### SUBJECT DESCRIPTION FORM

Subject Code	HSS5903			
Subject Title	Dissertation			
Credit Value	9			
Level	5			
Pre-requisite	BME5155 "Research Methods and Biostatistics", or RS517 "Research Methods & Data Analysis", or equivalent (and attained at least three Bs in completed subjects and an overall GPA of 2.5 at their stage of study)			
Objectives	To equip students with the capability of conducting independent academic research by providing them an opportunity to develop the essential skills and gain experience through a study on a specific area of health informatics.			
Intended Learning Outcomes	<ul> <li>Upon completion of the subject, students will be able to:</li> <li>a. Integrate the theory and practice of research into a single area of study;</li> <li>b. Develop a disciplined, logical and problem solving approach to health informatics problems;</li> <li>c. Develop the ability to work independently in the context of a supervised research project;</li> <li>d. Develop, through the experience of a research study, as a reflective clinician/researcher;</li> <li>e. Stimulate critical inquiry through the process of research;</li> <li>f. Present the findings of a research project in an appropriate and clear form;</li> <li>g. Value the role played by research in the future development of the health informatics profession;</li> <li>h. Develop confidence in presenting and analysing research both in writing and in oral seminars and presentations.</li> </ul>			
Subject Synopsis/ Indicative Syllabus	There will be no formal syllabus and students will be expected, under supervision, to negotiate, develop and explore an area of research interest. Students will be expected to report their progress to the Programme Dissertation Committee in the form of a seminar every six months. Students will also be expected to attend the research seminars to foster and stimulate critical research. Once the student's dissertation has been graded and accepted, the student should submit one electronic copy to the Programme Dissertation Committee.			
Teaching/Learning Methodology	Dissertation will be an individual project. The student will be allocated a supervisor who will provide regular support and consultation. Students will attend fellow classmates' dissertation progress reports organised by the dissertation coordinator, meet with their supervisors regularly throughout the dissertation study, and dedicate about 450-500 hours of independent work to the dissertation. After the first semester, students will present their dissertation proposal and progress to the Programme Dissertation Committee every semester until completion.  The Dissertation Coordinator will assist the student in selecting his/her			
	supervisor, monitor progress on a semester basis, and appoint the examiner and moderator who, with the supervisor, will become the examination panel for each			

dissertation. The Programme Dissertation Committee will decide on the appropriateness of the research and the supervision.

Students and their supervisors will be expected to provide six-monthly reports (dissertation progress reports). A student who fails to progress to his/her supervisor's satisfaction will receive a warning letter from the Programme Dissertation Committee. After two consecutive warnings, a student will be asked to show reasons why their enrolment in the subject should be continued.

A dissertation will normally take a minimum of two and maximum of four semesters (The normal dissertation registration period is three semesters).

#### Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed							
		a	b	c	d	e	f	g	h
1. Progress presentation	20%	✓	✓	✓	✓	✓	<b>√</b>	<b>√</b>	✓
Dissertation report and oral examination	80%	✓	<b>√</b>	<b>√</b>	✓	<b>√</b>	✓	✓	<b>✓</b>
Total	100 %								

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Students will be expected to produce a dissertation reflecting sufficient independent study necessary to justify the award of a Master's degree by coursework.

At the conclusion of the dissertation, each student will be assessed by oral examination and a Dissertation Report. The oral examination, conducted by the examination panel, will last for forty-five minutes, during which the student will present a 20-minute overview of the study and then defend the dissertation, taking into consideration relevant questions posed by the panel.

The progress report will contribute 20% to the overall value of the grade. The viva and the completed, approved dissertation will contribute 80% of the overall grade. A final grade following the University's criteria will be offered.

#### Progress presentation 20%

Assessment criteria will be based on the student's ability to:

- present and describe the research problem
- provide an overview of the literature
- succinctly report the research findings
- present the findings in a clear and organised manner
- respond to questions raised by fellow students and appointed assessors

#### Dissertation report and oral examination 80%

The written dissertation will be independently assessed by the examination panel based on the student's ability to:

• plan and design a conceptually sound research study

- comprehensively and critically evaluate the literature related to the topic under question
- succinctly state a research hypothesis/question in the context of overall aims and objectives
- create an appropriate research design
- systematically analyse data
- critically evaluate the results of the study
- substantiate the conclusions
- produce recommendations and present limitations based on the findings
- fluently and succinctly report the study in a dissertation format
- produce a text worthy, in part at least, of publication
- display initiative in the context of a supervised research project

#### Alternative Dissertation Format

Students may choose to submit their dissertation in a manuscript format that meets the requirements stipulated by a relevant journal selected and agreed upon by the supervisor and the student.

It is expected that this alternative format will provide students the opportunity to write for publication while completing their dissertation, and to increase the utility of the evidence-based services.

MSc dissertations submitted in manuscript format will be reviewed by staff with experience in journal review and/or publication; their comments will be taken into consideration for grading according to a provided guideline similar to that of article review. The general rule is that if the manuscript has been accepted for publication or considered publishable, the student will not be required to attend a viva examination.

# **Student Study Effort Expected**

Class contact:			
<ul> <li>Progress presentation</li> </ul>	20 Hrs.		
Other student study effort:			
<ul> <li>Independent research work and preparation of dissertation or manuscript.</li> </ul>	480 Hrs.		
Total student study effort	500 Hrs.		

## Reading List and References

- 1. Students will be expected to read widely from the refereed literature, not only in terms of method and procedure but also in the selected specialty area of health informatics.
- 2. American Psychological Association (1995). Publication Manual of the American Psychological Association. Fourth Edition. Washington, DC. USA.
- 3. The Hong Kong Polytechnic University Code of Ethics for Research
- 4. Dissertation Handbook for MSc Health Informatics
- 5. Portney L., Watkins M. (2000). Foundations of Clinical Research. Applications to Practice. Norwalk: Appleton & Lange.
- 6. Health Informatics Journals