

COURSE DETAILS

Master's Degree

24731 Research Methods in Educational Measurement and Evaluation (6 credits)

Course Learning Outcomes

1. Understand principles of educational research and research in educational measurement and evaluation.
2. Design research in educational measurement and evaluation.
3. Develop instruments for data collection.
4. Write research proposals in educational measurement and evaluation.
5. Use softwares to analyze quantitative and qualitative data.
6. Write results of quantitative and qualitative data analysis.

Course Description

Definition and types of educational research, educational research design, educational research process, research in educational measurement and evaluation, research planning, process and implementation of research in educational measurement and evaluation, determining research problem, research question, and research objective, constructing conceptual framework and hypothesis, review of literature in educational measurement and evaluation, designing research in educational measurement and evaluation, population and sample size determination, instrumentation and data collection, choosing appropriate statistics for research, descriptive and inferential statistics, correlation and regression, t-test, analysis of variance, analysis of covariance, qualitative research and mixed methods research, programming and statistical softwares for qualitative and quantitative data analysis, writing research findings, and evaluating quality of research in educational measurement and evaluation.

24732 Theories of Educational Measurement and Evaluation, and Program Evaluation (6 credits)

Course Learning Outcomes

1. Understand psychological measurement theory and its application for educational measurement and evaluation.
2. Understand classical test theory and advanced measurement theory.
3. Understand concepts of reliability, validity, and standard error of measurement.
4. Understand standards for educational and psychological assessment.
5. Understand and be able to develop classroom assessment instrument and use assessment results to improve educational quality.
6. Understand concepts of program and program evaluation.
7. Understand principles of program evaluation, evaluation model, evaluation criteria, indicators and design-making criteria.

Course Description

Definition and principle of educational measurement and evaluation, classical test theory, advanced measurement theories, applications of classical test theory and advanced measurement theories, reliability, validity, standard error of measurement, instrumentation, stands for psychological and educational testing, criterion- and normed-referenced testing, standards-based assessment, national and international educational assessment, classroom assessment, assessment for learning, formative assessment, summative assessment, definition of programs and program evaluation, evaluation criteria, evaluation design, evaluation implementation, and writing evaluation results.

24733 Seminar in Educational Measurement and Evaluation

(6 credits)

Course Learning Outcomes

1. Review and share current states, challenges, and new methodology of educational measurement and evaluation.
2. Understand and apply advanced educational measurement and evaluation methodology to practices.
3. Develop research topics in educational measurement and evaluation and design research strategies to investigate the proposed topics with valid and reliable findings.

Course Description

Review of challenges in education measurement and evaluation, advanced educational and evaluation methodology, dissemination of literature review, selected topics in advanced educational measurement and evaluation, educational data analysis, research design and writing research proposal.

24734 Evaluation of Policy, Program, Project and Organization

(6 credits)

Course Learning Outcomes

1. Understand definition and principles of policy, program, project, and organization.
2. Understand process of policy, program, project, and organization evaluation.
3. Design and evaluate policy, program, project, and organization.
4. Understand the principles of evaluation result utilization to develop policy, program, project, and organization.

Course Description

principles of policy, program, project, and organization, development of policy, program and project, principles of policy, program, project, and organization evaluation, evaluation process, analysis of policy, program, project, and organization, determining evaluation purpose, indicator and criteria, evaluation model, planning evaluation, evaluation instrument development, data analysis and presentation, writing evaluation report, evaluation unitization, readiness and needs assessment, evaluation of evaluation utilization, process evaluation, impact evaluation of policy, program, project, and organization, organizational risk evaluation, organizational effectiveness and efficiency evaluation.

24735 Curriculum Evaluation and Educational Quality Assurance**(6 credits)*****Course Learning Outcomes***

1. Understand curriculum and educational quality assurance concepts.
2. Design curriculum evaluation and educational quality assurance.
3. Undertake different types of curriculum evaluation.
4. Implement educational quality assurance in varied contexts.

