

Educational Research Methodology

Module name	Educational Research Methodology
Semester(s) in which the module is taught	I (Odd Semester)
Person responsible for the module	1. Dr. Pinta Deniyanti Sampoerno, M.Si. 2. Dr. Meiliasari, S.Pd., M.Sc.
Language	Indonesian Language [Bahasa Indonesia]
Relation to curriculum	This course is a compulsory course and is offered in the 1 st semester.
Teaching methods	<p>Teaching methods used in this course are:</p> <ul style="list-style-type: none"> • Lecture (i.e., group investigation, small group discussion, case study, and video-based learning) • Structured assignments (i.e., essays and case studies) • Research & writing for assignments. <p>The class size for lecture is 20 students. Contact hours for lectures are 40 hours, assignments are 96 hours, and private study is 96 hours.</p>
Workload	For this course, students required to meet a minimum of 232 hours in one semester, which consist of: 40 hours for lecture, 96 hours for structured assignments, 96 hours for private study,
Credit points	3 CP/ 7.8 ECTS
Required and recommended prerequisites for joining the module	Students should have attended all lectures and submitted all scheduled individual and group assignments prior to the final examination.
Module objectives/intended learning outcomes	<ol style="list-style-type: none"> 1. Finding real problems in the field of mathematics education through situation analysis. 2. Finding, selecting, and describing the background of the problem following the research problem. 3. Choose the suitable research methodology and design a research design to answer the research problem. 4. Designing an appropriate data collection process as an effort to answer research problems. 5. Analyze the data and its interpretation. 6. Applying research results as an alternative solution to problems in the field of mathematics education that are universally applicable
Content	<p>Students will learn about: Principles and procedures of scientific research as basic knowledge in thesis writing. Topics discussed include the nature of research, research variables, theoretical frameworks and research hypotheses, types and research designs, sampling techniques, preparation and development of research instruments, data collection and processing techniques, and rules for writing scientific reports. for chemical education research.</p>
Examination forms	Assessment of the learning process follows the following components: attendance 5%; assignments and presentations 30%; mid test 30%, and final test 35%.

<p>Study and examination requirements</p>	<p>Study and examination requirements:</p> <ol style="list-style-type: none"> 1. Students must attend 15 minutes before the class starts. 2. Students must switch off all electronic devices. 3. Students must inform the lecturer if they will not attend the class due to sickness, etc. 4. Students must submit all class assignments before the deadline. 5. Students must attend the exam to get a final grade.
<p>Reading list</p>	<ol style="list-style-type: none"> 1. Cohen, L., Manion, L., & Morrison, K. (2013). <i>Research methods in education</i>. routledge. 2. Gall, Meredith. P., Joyce, P. & Borg, Walter R. 2007. <i>Educational Research: An Introduction</i>. Boston: Allyn and Bacon. 3. John W. Creswell, <i>Research Design: Pendekatan Kualitatif, Kuantitatif dan Mixed</i>, California: Sage Publications, 2010. 4. Pelton, R. P. (2010). <i>Action research for teacher candidates: Using classroom data to enhance instruction</i>. R&L Education. 5. Sugiyono. 2010. <i>Metode Penelitian Kuantitaif Kualitatif dan R&D</i>. Jakarta: Alfabeta. 6. Fraenkel, Jack. R., and Norman E. Wallen. 2012. <i>How to Design and Evaluate Research in Education 8th Edition</i>. Boston: McGraw-Hill Higher Education. 7. Creswell, John W. 2014. <i>Research Design, Qualitatives, Quantitative, and Mixed. Methods Approcahes (Fourth Edition)</i>. United State of America: Sage. 8. E. Mills., dan Airasian, Peter. (2009). <i>Educational research: Competencies for analysis and applications</i>. Ninth Edition. New Jersey: Upper Saddle River, Pearson Education 9. Seale, Clive. (2004). <i>Researching Society and Culture</i>. Second Edition. London: SAGE Publications. 10. Bungin, Burhan, 2003, <i>Analisa Data Penelitian Kualitatif: Pemahaman Filosofis dan Metodologis ke Arah Penguasaan Model Aplikasi</i>, PT. Raja Grafindo Persada, Jakarta. 11. Miles, B., Matthew dan Huberman, A., Michael, 1992, <i>Qualitative Data Analysis: A Sourcebook of New Methods</i>. Beverly Hills, London: SAGE Publications. 12. Thomas, Murray R. (2003). <i>Blending Qualitative and Quantitative: Research Methods in Theses and Dissertations</i>. Thousand Oaks, California: Corwing Press, Inc.