as soon as possible; however, no later than six months after the ordinary examination.

(4) The rules on automatic registration for a re-exam (2nd examination attempt) are dispensed with if the student is not offered the opportunity to fulfil the requirements laid down pursuant to section 13(1) and (3) before the second examination attempt is held. The student is registered for the next examination attempt as soon as possible.

(5) The deadline for withdrawal from an examination is 1 month before the start of the examination in question. However, a student who awaits an assessment is exempt from this deadline as regards the re-exam of the course in question.

(6) For the requirements regarding documentation etc. concerning illness during an examination, reference is made to CBS' rules regarding illness in connection with an examination. Attention must be paid to the documentation deadline stated in those rules.

(7) Re-exams are subject to the learning objectives of the ordinary examination of the examination in question.

(8) Re-exams are conducted according to the examination regulations of the ordinary examination of the examination in question, except when:

1. the examination regulations for the examination in question explicitly contain differing provisions for the re-exam, or
2. it is a written examination and the number of registered candidates for the re-exam warrants that it may most appropriately be held as an oral examination.

(9) It is not possible to determine another examination form for the re-exam of the master's thesis.

Study activity requirement

16. The student must pass minimum 30 ECTS each year of study in order to be able to continue the programme (study activity requirement). The student must have three examination attempts, see section 27(1), in the courses or course elements that are included in the study activity requirement.

(2) The study board may grant an exemption from the study activity requirement, see subsection (1), if the student is an elite athlete or if there are extraordinary circumstances, including impairment.

Extraordinary re-exams and offers of re-assessment/re-exam

17. If an extraordinary re-examination is arranged or offered in accordance with section 21 of the Examination Order (regarding examination irregularities) or the offer of a re-evaluation/re-examination is given in accordance with section 36 or 41 of the Examination Order (regarding complaints about the exam), the re-examination is subject to the learning objectives of the ordinary examination of the examination in question.

(2) Examinations under subsection 1 can be conducted in accordance with the regulations of the re-exam if the examination is an offer of an extraordinary re-exam.

Entrepreneurs

18. Students who are entrepreneurs in parallel with their studies must document that they are either self-employed with a turnover and productive assets or are part of an entrepreneurial environment, e.g. university incubators and regional growth environments, cf. section 8 (2) of the University Programme Order.

(2) A student who has a registered CVR number in a start-up company with relevance for the student's studies or is able to document that he/she has been enrolled in one of the programmes which are offered by Copenhagen School of Entrepreneurship (CSE) or the like is considered an entrepreneur under subsection (1). The student must follow the registered entrepreneurship programme in accordance with the continuous requirements of the programme.

Examination forms

19. Examinations are organised as individual examinations or as group examinations. The specific examination form of a given examination, including whether it is an individual or a group examination, or a mixture of the two, is stated in the relevant course description, see links in section 5.

(2) At both individual and group examinations the student's individual performance must be assessed, and grading must be individual, see subsections (3)-(4).

(3) At oral group examinations the individual student must be examined in such a way that it is ensured that the student's individual performance is assessed.

(4) If a written product is produced by more than one student, and if there is no oral defence of the product, the students must show what their individual contributions are, and in such a way that it is ensured that individual assessment is possible. See 'Individualisation of group papers etc.' in the study administrative rules (SAR).

(5) For group examinations, see subsection (1), rules about those of the following factors that are relevant for the examination form in question must be stated in the regulations of the individual examination:

1. maximum group size
2. the allotted time at the oral examination – see subsection (3)

3. requirements regarding individual contributions – see subsection (4).

(6) Where it is stipulated in the regulations of a given examination that it is a group examination, it is stated in the course description if the students can choose to take the examination as an individual examination instead, see however subsection (7). When the examination in question contains both a written and an oral part, both parts must then be taken as an individual examination.

(7) The student can choose to write the master's thesis individually. When the master's thesis has been made by a group, the student can choose to have an individual oral exam.