Course Description

Principles of curriculum, curriculum and instruction development, principle of curriculum, curriculum analysis, curriculum evaluation model, curriculum evaluation planning, determining purpose, indicator, and criteria for curriculum evaluation, instrumentation and data collection for curriculum evaluation, data analysis and presentation, writing evaluation findings, evaluation utilization, feasibility evaluation of curriculum, evaluation of evaluation utilization, monitoring and impact evaluation of curriculum, principles and theory of educational quality assurance, designing, planning, and implementing educational quality assurance, educational risk evaluation, external and internal educational quality assurance, educational quality assurance for basic, vocational and higher education levels, monitoring, and developing educational quality assurance system, utilization of curriculum evaluation, and educational quality assurance for better practices.

24736 Applied Psychometric Theories for Educational and Psychological Measurement and Assessment**(6 credits)*****Course Learning Outcomes***

1. Understand principles of psychological measurement theory for educational and psychological measurement and evaluation.
2. Understand measurement theory and scale development.
3. Understand classical test theory and its application in test development and psychological and educational test and item analysis.
4. Understand item response theories and applications in test development, and psychological and educational test and item analysis.
5. Understand generalizability theory and its applications in test development, and psychological and educational test and item analysis.
6. Use computer programs and statistical softwares to analyze data following advanced measurement models for test development and validation.
7. Know and understand norm development, grading, cut-score, test equating and differential item functioning.
8. Understand principles of reporting of educational and psychological testing.

Course Description

Principles of measurement, evaluation and psychological measurement theory, fundamental statistics for educational and psychological measurement and evaluation, scaling, factor analysis and dimensionality assessment, applications of classical test theory in test development, item and test analysis, item response theory for dichotomous and polytomous responses, multidimensional item response theory, applications of item response theories in educational and psychological measurement, item response theory-based statistical packages for item and test analysis, item bank development, computerized adaptive testing, web-based assessment, generalizability theory, g-theory-based statistical packages for test analysis, grading and cut-score, norming, test equating, differential item functioning, educational and psychological assessment report, applications of measurement theory in designing educational tests.

24793 Graduate Professional Experience in Educational Measurement and Evaluation (6 credits)

Course Learning Outcomes

1. Acquire additional knowledge and experiences that transferred earlier via distance teaching system.
2. Possess proper personality and positive attitudes towards the profession of educational evaluation.
3. Promote and develop academic leadership in educational evaluation profession.
4. Promote human relations and ability in team work.
5. Develop skills in solving problems efficiently as leader in educational evaluation.
6. Increase morality, ethics and appropriate professional code of conduct.

Course Description

Analysis and organization management, application of techniques in educational evaluation, self-development with appropriate personality and positive attitudes toward educational evaluation profession, promotion of human relations and ability in team work, development of solving problems in educational evaluation, including promotion of appropriate morality, ethics and professional code of conduct.

24794 Independent Study (Educational Measurement and Evaluation) (6 credits)

Course Learning Outcomes

Students are expected to possess skills in applying concepts, theories and methods studied from different courses to analysis study, study or research on educational evaluation in topic of interest.

Course Description

Problems selection for independent study or research, writing a project, analysis of literature review, data compilation and analysis, presentation of study or research results.

24795 Thesis (Educational Measurement and Evaluation)**(6 credits)**

Course Learning Outcomes: Upon completion of the course, students should

1. To be able to select research problems for a thesis.
2. To be able to survey and analyze literature related to the thesis.
3. To be able to design research for the thesis.
4. To gain knowledge and skill in writing and presenting the thesis proposal.
5. To be able to develop quantitative research tools.
6. To be able to develop qualitative research tools.
7. To be able to collect, analyze, and present data for the thesis.
8. To be able to present and defend the thesis examination.
9. To be able to write the complete thesis report.
10. To be able to write the research report for publication.

Course Description

Selection of the research problem; survey and analysis of relevant literature; research design; writing and presenting a thesis proposal; tool development for thesis research, both quantitative and qualitative research; data collection; thesis data presentation; thesis presentation and examination defending; writing the complete thesis report; writing the research report for publication.

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