

**The University of Jordan**

**Accreditation & Quality Assurance Center**

**Course Name:**

**Course Syllabus**

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| **1** | Course title | Measurement in Nursing Research |
| **2** | Course number | 0701922 |
| **3** | Credit hours (theory, practical) | 3 |
| Contact hours (theory, practical) | 48 |
| **4** | Prerequisites/corequisites | - |
| **5** | Program title | Doctor of Philosophy in Nursing |
| **6** | Program code |  |
| **7** | Awarding institution | The University of Jordan |
| **8** | Faculty | School of Nursing |
| **9** | Department |  |
| **10** | Level of course | 2nd year |
| **11** | Year of study and semester (s) | 1st semester 2nd year |
| **12** | Final Qualification |  |
| **13** | Other department (s) involved in teaching the course |  |
| **14** | Language of Instruction | English |
| **15** | Date of production/revision | Feb. 2018 |

16. Course Coordinator:

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| *Office numbers, office hours, phone numbers, and email addresses should be listed.*  Prof. **Muayyad Ahmad, PhD, RN**  Office number: 111  [mma4@ju.edu.jo](mailto:mma4@ju.edu.jo) ; [mma4jo@yahoo.com](mailto:mma4jo@yahoo.com) |

17. Other instructors:

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| *Office numbers, office hours, phone numbers, and email addresses should be listed.*  *Prof. Ayman Hamdan-Mansour* |

**18. Course Description:**

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| *As stated in the approved study plan.*  This course focuses on theories and concepts related to measurement in nursing research, and techniques for construction, testing, and refining instruments and assessing their reliability and validity. The emphasis will be on applying the principles of psychometric analysis used while constructing special instruments and scales with pilot application in the field. |

**19. Course aims and outcomes:**

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| **A- Aims:**   1. Understand the basic terms and concepts of measurement. 2. Apply the constructs underlying measurement theory. 3. Critique existing methods of measuring a selected variable. 4. Use statistical procedures to evaluate the psychometric properties of a selected measure   **B- Intended Learning Outcomes (ILOs):** Upon successful completion of this course students will be able to … |
| 1. Knowledge and Understanding |
| * 1. Define and interpret reliability coefficients |
| 1.2. Define and interpret validity coefficients |
| 1.3. Understand the basic terms and concepts of measurement |
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| 2. Intellectual Analytical and Cognitive Skills |
| **2.1. Use Exploratory and confirmatory factor analysis for scale development.** |
| 1. Analyze and critique real measurement data for the purpose of improving the measurement instrument. |
| 3. Subject/ Specific/ Practical Skills |
| **3.1. Recommend measures that reflect**   * 1. **best psychometric properties**   2. **sensitivity to cultural variations in selected target population(s)**   3. **best match with research/theoretical framework** |
| **3.2. Evaluate strategies for overcoming the psychometric challenges associated with use of a translated tool/instrument** |
| **3.3. Integrate ethical and legal principles into research instrumentation and measurement.** |
| 4. Creativity /Transferable Key Skills/Evaluation |
| **4.1. Summarize and critique published articles related to the development of measuring instruments in nursing research.** |
| 4.2. Apply the standard procedures for developing and evaluating measurement tools |
| **4.3. Develop and pilot special instruments in the real field.** |

20. Topic Outline and Schedule:

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| **Basic Principles of Measurement**  **1** Introduction to Measurement  **2** Operationalizing Nursing Concepts  **3** Measurement Theories and Frameworks  **II Understanding Measurement Design**  **4** Strategies for Designing Measurement Tools and Procedures  **5** Measurement Reliability  **6** Validity of Measures  **7** Standardized Approaches to Measurement  **III Measurement via the Digital World**  **8** Internet Data Collection  **9** Observational Methods  **IV Instrumentation and Data-Collection Methods**  **10** Content Analysis  **11** Interviews  **12** Questionnaires  **13** The Delphi Technique  **14** Visual Analog Scales  **15** Measurement of Physiological Variables Using Biomedical Instrumentation  **16** Precision, Accuracy, and Uncertainty of Biophysical Measurements for Research and Practice  **17** Selection and Use of Existing Instruments  **V Team Science**  **18** Interprofessional Practice Measurement and Evaluation  **19** Metrics and Benchmarking in Quality Improvement in Health  Professions Education and Practice |

21. Teaching Methods and Assignments:

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| Development of ILOs is promoted through the following teaching and learning methods:  Lectures, debates, assignments, publishing high quality papers |

22. Evaluation Methods and Course Requirements:

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| Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:  Midterm Exam 20%  Presentation 20%  Project 20%  Final Exam 40%  **Total 100%** |

23. Course Policies:

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| A- Attendance policies:   * Regular class attendance and participation is expected of all students. * Students are responsible for all missed course information.   B- Absences from exams and handing in assignments on time:  Each student is expected to submit assignment on the due date. One grade will be deducted for each day after due date.  C- Health and safety procedures:  D- Honesty policy regarding cheating, plagiarism, misbehavior:  Copying another student’s paper or any portion of it is plagiarism. Additionally, copying a portion of published material (e.g., books or journals) without adequately documenting the source is plagiarism. If five or more words in sequence are taken from a source, those words must be placed in quotes and the source referenced with author’s name, date of publication, and page number of publication. If the author’s ideas are rephrased, by transposing words or expressing the same idea using different words, the idea must be attributed to the author by proper referencing, giving the author’s name and date of publication. If a single author’s ideas are discussed in more than one paragraph, the author must be referenced at the end of each paragraph. Authors whose words or ideas have been used in the preparation of a paper must be listed in the references cited at the end of the paper. Students are encouraged to review the plagiarism module from the UT Arlington Central Library via  E- Grading policy:  A grade of (C+) is the minimum passing grade for the course.   |  |  | | --- | --- | | **Grade Points** | **Grade** | | 4 | A | | 3.75 | A- | | 3.5 | B+ | | 3 | B | | 2.75 | B- | | 2.5 | C+ | | 2 | C |   F- Available university services that support achievement in the course: |

24. Required equipment:

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**25. References:**

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| 1. Required book (s), assigned reading and audio-visuals:   Waltz C., Strickland O., Lenz E. (2017; 5th ed.). Measurement in Nursing and Health Research Fourth Edition. Springer; New York.   1. Recommended books, materials, and media:   Selected articles for discussion and critique will be assigned to accompany each topic. |

26. Additional information:

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| * We will also discuss and critically evaluate published research based on the various measurement techniques. Make sure that you carefully read the assigned examples of published research before class and be prepared to discuss them. * The course is based on an interactive relationship between the instructor and students (and among students themselves). You are strongly encouraged to ask questions and discuss the material in class. * I also would like to stress that you are always welcome to come and see me with any additional questions. If I am not in my office, email is the best way to get in touch. Also, please check the course website regularly: typically, each week I will post course notes for you. |

Name of Course Coordinator: Muayyad Ahmad -Signature: ------------------------- Date: 28 Feb 2018

Head of curriculum committee/Department: ------------------------- Signature: ---------------------------------

Head of Department: ------------------------- Signature: ---------------------------------

Head of curriculum committee/Faculty: ------------------------- Signature: ---------------------------------

Dean: ------------------------------------------- -Signature: ---------------------------------

Copy to:

Head of Department

Assistant Dean for Quality Assurance

Course File