UNIVERSITAS NEGERI PADANG
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
MATHEMATICS DEPARTMENT, MATHEMATICS EDUCATION STUDY PROGRAM
Main Campus Universitas Negeri Padang.
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Bachelor of Mathematics Education **MODULE HANDBOOK**

Module name:	Educational Research Methods and Mathematics Teaching
Module level, if applicable:	Bachelor
Code:	MAT1.61.6202
Sub-heading, if applicable:	-
Classes, if applicable:	Educational Research Methods and Mathematics Teaching
Semester:	6^{th}(sixth)
Module coordinator:	Dr. Armiati, M.Pd.
Lecturer(s):	Dr. Armiati, M.Pd., and Team
Language:	Bahasa Indonesia
Classification within the curriculum:	Study Program Compulsory Course
Teaching format / class hours per week during the semester:	Teaching format: • Lectures (face to face activities): Project base learning, group discussion, expository • Structured assignment: project report, presentation, paper • Independent activities, • Practice (school observation, create a proposal draft) 3 x 170 minutes = 510 minutes = 8.50 hours lectures.
Workload:	16 weeks per semester include mid-term exam and final exam, consisting of: • 1. 67 hours lectures (2 x 50 minutes) per week, • 2 hours tutorial assignments (2 x 60 minutes) per week, • 2 hours individual study (2 x 60 minutes) per week • 2. 83 hours practice (1 x 170) per week 16 x 170 x 3 = 8160 Minutes =136 hours = 4.53 ECTS
Credit points:	3 SKS (4.53 ECTS)
Prerequisite's course(s):	-

Course outcomes:	After taking this course the students have ability to: CO 1 : Interpret the basic concepts of research, objectives, functions, benefits and initial research procedures, methods, types and designs of research (quantitative, qualitative, action, development research), as well as research populations and samples. CO 2 : Formulate problems, variables, hypotheses and research questions based on problems found in the field CO3 : Develop research instruments, data collection techniques, data analysis, data interpretation and steps to draw conclusions based on research problems found in the field CO 4 : Design and presenting the initial draft of the research proposal CO 5 : Show the responsibility attitude in own works CO 6. : Maintain the responsibility attitude in team works
Content:	This course discusses: 1. the research and development of science 2. types of research 3. the research process 4. the identification and definition of research variables 5. data analysis techniques 6. the preparation of research reports
Study/exam achievements:	Total Score = (30% x Mid Exam Score) + (30% x Final Exam Score) + (30% x Project Assignment score) + (10% x Affective assessment score) The initial cut - off points for grades A, A- B+, B, B-, C+, C, C-, and D should not be less than 85, 80, 75, 70, 65, 60, 55, 50, and 40 out of 100 respectively. **Explanation**: **1. Midterm Exam** ✓ Midterm Exam is held at the 9th meeting ✓ Midterm Exam is a written exam and carried out in the classroom with an implementation time of 120 minutes according to the module schedule **2. Final Exam** ✓ Final Exam is held at the 16th meeting ✓ Final Exam is a written exam and carried out in the classroom with an implementation time of 120 minutes which follows the UAS implementation schedule of the department **3. Project Assignment** ✓ Projects are given twice in one semester, before Midterm Exam and before Final Exam ✓ Projects are given as individual task and it is in form paper and presentation and it is assessed by rubric assessment ✓ Project before Midterm Exam is about analyzing and evaluating proposal of quantitative research ✓ Project before Final Exam is about creating proposal of quantitative or qualitative or development research

	4. Affective Assessment ✓ Affective assessment is held in every meeting by observing students' attitude in classroom and daily interaction at campus ✓ The assessment based on observation sheet and it was given score by affective rubric assessment
Forms of media:	Laptop and LCD Projectors
Literature:	1. Menulis Laporan Penelitian bagi Peneliti Pemula. (2021). (n.p.): Insan Cendekia Mandiri. 2. Creswell, J. W. (2020). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research, Global Edition. United Kingdom: Pearson Education Limited. 3. Lukman Hakim. (2020). *Mudah Menulis Penelitian Kualitatif Dan Kuantitatif*. Sanabil. Mataram 4. Ismail Nurdin, Sri Hartati. (2019). *Metodologi Penelitian Sosial*. Penerbit Media Sahabat Cendikia. Surabaya 5. Metodologi Penelitian Kuantitatif: Beberapa Konsep Dasar Untuk Penulisan Skripsi & Analisis Data Dengan SPSS. (2019). (n.p.): Deepublish. 6. Metodologi Penelitian Kualitatif dalam Ilmu Sosial, Pendidikan, Kebudayaan dan Keagamaan. (2018). (n.p.): Nilacakra. 7. Suwendra, Wayan. Metodologi penelitian kualitatif. (2018). (n.p.): CV Jejak (Jejak Publisher). 8. Creswell, J. D., Creswell, J. W. (2017). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. United States: SAGE Publications. 9. Poth, C. N., Creswell, J. W. (2016). Qualitative Inquiry and Research Design: Choosing Among Five Approaches. United States: SAGE Publications. 10. Sandu Siyoto, M. Ali Sodik (2015). *Dasar Metodologi Penelitian*. Literasi Media Publishing. Sleman 11. Gay, L. R., Mills, G. E., Airasian, P. (2015). Educational Research: Competencies for Analysis and Applications. (n.p.): Vital Source (for Pearson). 12. Wellington, J. (2015). Educational Research: Contemporary Issues and Practical Approaches. United Kingdom: Bloomsbury Publishing. 13. Tjeerd Plomp and Nienke Nieveen. (2013). *Educational Designe Research Patr A*, Introduction. SLO Netherland Institute 14. Tjeerd Plomp and Nienke Nieveen. (2013). *Educational Designe Research Patr B*, Illustrative cases. SLO Netherland Institute 15. Gay, L R, Geoffrey E. Mills, Peter Airasian. (2012). *Educational Research Competencies for Analysis and Applications, tenth edition*. Pearson Education. Boston Colombus 16. Syahrum, Salim. (2012). *Metodologi Penelitian Kuantitatif*. Citapustaka Media Bandung 17. Donald Ary, Luci Cheser Jacob, Chris Sorensen (2010). *Introduction to Research in Education*. 8 th Edition. Wadsworth Cengage Learning. Belmont. USA

	18. Sugiyono. (2010). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.

PLO and CO mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10	PLO11
CO1		✓									
CO2				✓							
CO3						✓					
CO4							✓				
CO5										✓	
CO6										✓	