(8) When it is an oral exam based on a written product, the following applies to all variations:

1. Submission of the written product is a requirement to be able to attend the oral examination.
2. Both the written product and the oral presentation count in the assessment.
3. The assessment is an overall evaluation of the written product and the oral presentation.

Examination rules

20. All students have an obligation to familiarise themselves with and to observe the examination rules of the examinations which they participate in, including the general rules that apply to the individual examination. Those rules are in particular:

- The examination rules, as stipulated in the relevant course description, see links in section 5.
- *Rules about written sit-in examinations at CBS, including rules about electronic aids*, see section 21(3).
- Rules on good academic conduct, see section 4 of *Copenhagen Business School's rules and regulations on academic conduct, including penalties*.

(2) Audio and video recordings of an examination or of the examiners' discussion of a student's performance are not allowed, unless such recordings are considered an integral part of the examination process. Such recordings will then be made by CBS.

(3) It is stipulated in the examination regulations of the individual examination what the maximum number of pages is for a given written product. This pertains to the examination forms written home assignment and oral exam based on a written product. In addition, the following applies for the written product with these two examination forms:

1. In the page count the front page, the bibliography and any appendices are not included. Appendices are not part of the assessment.
2. All pages must have a margin of min. 3 cm in top and bottom and min. 2 cm to each of the sides. The font must be minimum 11 points.
3. Tables, diagrams, illustrations etc. are not included in the number of characters, but will not justify exceeding the maximum number of pages.
4. On average, one page must not contain more than 2,275 characters (including spaces).

(4) Upon digital submission the student declares that the submitted product complies with the rules for good academic conduct, form requirements and maximum size, via a digital declaration of authorship.

(5) Any violation of rules and regulations under subsections (1)-(2) will be sanctioned in accordance with *Copenhagen Business School's rules and regulations on academic conduct, including penalties.*

(6) Violation of form or layout requirements stipulated in subsection (3)-(4) or form requirements laid down under section 19(4) may result in a rejection of the exam paper, see section 24(3) of the Examination Order. If the exam paper is rejected, it will not be assessed, and the student will have used an exam attempt.

Examination aids

21. The examination aids that students are allowed to bring with them to written sit-in examinations are specified in the examination regulations of the individual examination/course.

(2) Unless otherwise stated in the examination regulations, see subsection (1), no examination aids, whether written or technical, are allowed in the examination room, except simple writing and drawing utensils.

(3) In cases where the examination regulations, see subsection (1), stipulate that electronic aids can be brought to the examination room, the provisions stipulated in *Rules about written sit-in examinations at CBS, including rules about electronic aids* apply.

Examinations under special circumstances

22. The Study Board may decide to deviate from the examination regulations stipulated for the individual examination with the purpose of allowing students with special needs to sit examinations under special circumstances. Such exemption can be granted to students who are physically or mentally disabled, to students whose mother tongue is not Danish, and to students who have similar difficulties when this is considered necessary in order to place them on even terms with their fellow students in the examination situation. It is a condition that it does not change the academic level of the examination.

(2) When it is stipulated in the objectives of the examination in question that the student's spelling and writing skills are included in the assessment, the Study Board may grant exemption from this to a student who is able to document a relevant and specific impairment.

(3) Students who wish to apply for permission to sit an exam under special circumstances according to subsection (1) or apply for an exemption according to subsection (2) must submit an application, including the necessary documentation, to the Programme Office no later than 2 months before the exam is to take place.

Sitting examinations abroad

23. The university may conduct examinations at a Danish representation or at other locations abroad, provided the reason for doing so is that the student is unable to participate in the university's examinations in Denmark for practical or financial reasons and if the student and the exam location reach an appropriate agreement. Danish examinations held abroad must comply with all the other rules laid down in the Examination Order.

(2) The Programme Director decides whether the examination can be conducted abroad and appoints or approves invigilators and other persons to organise the practical aspects of conducting the examination abroad.

(3) The university defrays the special costs associated with conducting examinations abroad.

(4) The Ministerial Order on Payment for the Services of Civil Servants Serving Abroad (Bekendtgørelse om betaling for tjenestehandlinger i udenrigstjenesten) applies to conducting examinations at Danish representations abroad.

