COURSE SYLLABUS

MASTER OF ARTS IN EDUCATION

Curriculum Description

The Master of Arts in Education (MAEd) program is designed to equip educators, administrators, and educational leaders with the advanced knowledge and skills necessary to foster effective learning environments. This program emphasizes a comprehensive understanding of educational theory, research methodologies, and practical applications in diverse educational settings. Students will engage with contemporary issues in education, explore innovative teaching strategies, and develop leadership capabilities that promote equity and inclusion. The MAEd program is delivered through a blend of online and in-person courses, allowing for flexible learning while fostering collaboration among peers. Graduates will be prepared to make meaningful contributions to the field of education, whether in classrooms, schools, or educational policy.

Program Objectives

1. **Advanced Knowledge Acquisition**: Equip students with a deep understanding of educational theories, philosophies, and practices to inform their teaching and leadership approaches.
2. **Research Proficiency**: Develop students' abilities to conduct educational research, analyze data, and apply findings to improve educational practices and outcomes.
3. **Culturally Responsive Teaching**: Foster an understanding of diversity in education, enabling students to create inclusive learning environments that respect and celebrate differences.

4. **Leadership Development**: Prepare students to take on leadership roles within educational institutions, focusing on effective communication, collaboration, and decision-making skills.
5. **Curriculum and Instruction Design**: Enable students to design, implement, and evaluate curricula that meet the needs of diverse learners and align with educational standards.
6. **Technology Integration**: Prepare students to effectively integrate technology into teaching and learning processes, enhancing student engagement and achievement.
7. **Policy and Advocacy**: Equip students with the knowledge and skills to engage in educational policy discussions and advocate for equitable educational practices.

Program Outcomes

Upon successful completion of the Master of Arts in Education program, graduates will be able to:

1.**Demonstrate Expertise in Educational Theory**: Articulate and apply key educational theories and philosophies to enhance teaching and learning practices.
2.**Conduct and Analyze Research**: Design and implement educational research projects, critically analyze data, and effectively communicate findings to stakeholders.
3.**Implement Inclusive Practices**: Develop and apply strategies that promote equity and inclusion in diverse educational settings, ensuring all students have access to quality education.
4.**Exhibit Leadership Skills**: Lead collaborative efforts within educational settings, demonstrating effective communication, conflict resolution, and team-building skills.
5.**Design Effective Curriculum**: Create and assess curricula that are responsive to the needs of learners, utilizing best practices in instructional design.

6.**Utilize Technology Effectively**: Integrate technology into instructional practices to enhance learning experiences and outcomes for all students.

7.**Engage in Policy Advocacy**: Analyze educational policies and advocate for changes that promote equity, access, and quality in education at local, state, and national levels.

COURSE SYLLABUS

Course Title:	**ADVANCED MEASUREMENT AND EVALUATION**
Credit:	3 Units
Time Allotment:	3 Hours / Week
Professor:	PIC Faculty
	Email: pic1@pic.edu.ph

I. COURSE DESCRIPTION

This course provides an in-depth exploration of advanced concepts and methodologies in educational measurement and evaluation. Students will learn to design, implement, and analyze assessment tools and evaluation strategies that are aligned with educational goals. Emphasis will be placed on both quantitative and qualitative approaches, as well as the ethical considerations involved in assessment practices.

II. COURSE OBJECTIVES

By the end of this course, students will be able to:

1. Analyze and apply advanced measurement theories and models.
2. Design and evaluate educational assessments that align with learning outcomes.
3. Utilize statistical methods for analyzing assessment data.
4. Implement formative and summative evaluation strategies effectively.
5. Critically assess the reliability and validity of measurement instruments.
6. Explore ethical issues related to educational assessment and evaluation.
7. Develop a comprehensive evaluation plan for an educational program or intervention.

III. LEARNING OUTCOMES

Upon successful completion of the "Advanced Measurement and Evaluation" course, students will be able to:

1.**Analyze Measurement Theories**

Demonstrate an understanding of advanced measurement theories, including Classical Test Theory (CTT) and Item Response Theory (IRT), and their applications in educational settings.

2.**Design Effective Assessments**

Create and evaluate various types of assessments (both quantitative and qualitative) that are aligned with specific learning outcomes and educational goals.

3.**Apply Statistical Analysis**

Utilize appropriate statistical methods to analyze assessment data, interpreting results to inform educational practices and decision-making.

4.**Implement Evaluation Strategies**

Differentiate between formative and summative evaluation methods and effectively implement them in educational programs to enhance learning outcomes.

