The Finnish Post-Graduate School in Nursing Science

PROGRAM

QUANTITATIVE RESEARCH METHODS IN NURSING SCIENCE:
SURVEYS AND INSTRUMENTS, 6 ETCS

Time and place: Lectures 13-14.9.2012 Room 227, 2nd floor, Department of Nursing Science
Seminars 8.-9.11.2012 Room 227, 2nd floor, Department of Nursing Science,
University of Turku, Finland, Sanitas, Lemminkäisenkatu 1
E-learning (Moodle) 15.9.-1.11.2012

Course leader: Professor Riitta Suhonen, PhD, RN,
Department of Nursing Science, University of Turku

Teachers: Professor Roger Watson, University of Hull, UK
Professor Riitta Suhonen, PhD, RN, University of Turku
Adjunct Professor Mikko Saarikoski, PhD, RN, University of Turku
Statistician and lecturer Jouko Katajisto, Msoc.Sci, University of Turku

Purpose: Students receive preparedness for plan, implement and evaluate survey designs as well as form and test an instrument.

Credits: 6 ECTS

Learning methods: Specialist lectures, independent readings, a paper, e-learning (Moodle) and seminars. The first part of the course consists of lectures and the second part consists of independent readings and e-learning as well as seminars based on papers written by students.

Literature: See the list below.

Outcomes and evaluation:
After the course students should:
• have deeper understanding of the quantitative research methods and statistical analyses for survey designs
• have more interest and courage in using different quantitative research methods in their own study designs
• use relevant literature as the basis of their methodological decisions
• have knowledge about the process of the instrument development for research purposes

Students evaluate the course according to the evaluation form of the Finnish Post-Graduate School in Nursing Science. Evaluation is a precondition for obtaining a certificate.

Contact person: Coordinator Heli Virtanen, heli.virtanen@utu.fi, tel. +358 2 333 8455

Registration: Via www-page form:
http://www.med.utu.fi/hoitotiede/tutkijakoulu/forms/index.html
Altogether 16 students will be accepted to the course.
The Finnish Post-Graduate School in Nursing Science

PRELIMINARY PROGRAM

QUANTITATIVE RESEARCH METHODS IN NURSING SCIENCE: SURVEYS AND INSTRUMENTS, 6 ETCS

Course Outline:

Thursday 13th September, 2012
Room 227, 2nd floor

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<th>Time</th>
<th>Session</th>
<th>Instructor(s)</th>
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<td>8.30–9.00</td>
<td>Introduction and practical information</td>
<td>Professor Riitta Suhonen/ Coordinator Heli Virtanen</td>
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<tr>
<td>9.00–10.30</td>
<td>Survey designs, cross sectional studies</td>
<td>Adjunct Professor Mikko Saarikoski</td>
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<td>10.30–10.45</td>
<td>Break</td>
<td>Adjunct professor Mikko Saarikoski</td>
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<td>10.45–12.15</td>
<td>Longitudinal studies; follow up studies</td>
<td>Adjunct professor Mikko Saarikoski</td>
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<td>12.15–13.15</td>
<td>Lunch</td>
<td>Adjunct professor Mikko Saarikoski</td>
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<tr>
<td>13.15–14.45</td>
<td>Methods for developing an instrument</td>
<td>Professor Riitta Suhonen</td>
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<td>14.45–15.00</td>
<td>Break</td>
<td>Statistician Jouko Katajisto</td>
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<tr>
<td>15.00–16.30</td>
<td>Statistical methods in survey designs</td>
<td>Statistician Jouko Katajisto</td>
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Friday 14th September, 2012
Room 227, 2nd floor

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<tr>
<td>8.30–10.00</td>
<td>Methods for developing an instrument</td>
<td>Professor Riitta Suhonen</td>
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<td>10.00–10.15</td>
<td>Break</td>
<td>Professor Riitta Suhonen</td>
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<tr>
<td>10.15–11.45</td>
<td>Development of the instrument: Interpretation of factor analysis</td>
<td>Professor Roger Watson</td>
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<td>11.45–12.45</td>
<td>Lunch</td>
<td>Professor Roger Watson</td>
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<td>12.45–14.15</td>
<td>Item response theory: Mokken scaling</td>
<td>Professor Roger Watson</td>
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<td>14.15–14.30</td>
<td>Break</td>
<td>Professor Roger Watson</td>
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<td>14.30–15.15</td>
<td>Statistical analyses in instrument development</td>
<td>Statistician Jouko Katajisto</td>
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<td>15.15–15.45</td>
<td>Closing this part of course</td>
<td>Professor Riitta Suhonen</td>
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<td>Guidelines for working</td>
<td>Professor Riitta Suhonen</td>
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E-LEARNING (MOODLE), PAPER AND SEMINARS

E-learning starts after the contact teaching days (15.9). You will need Moodle access (userstatus, keywords). User status and keywords (to ensure access) will be handled during the contact days.

eLearning in Moodle, written paper and seminars support each others. In the course the student will write one paper. Detailed guidelines for the paper will be given during the contact days. The first draft of the papers should be returned (=downloaded) into Moodle no later than 7th October 2012. Each participant in the course needs to comment on at least 3 papers of other students in the course. This means that each student will have comments from colleagues to continue the paper. The course teacher will comment all works online in the Moodle during the weeks 41-42 (8.10-17.10) (version 1).

After comments were given, the independent working with the paper continues. The final, 2nd version will be returned (=downloaded) into the Moodle no later than 1.11.2012 (name the file: surname01112012seminarpaper) and will be presented in the seminars 8.–9.11.2012. Each student is expected to take an active role in discussion during the seminars. It is necessary, that the papers are kept confidential, as the papers deal with material related to dissertations and students’ plans and data.

Paper guidelines:
SURVEYS AND INSTRUMENTS

Explore and write a paper about the use of survey-designs, development and testing of an instrument related to your own PhD study, as a process. If your study includes a measure/instrument (developed for your study or using already existing instrument), explain/plan the development process (identify and plan what methods are needed) and plan also how you assess and evaluate the validity and reliability of your own measure. Select different methods to support different types of validity and reliability.

If your study does not include a measure/instrument, make an imaginary plan for instrument development in the area/research topic you study (for future purposes). You can also assess the validity, usability and usefulness of the methods for developing an instrument.

Use lecture material, literature given (some may help you, some may be additional information) and search literature on your own. Write about, how the phenomenon under investigation can be measured/or measure developed, and plan the testing of its validity and psychometric properties from different point of views.

Paper should not exceed 15 pages including references (10-15 pages). Your paper should follow the scientific writing style. You may choose the referencing style according to any nursing journal, e.g. Hoitotiede, Journal of Advanced Nursing etc..

Evaluation/ criteria
Paper 10-15 pages (accepted - rejected)

In evaluating the paper the following criteria will be applied:

1) Logical title, scientific writing style, logical and clear structure
2) Measurement, several methods for evaluating the validity and reliability have been presented
3) Paper is based on your own research topic, but the main points are in methodological issues, designs, and methods with justification
4) Paper is a presentation of a process for developing/testing/validation of an newly developed or already existing instrument
5) Paper is based on scientific, theoretical and methodological literature
Quantitative Research Methods in Nursing Science: Surveys and Instruments 6 ETCS

Literature (more will be informed during the course): Underlined are suggested reading