(5) The university may ask the student to pay part or all of the costs incurred by the university to conduct the examination abroad. However, it is a condition that the student confirms in writing in advance his or her willingness to pay the costs in question, on the basis of an estimate made by the university of the expected costs. The university may make it a condition for conducting the examination that the amount is paid in advance.

(6) When an examination is conducted abroad, the conditions and regulations in CBS' guidelines for examinations conducted abroad apply.

Assessment

24. Examinations are either internal or external:

- Internal examinations are assessed by one or more teachers (internal examiners) appointed by CBS from among the teachers at the university or from other universities that offer the same or similar study programmes.
- External examinations are assessed by one or more internal examiners and one external examiner (in Danish: censor) appointed by the Danish Agency for Science and Higher Education.

(2) It is stipulated in the exam regulations of the individual examination whether it is an internal or an external examination, see link in section 5.

(3) Assessment of the examinations is carried out in accordance with the Grading Scale Order.

(4) Compulsory assignments and class participation, see section 13, are assessed by the teacher(s) of the specific course. The assessment type 'Approved/Not approved' is used.

Announcement of results

25. In connection with examinations where the result is not announced immediately after the examination, the result must be announced within 4 weeks after the examination has been held, see however subsection (2). The month of July is not included in the calculation of these 4 weeks.

(2) In connection with bachelor projects, master's (candidatus) theses and master's projects, the result must be announced no later than 6 weeks after the project/thesis has been submitted.

(3) When special circumstances warrant it, the Programme Director can set aside the deadlines stipulated in subsections (1) and (2). If the assessment cannot be completed by the fixed deadline, the student(s) must be notified as soon as possible and be informed about the reason for the delay and when the result will be announced.

Pass requirements

26. Each examination must be passed separately. An examination shall be passed when the student achieves a grade of at least 02 or the assessment 'Pass'.

(2) Each examination can be retaken separately. However, passed examinations cannot be retaken.

(3) If a grade consists of several partial grades for various categories of performance (partial examinations), the grade shall be the average of the partial grades, rounded off to the nearest grade on the grading scale, see however subsection (4). The grade shall be rounded up if the average is half-way between two grades.

(4) If the partial grades are given different weights when the combined grade is to be calculated, this is stipulated in the exam overview in section 5. If so, the grade shall be the sum of the individual grades, each multiplied by the weighting of the grade, divided by the sum of the weightings and then rounded off to the nearest grade on the grading scale. The grade shall be rounded up if the average is half-way between two grades.

(5) If an examination consists of partial examinations, each partial examination can be retaken separately. However, passed partial examinations and not-passed partial examinations that are part of a passed examination cannot be retaken.

(6) Any requirements about a certain grade on the grading scale being required as achieved in one or more partial examinations are stipulated in section7.

(7) If an elective course has partial exams, the pass requirements for the specific elective course apply.

(8) The calculation of the overall grade point average is based on the weights of the individual grades, which are listed in the table in section 5.

(9) If a student retakes an examination or another type of assessment, the highest grade applies – see however section 37(4) of the Examination Order.

27. Students have a maximum of three attempts in passing each examination, see however subsection (2). The Study Board may grant more attempts, if warranted by extraordinary circumstances. The question of academic aptitude may not be included when assessing whether extraordinary circumstances apply.

(2) No later than 16 months after the end of the teaching of the course, the student must participate in the third examination attempt if the course is no longer offered. If the course is offered each semester, the deadline for completing the course is 10 months after the end of the teaching of the course.

(3) Students who are to have their class participation assessed a second time may require an examination instead. However, where class participation includes practical exercises, it cannot be replaced by an examination.

Diploma

28. CBS issues a diploma to students who have completed their study programme, in accordance with the requirements stipulated in section 31 of the Examination Order. The diploma is issued to the graduate no later than 2 months after the announcement of the result of the final examination. July is not included in the calculation of these 2 months.