5.**Assess Reliability and Validity**

Critically evaluate the reliability and validity of measurement instruments, ensuring that assessments are both fair and accurate.

6.**Address Ethical Issues**

Identify and address ethical considerations in educational assessment, ensuring fairness, equity, and accountability in measurement practices.

7.**Develop Program Evaluation Plans**

Construct comprehensive evaluation plans for educational programs or interventions, utilizing various evaluation models and frameworks.

8.**Integrate Technology in Assessment**

Explore and apply technology-enhanced assessment tools and online evaluation methods to improve assessment practices.

9.**Engage in Reflective Practice**

Reflect on personal learning and experiences throughout the course, identifying areas for growth and improvement in assessment and evaluation skills.

10.**Collaborate and Communicate Effectively**

Work collaboratively with peers to critique and improve assessment designs, and effectively communicate findings and recommendations based on assessment data.

IV. LEARNING PLAN

WEEK	LEARNING MATERIALS	LEARNING OBJECTIVES
Week 1: Introduction to Advanced Measurement Concepts	Learning Materials: • Textbook: Chapter 1 of Measurement and Evaluation in Education and Psychology • Article: "The Importance of Validity in Assessment" Activities: Class discussion on the significance of measurement in education.	Learning Objective: • Understand key measurement concepts and the importance of reliability and validity in educational assessments.
Week 2: Classical Test Theory vs. Item Response Theory	Learning Materials: • Textbook: Chapter 2 of Measurement and Evaluation in Education	Learning Objective: Compare and contrast Classical Test Theory (CTT) and Item Response Theory (IRT) and their applications.

	and Psychology • Research article on IRT applications Activities**:** Group discussion on the strengths and limitations of CTT and IRT.	
Week 3: Assessment Design Principles	Learning Materials: • Textbook: Chapter 3 of Measurement and Evaluation in Education and Psychology • Sample assessment blueprints Activities**:** Workshop on creating assessment blueprints.	Learning Objective**:** Learn principles for effective assessment design aligned with learning outcomes.
Week 4: Quantitative Assessment Methods	Learning Materials**:** • Textbook: Chapter 4 of Measurement and Evaluation in Education and Psychology • Selected articles on quantitative assessments Activities**:** Analyze existing quantitative assessments in small groups.	Learning Objective**:** Explore various quantitative assessment methods and their scoring mechanisms.
Week 5: Qualitative Assessment Methods	Learning Materials: • Textbook: Chapter 5 of Measurement and Evaluation in Education and Psychology • Case studies on qualitative assessments Activities**:** Peer review of qualitative assessment designs.	Learning Objective**:** Understand qualitative assessment methods and their applications in educational settings.
Week 6: Data Collection and	Learning Materials: • Textbook: Chapter 6 of	Learning Objective: Learn data collection methods and statistical

Analysis	Measurement and Evaluation in Education and Psychology • SPSS or Excel tutorial resources Activities: Hands-on data analysis using provided datasets.	analysis techniques for assessment data.
Week 7: Formative vs. Summative Evaluation	Learning Materials: • Textbook: Chapter 7 of Measurement and Evaluation in Education and Psychology • Articles on evaluation strategies Activities: Case study analysis of formative and summative evaluations.	Learning Objective: Differentiate between formative and summative evaluation methods and their purposes.
Week 8: Midterm Exam	Learning Materials: Review notes and readings from Weeks 1-7. Activities: Midterm exam covering all topics discussed.	Learning Objective: Assess understanding of key concepts covered in the first half of the course.
Week 9: Reliability and Validity in Measurement	Learning Materials: • Textbook: Chapter 8 of Measurement and Evaluation in Education and Psychology • Research articles on reliability and validity Activities: Evaluate the reliability and validity of existing assessments.	Learning Objective: Evaluate the reliability and validity of different measurement instruments.
Week 10: Ethical Considerations in Assessment	Learning Materials: • Textbook: Chapter 9 of Measurement and Evaluation in Education and Psychology • Articles on ethics in	Learning Objective: Identify ethical issues related to educational assessment and develop strategies to address them.