(2) Students who leave the programme without having completed it are entitled to receive a transcript documenting the completed parts of the programme, with the relevant number of ECTS credits stated.

Leave

29. A student may be granted leave from the programme on personal grounds. The specific rules for obtaining leave and the provisions that apply to students while on leave are stipulated in CBS' *Rules regarding leave on bachelor and master programmes at CBS*.

Programme regulations

30. The programme regulations and various regulations etc. referred to in this document are publicly available on CBS' website, more specifically on studieordninger.cbs.dk and in the study administrative rules (SAR).

Exemption from the programme regulations

31. The university may, when warranted by extraordinary circumstances, grant exemptions from those rules in the programme regulations which are solely laid down by the university.

(2) An exemption from the programme regulations that requires an exemption from a ministerial order may be brought before the Danish Agency for Science and Higher Education.

Credit transfer

32. Programme elements passed at another university are regarded as equivalent to corresponding programme elements covered by these programme regulations.

(2) The Study Board may grant approval for students to substitute passed programme elements from another Danish or foreign programme of the same level, for programme elements covered by these regulations.

(3) Decisions under subsections (1) and (2) are made on the basis of a professional assessment.

33. Students who, as part of their studies, wish to complete programme elements at another university or another institution of higher education in Denmark or abroad may apply to their home university for pre-approved credit transfer for planned programme elements.

(2) Approval of pre-approved credit transfer pursuant to subsection (1) may only be granted if, in connection with the application for preapproved credit transfer, the student undertakes to submit to the home university the necessary documentation to show whether the programme elements have been passed or failed upon completion of the programme elements for which pre-approved credit transfer has been granted. Students must also consent to the home university requesting the necessary information from the host institution if students are unable to procure the documentation themselves.

(3) Once documentation is available that the student has passed the programme elements for which pre-approved credit transfer has been granted, the home university administratively approves the transfer of the credit to the relevant programme at the university.

(4) In cases where the programme elements for which pre-approved credit transfer has been granted are, for example, not offered by the host institution, the university may, upon the student's request,

change the approval of pre-approved credit transfer pursuant to subsection (1). The student is responsible for and is obliged to take the initiative to compose a proposal for a study plan. The university offers academic support if requested by the student. In special cases, the chair of the Study Board may approve changes to the Study Board's decisions about pre-approved credit transfer.

(5) Decisions under subsections (1) and (4) are made on the basis of a professional assessment.

(6) Credit transfer of Master theses is not possible when the thesis is the basis of the awarding of a different title in another Master programme.

34. Programme elements which students wish to have transferred from other programmes will be transferred on the basis of the normalised workload specified in ECTS points and stipulated in the relevant degree regulations. Due to the structure of the programme, discrepancies may occur between the equivalent number of ECTS credits and the actual amount of ECTS transferred, as the number of ECTS credits for the programme must total the number of ECTS credits stated in section 1(1).

(2) If the programme element in question is assessed according to the 7-point grading scale or the 13-point grading scale at the academic institution at which the examination was taken, and if this programme element equates or replaces a programme element which according to the exam regulations of these study regulations is assessed according to the 7-point scale or the 13-point scale, the grade will be transferable, but converted into the 7-point scale if assessed according to the 13-point scale. In all other cases, the assessment will be transferred as 'Pass'. Examinations transferred as 'Pass' are not included in the calculation of the final grade point average.

35. Applications for pre-approval or credit transfer must be sent to the Programme Office, addressed to the Study Board, on a special form and with the necessary documentation enclosed. See guidance on credit transfer applications on the student intranet.

(2) Concerning complaints about credit transfer decisions, see part 3.

Part 3: Complaints

Complaints about examinations etc.

36. A student is entitled to file a complaint about an examination or other assessment. Concerning the specific rules and procedures, including deadlines, for filing written and reasoned complaints reference is made to the rules in part 7 of the Examination Order and to CBS' guidelines on CBS' student intranet.

Complaints about decisions concerning credit transfer

37. Complaints about decisions made by the Study Board on whether education qualifications acquired at another Danish University may replace parts of the programme (credit transfer) as well as complaints about the decisions made by the Study Board on whether Danish or foreign education qualifications, not yet passed, may replace parts of the programme (pre-approval of credit transfer), may be brought before the Appeals Board for decisions on credit transfer, see Ministerial Order no. 1517 of 16 December 2013 on the Appeals Board for decisions on credit transfer in university study programmes.

(2) The deadline for filing a complaint is 2 weeks from the date when the complainant was informed of the decision. The complaint must be addressed to the Appeals Board for decisions on credit transfer but sent to the President of CBS; the reasoned complaint should be sent to CBS Legal, Solbjerg Plads 3, 2000 Frederiksberg. It is also possible to send the complaint to: legal@cbs.dk. CBS has the option to process the application again. If the decision is upheld, CBS will forward the complaint to the Appeals Board, accompanied by a statement. CBS will give the complainant the opportunity to comment on the statement within a time limit of 1 week. The complainant's comments, if any, will be enclosed when the complaint is forwarded to the Appeals Board. The Appeals Board will make the final administrative decision.

38. Complaints about decisions made by the Study Board on whether education qualifications acquired abroad may replace parts of the programme (credit transfer) may be brought before the Qualifications Board, see Assessment of Foreign Qualifications etc. Act.

(2) The deadline for filing a complaint is 4 weeks from the date when the complainant was informed of the decision. The complaint must be addressed to the Appeals Board for decisions on credit transfer but sent to the President of CBS; the reasoned complaint should be sent to CBS Legal, Solbjerg Plads 3, 2000 Frederiksberg. It is also possible to send the complaint to: legal@cbs.dk. CBS has the option to process the application again. If the decision is upheld, CBS will forward the complaint to the Qualifications Board, accompanied by a statement. CBS will give the complainant the opportunity to comment on the statement, within a time limit of 1 week. The complainant's comments, if any, will be enclosed when the complaint is forwarded to the Qualifications Board. The Qualifications Board will make the final administrative decision.

Complaints about other decisions

39. Complaints about decisions made by the Study Board or the Programme Director according to these programme regulations have to be filed with the President of CBS. The deadline for filing a complaint is 2 weeks from the date when the complainant was informed of the decision.

(2) A decision made by CBS according to subsection (1) may be appealed by the complainant to the Danish Agency for Science and Higher Education when the complaint is concerned with an error of

law or procedure. The deadline for lodging an appeal is 2 weeks from the date when the complainant was informed of the decision. The reasoned appeal should be addressed to the agency but sent to CBS Legal, Solbjerg Plads 3, 2000 Frederiksberg. It is also possible to send the complaint to: legal@cbs.dk. CBS will forward the appeal to the agency, accompanied by a statement. CBS will give the complainant the opportunity to comment on the statement, with a time limit of at least 1 week. The complainant's comments, if any, will be enclosed with the other case files when the appeal is forwarded to the agency.

(3) Moreover, students are referred to CBS' Guidelines regarding students' right to file a complaint about decisions made by study boards, programme directors and programme administration.

Complaints about the teaching etc.

40. Complaints about the teaching, academic supervision or other issues concerning the organisation of the degree programme can be brought before the Study Board.

Commencement and transition regulations

41. These Programme Regulations are effective for students enrolled on the programme in September 2019 or later, and for students who are transferred to these Programme Regulations, see section 42(1).

(2) The 2018 Programme Regulations are repealed as of 1 September 2019.

42. Students who began their studies under the 2018 Programme Regulations or according to the transition regulations in those regulations were transferred to the 2018 Programme Regulations are transferred to these 2019 Programme Regulations, so that these are effective for the remainder of the programme, see however subsection (2).

(2) Students covered by subsection (1) who have not passed the first year exams in Health Systems and Innovation and/or The Economics of Health Care Innovation, shall take the remaining exam(s) under the 2018 course descriptions. These exams are offered for the last time in the academic year 2019/2020.