	assessment Activities**:** Group discussion on ethical dilemmas in assessment.	
Week 11: Program Evaluation Models	Learning Materials: • Textbook: Chapter 10 of Measurement and Evaluation in Education and Psychology • Frameworks for program evaluation (CIPP, Logic Model) Activities**:** Develop a program evaluation model for a hypothetical educational program.	Learning Objective: Explore various program evaluation models and their applications in educational settings.
Week 12: Performance Assessment and Authentic Assessment	Learning Materials: • Textbook: Chapter 11 of Measurement and Evaluation in Education and Psychology • Selected articles on performance assessment Activities**:** Create an authentic assessment task based on course content.	Learning Objective: Understand the characteristics and design principles of performance and authentic assessments.
Week 13: Using Technology in Assessment	Learning Materials: • Articles on digital assessment practices (e.g., "The Role of Technology in Assessment") • Tutorials on online assessment platforms (e.g., Google Forms, Kahoot, Socrative) Activities: • Hands-on workshop	Learning Objective: Explore technology-enhanced assessment tools and online evaluation methods to improve assessment practices.

	where students explore various online assessment tools. • Group activity to create a sample online assessment using one of the platforms.	
Week 14: Final Project Workshop	Learning Materials: • Guidelines for the final project (evaluation plan template) • Examples of successful evaluation plans from previous cohorts Activities: • Peer review sessions where students present their project ideas and receive feedback. • Individual work time to refine evaluation plans based on feedback received.	Learning Objective: Develop a comprehensive evaluation plan for an educational program or intervention, incorporating feedback from peers and instructor.
Week 15: Final Project Presentations	Learning Materials: • Presentation guidelines (e.g., structure, time limits) • Rubric for evaluating presentations Activities: • Student presentations of their final projects to the class. • Q&A session after each presentation for peer feedback and discussion.	Learning Objective: Effectively communicate findings and recommendations based on the comprehensive evaluation plan developed throughout the course.

Week 16: Course Reflection and Review	Learning Materials: • Reflection prompts (e.g., "What were your key takeaways from this course?") • Course feedback survey	Learning Objective**:** Reflect on personal learning experiences throughout the course and identify areas for further development in measurement and evaluation practices.

V. LEARNING OUTPUTS

Upon completion of the "Advanced Measurement and Evaluation" course, students will be able to:

1.**Theoretical Knowledge**

•Articulate key concepts in advanced measurement theories, including Classical Test Theory (CTT) and Item Response Theory (IRT).

2.**Assessment Design**

•Design and develop various types of assessments (both formative and summative) that align with specific learning objectives and outcomes.

3.**Data Analysis Skills**

•Apply appropriate statistical methods to analyze assessment data, interpreting results to make informed decisions in educational contexts.

4.**Evaluation Implementation**

•Implement effective formative and summative evaluation strategies to assess educational programs and interventions.

5.**Reliability and Validity Assessment**

•Critically assess the reliability and validity of measurement instruments, ensuring

their effectiveness in measuring educational outcomes.

6.**Ethical Considerations**

•Identify and address ethical issues related to assessment practices, ensuring fairness and equity in educational evaluation.

7.**Program Evaluation Development**

•Construct comprehensive evaluation plans for educational programs using various evaluation models and frameworks.

8.**Technology Integration**

•Utilize technology-enhanced assessment tools and online evaluation methods to improve assessment practices and data collection.

9.**Reflective Practice**

•Engage in reflective practices to evaluate personal growth and areas for improvement in measurement and evaluation competencies.

10.**Communication and Collaboration**

•Effectively communicate assessment findings and collaborate with peers to enhance assessment designs and practices.

VI. REFERENCES:

Core Textbooks

1.Measurement and Evaluation in Education and Psychology

•Author: Robert M. Thorndike & Tracy Thorndike-Christ

•Description: A comprehensive overview of measurement and evaluation theories, focusing on practical applications in educational settings.

2.Educational Assessment of Students

- Author: Anthony J. Nitko & Susan M. Brookhart
- Description: This book covers principles of assessment design, implementation, and evaluation, with an emphasis on aligning assessments with learning outcomes.

3.Item Response Theory for Psychologists

- Author: Susan E. Embretson & Steven P. Reise
- Description: An introduction to Item Response Theory (IRT), discussing its applications in educational measurement and assessment.

Supplementary Readings

4.Assessment for Learning: An Action Guide for School Leaders

- Authors: Ainsley Rose & Anne Davies
- Description: This resource provides practical strategies for implementing assessment for learning within educational institutions.

5.Classroom Assessment Techniques: A Handbook for College Teachers

- Author: Thomas A. Angelo & K. Patricia Cross
- Description: A guide to various assessment techniques suitable for higher education, focusing on enhancing student learning.

6.The Handbook of Student Engagement Interventions

- Editors: John W. Lounsbury & Robert A. H. Smith
- Description: Discusses various interventions and assessment strategies to engage students effectively in their learning process.

Articles and Journals

7.The Importance of Validity in Assessment

- Description: An article discussing the critical role of validity in educational assessments.

8.Ethics in Educational Assessment

- Description: This article addresses the ethical considerations and challenges faced in educational assessments.

9.Digital Assessment Practices: Trends and Innovations

•Description: A review of current trends in technology-enhanced assessment practices in education.

Online Resources

10.SPSS Tutorials for Data Analysis

•Description: A collection of tutorials and guides for using SPSS software for statistical analysis in educational research.

11.Assessment Tools and Platforms

•Description: A compilation of various online tools and platforms for creating and administering assessments.

Evaluation Frameworks

12.CIPP Evaluation Model

•Author: Daniel Stufflebeam

•Description: A framework for evaluating educational programs based on Context, Input, Process, and Product.

13.Logic Model Development Guide

•Authors: W.K. Kellogg Foundation

•Description: A guide for developing logic models to plan, implement, and evaluate programs effectively.

VII. COURSE REQUIREMENTS

1. Active participation in class discussion is required.
2. Each student has to take and pass all formative (quizzes/written assignments) and summative tests (midterm/final exams). Homework must be submitted the next meeting.
3. Students have to submit a compilation of all the required outputs as stipulated in the learning outcomes.

VIII. GRADING SYSTEM

General Average. The students will be graded for two quarters (midterm and final rating periods) according to the following:

- Class Attendance 10%
- Participation in Class Discussion and Pair/Group Activities 25%
- Individual Formative Tests, Homework, Research 25%
- Summative Examination (Midterm/Final Exams) 40%

TOTAL 100%

Final Grade. The students will be given a final grade based on their average grade (AG) in the mid grading period (1st quarter of the term) and in the final grading grade (2nd quarter). Midterm average grade has a weight of 50% and the final grading period has also a weight of 50%.

College Equivalent Rating:

95.5-100% 4.5 = A+ (Truly Exceptional Performance)

90.5-95.4% 4.0 = A (Excellent Performance)

85.5-89.4% 3.5 = B+ (Good Performance)

80.5-84.4% 3.0 = B (Acceptable Performance)

75.5-79.4% 2.5 = C+ (Marginally Acceptable Performance)

70.5-74.4% 2.0 = C (Passing but below expectations for graduate work)

65.5-69.4% 1.5 = D+ (Poor) 60.5-64.4% 1.0 = D (Lowest Passing Grade)

<59.4% 0.0 = F (Academic Failure No Credit Earned)

IX. CLASS POLICIES

All students who are enrolled in this course should conform to the following class policies:

1. Regardless of a disability, all students are responsible for fulfilling the essential requirements of courses/programs/degrees, including attendance expectations.
2. No one is allowed to attend a class unless officially enrolled on a credit or non- credit basis with the appropriate fees paid. Students who attend, participate and strive to complete course requirements

without formal enrolment will not receive credit for their work.

3. In compliance with the University regulations governing class attendance, students who stop attending the class for five (5) or six (6) times without justifiable reasons or who have never attended class will be dropped from the class. (Attendance is defined as online attendance to class meetings, participation or presence in an academically related activity such as submission of an assignment (e.g., homework, research paper), quiz/ examination, or participation in group activities.)
4. Severe consequences on students who miss term exams without a "satisfactory explanation" shall be imposed, namely, a failing grade in the course. To avoid such dire action, the policy instructs students "unable to take a midterm/final examination because of illness or other reasons over which they have no control" to notify the instructor/professor immediately. Students should be prepared to document their illness or the extenuating circumstances that caused them to miss the exam.
5. Students are excused from classes to participate in university-approved events or competitions. Before missing classes, the participants must present their instructors with a letter signed by both the director of the Student Affairs and the faculty adviser/coach of the student. These letters confirm the dates and locations of the events. An excused absence does not excuse students from completing course work missed during their absences.
6. Students who face emergencies, such as a death in the family, serious illness of a family member, court appearances, hazardous weather that makes attendance impossible or other situations beyond their control that preclude class attendance should notify

their instructors immediately to be excused from their class.

7. Students without notifications of absence or excuse letters will not be allowed to have make-up course work such as quiz, but will be allowed to take midterm and/or final examinations.

X. Class Participation and Behavior

1. Class participation is a very important part of the learning process in this course. Students will be evaluated on the quality of their contributions and insights
2. Any form of cheating will immediately earn you a failing grade.
3. If a student is disruptive, the faculty member may ask the student to stop the disruptive behavior and warn the student that such disruptive behavior can result in academic or disciplinary action.

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