(3) Students covered by subsection (1) who have chosen elective track 3 and who have not passed the exams in Innovation, Entrepreneurship and Strategy in BioBusiness, Bio Markets and Contracting, and/or BBIP Entrepreneurship Project shall take the remaining exams under the 2018 course descriptions. These exams are offered for the last time in the exam term winter 2019/2020.

Part 4: Appendix - regulations for the Portugal Platform under EIT

43. Learning objectives and rules regarding exams in Lisbon, Universidade de Lisboa

The students have 2 exam attempts at the exams at Universidade de Lisboa.

Students may resit exams in the same year they were enrolled in the course unit or in the following academic year, and may resit the exam only once. For those who passed the exam during the 1st examination period, the 2nd examination period is for grade improvement.

For further information regarding assessment, see the university homepage.

Health Quality Assessment

Main academic disciplines

- Statistics and quantitative methods
- Innovation

Learning Objectives

- The need of personalised medicine. Understanding the reasoning behind Patient Reported Outcome Measures.
- Competence in judging the effectiveness of a health questionnaire. Ability to analyse datasets from health surveys. Skills in exploring business solutions to overcome the main problems identified by analysing health surveys.

Examination

- Examination form: One project set during the quarter
- Individual or group exam: Individual project
- Assignment type: Written essays and in-class presentation
- Grading scale: 20-points grading scale

Course structure and Content

With an aging population and rising health care costs it is crucial to develop strategies to quantify European citizen’s quality of life and well-being to enhance their health in a broad perspective. During this course, students will be provided with innovative and complementary ways of evaluating health quality. More precisely, students will learn how to measure patient needs, ambitions and opinions to center the health system in the patient.

The course covers the following topics:

1. Patient Reported Outcome Measures (PROMs) and Health Questionnaires

To handle the issues raised above, it is crucial to get patient’s feedback and perception of its health and of the health care services, without interpretation of he/she response by a physician or anyone

else. Therefore, students will be introduced to health surveys. Students will learn how to write an effective questionnaire as well as identifying the different types of scales and the most appropriate situation for applying each of them. Critical and innovative analysis to health questionnaires will be developed. Emphasis are given to the Short Form (36) Health Survey (SF-36), EQ-5D (developed by the EuroQol group) and the 5-item World Health Organization Wellbeing Index, WHO-5;

2. Statistical Analysis of Health Questionnaires

Statistical analysis of health questionnaires will be also carried out. More precisely: exploratory analyses; regression analysis (multinomial, with emphasis to the binary case; ordinal); nonparametric analysis. These analytical competencies will give students the ability to introduce innovative ideas to improve health care service, products, etc., which can be translated into jobs opportunities.

Teaching Method

Classes are based on student-centred learning and they rely on real-life health care challenges, which give a hands-on approach to this course.

Teaching includes lecture-style classes, in-class workshops with students presenting and actively participating in discussions around pre-assigned cases and/or exercises, and guest presentations by academics and practitioners. Preparation before class is of crucial importance.

Group projects composed of heterogeneous background and nationalities will be stimulated. This approach will create and diffuse knowledge and competencies more effectively.

Value in Health Care

Main academic disciplines

- Innovation
- Finance and economics
- Health Management

Learning objectives

- To apply Cost-Effectiveness Analysis and Utility Maximization tools to health care systems and services, and evaluate their sustainability
- To apply quantitative metrics to help decisions-makers in the health care management
- To critically and creatively assess the importance of valued-based approaches in health care, where the main goal is patient health outcomes achieved relative to the inputs, or costs, of care.

Examination

- Examination form: One individual project set during the quarter
- Individual or group exam: Individual project
- Assignment type: Written essays and in-class presentation

- Grading scale: 20-points grading scale

Course content and structure

The course is structured in two parts, each one directed at complementary ways to address the topic of Value in Health Care.

After a brief introduction, the course will guide the students to innovative and creative knowledge about Cost-Effectiveness Analysis and Utility Maximization to accurately choose between different health care programmes giving maximum effectiveness under constraints.

On the other hand, for each medical condition there is a set of multidimensional outcomes that jointly constitutes patient's benefits. The full set of outcomes, adjusted for individual patient's characteristics, constitutes the quality of care for the patient. The course will, thus, analyse how patients' health outcomes can be adjusted for the risk to make reliable comparisons between health institutions. In this context, regression models will be studied.

Teaching methods

Teaching includes lecture-style classes, in-class workshops with students presenting and actively participating in discussions around pre-assigned cases and/or exercises, and guest presentations by practitioners. Preparation before class is of crucial importance.

Group projects composed of heterogeneous background and nationalities will be stimulated. This approach will create and diffuse knowledge and competencies more effectively.

Entrepreneurship Project in Health Care

Main academic disciplines

- Innovation
- Finance, economics, statistics
- Health Management
- Insurance

Learning objectives

- To critically and creatively assess challenges in the health sector, from the point of view of the public, private or public-private sector
- To develop innovative solutions to issues posed by health care organizations

Examination

- Examination form: Oral presentation at the faculty and individual assessment from the supervisor
- Individual or group exam: Individual exam

- Assignment type: Written presentation (Powerpoint® or similar)
- Grading scale: 20-points grading scale

Course content and structure

Each enterprise will establish the schedule for the traineeship programme. In general, students might spend 30 to 40 hours per week (full-time working schedule) of training at the non- academic partners in an entrepreneurial environment, outside the faculty, to strength the interaction between academia and business.

Teaching methods

Each enterprise will establish its own teaching methods. The main idea is to assign to each student (or group of students) an innovation challenge to solve during the traineeship.

44. Learning objectives and rules regarding exams in Coimbra, University of Coimbra

The students have 2 exam attempts at the exams at University of Coimbra.

If students fail in some of the assessments, there is always the possibility of being re-evaluated (before returning to Copenhagen).

Management Health Innovation

Learning objectives

This course will provide opportunity for students to develop short innovation internship projects in health and innovation partners of the University of Coimbra – including the University Hospital (CHUC), Institute Pedro Nunes (IPN) and Division for Innovation and Technology Transfer of UC (DITS). Students will develop hands on in real short management in health innovation project under co-supervision of Professors from the Faculty of Economics and professionals from Biomedical/Innovation sector.

Examination

Students will be asked to develop an internship report and to present orally the result of the project to a group of experts project committee.

Course content and structure

Students will benefit from the local health/innovation ecosystem to develop internship projects to identify resources for better management of innovation in health. The students will be challenged with specific projects and allowed to perform short hands on projects to experience in real-time the potential and bottlenecks to foster innovation and improved management in health care units as well as in local business incubators.

The course will be developed for a total of 75 hours, including a minimum of 30 hours of contact with the “case study” environment (hospital, technology transfer, commercial potential assessment or business incubator setting).

This course addresses the following topics:

1. Innovation of processes in Hospital sector
2. Innovation and multidisciplinary teams in health and business incubator settings
3. Innovation in health management
4. Innovation in health sector administration
5. Innovation in integrated care
6. Innovation and technology transfer
7. Innovation, risk investment and fund raising
8. Licensing and IP management
9. Business creation and business acceleration

Health Governance

Main academic disciplines

- Health Economics and Health Policy
- Health Services Research
- Healthcare Management and Organizational Theory
- Stakeholder Analysis, Statistics and quantitative methods

Learning objectives

Governance (as a broad field in terms of leadership, stewardship, regulation, oversight or governance itself) has repeatedly been stated as a core function in theories and frameworks on health system. The premise that good governance will ultimately lead to better health outcomes has been central to the proliferation of work in this area over the past decade. This course intends to present the concept of governance in its multiple interpretations and principles associated with good governance, applied to the health context, both in terms of health policies and of healthcare organizations.

The main goal is to provide students with the necessary skills to master the various concepts associated with governance and extend them to health in their decision-making. Specifically, define the concept of governance in its multiple interpretations, identify and characterize the main stakeholders and their interests, understand and apply principles associated with good governance and be able to extend these concepts to health care at different levels - macro (focused on government decisions that determine the basic structure , the organization and the financing of the entire health system and health policies), intermediate or meso (focused on decision making at the institutional level) and micro (focused on operational management of day-to-day staff and services within organizations).

Examination

The assessment will be done through an individual work (30%) and a working group project (70%). The individual work consists of a presentation in class of a paper related to the theoretical concepts covered in the course. The working group project has two components: written report (70%); presentation and discussion (30%). The groups will be of two students.

The work's theme is chosen from among a set of alternatives to disclose in class. Students may suggest other topics. Aspects to discuss at the work should be analyzed and discussed with the teacher.

Course content and structure

The program covers the main points related to governance from the macro level to the micro level, particularly in the context of healthcare providers (hospitals and primary health care) where the concepts of hospital governance and clinical governance are of particular importance. In addition, the major health reforms (both international and national) are presented with their developments, results and issues they raise.

The main themes covered are governance, corporate governance, health governance, hospital governance, clinical governance and integrated governance:

- GOVERNANCE | definitions and related aspects; governance varieties; the importance of governance (evidence); reforms of public administration, the New Public Management and the New Public Service; different approaches; decision making; principles of good governance; measurement, monitoring and evaluation of governance;
- CORPORATE GOVERNANCE | definitions and related aspects; the importance of corporate governance; actors and theories of corporate governance; systems, codes and principles of good governance;
- HEALTH GOVERNANCE | definitions and related aspects; different perspectives of international institutions; health systems and healthcare market; health sector reforms; good health governance characteristics; the analysis of health governance; health governance vs. Stewardship; adaptative complex systems; change management in helathcare context; the challenges of health governance and analysis of health governance in Europe and Portugal;
- HOSPITAL GOVERNANCE | definitions and related aspects; hospital as a complex organization; organizational reforms in hospitals; improve hospital performance; governance practices and evidence; hospital governance in Europe and Portugal - context and developments;
- INTEGRATED GOVERNANCE AND CLINICAL GOVERNANCE | definitions and related aspects; main components; assumptions and Portuguese situation in primary health care and hospital care; best practices and international comparisons.

Teaching methods

Teaching includes lecture-style classes for each selected theme, in-class workshops with students presenting and actively participating in discussions around pre-assigned cases and/or exercises, and guest presentations by practitioners. Preparation before class is of crucial importance.

Health Outcomes Measurement

Learning objectives

This course aims to develop the knowledge and understanding to a deeper level about the measurement in health, including the theory and fundamentals that are behind it. In addition, aims at critically analyzing health measures on the basis of their suitability, relevance and applicability in the context of clinical practice and research.

Examination

The methodology encompasses lectures using audiovisual means. We seek to promote an active and participative learning process, favoring the interaction, in order to better understand what is meant by health system.

The knowledge assessment is done through a written work (80%) and their presentation and discussion in class (20%). The classification is assigned from zero to twenty values, being guaranteed approval with the minimum rating of ten values. The final ranking is the result of the weighted average of the written document and presentation/discussion.

Course content and structure

Traditionally, the impact of health care has been measured by its effect on mortality. In fact, in most countries, until very recently, the main clinical result effectively collected was based on mortality, infection rates, readmissions (hospitals), new operations or other incidents, not being evaluated the outcome from the perspective of the patient.

In more recent times there has been a marked international change about what health is and how it can be measured. Traditional clinical forms of measuring health and the effects of the treatment are being increasingly accompanied by, or even replaced by PRO (patient reported outcomes) measures. In general terms, PRO measures include a series of structured questions asking patients about their health, from their point of view, symptoms, functional level, satisfaction with treatment, among others.

This course addresses the following topics:

1. Measurement in health and health needs
2. Concepts of health, health status and quality of life
3. Conceptual and measurement models
4. Health-related quality of life and PRO
5. Generic and specific measures
6. Preference-based health measures
7. Quality criteria for health measurement instruments
8. Translation and cultural adaptation of health measurement instruments
9. How to choose a health measurement instrument?