

Module Descriptions

A **module** is a self-contained **learning unit** within a higher education program that includes thematically related courses and is assigned a **fixed number of credits**. It follows specific **learning objectives**, includes an **assessment component**, and contributes to achieving the qualifications of a degree program. In some countries, "modules" are also named "courses".

Please provide a module description for each module. In addition to the compulsory and elective modules, this also includes credited internships and the final thesis.

Please summarize all module descriptions in one document (Module Handbook) and create a table of contents so that the modules can be found easily.

| Module designation | Educational Research Methodology. |
|---|---|
| Semester(s) in which the module is taught | 1 |
| Person responsible for the module | Dr. Dra. Raden Rosnawati M.Si. |
| | Prof. Dr. Kana Hidayati M.Pd. |
| Language | Indonesian |
| Relation to curriculum | Compulsory |
| Teaching methods | Lecture and discussion |
| Workload (incl. contact hours, self-study hours) | Total workload is 136 hours per semester which consists of 150 minutes lectures, 180 minutes structured activities, and 180 minutes self study per week for 16 weeks. |
| Credit points | 3 |
| Required and recommended prerequisites for joining the module | - |



| Module objectives/intended | After taking this course the students have ability to: |
|----------------------------|---|
| learning outcomes | CO1. Identifying the Domains of Educational Research. |
| | CO2. Understanding Types of Educational Research. |
| | CO3. Understanding the Fundamentals of Educational Research. |
| | CO4. Identifying Research Problems. |
| | CO5. Identifying Research Variables. |
| | CO6. Developing and Formulating a Theoretical Review from Various Literature Sources. |
| | CO7. Formulating a Conceptual Framework Based on Theoretical Review and Developing Research Hypotheses. |
| | CO8. Using Sampling Techniques in Sample Selection. |
| | CO9. Developing Research Indicators and Instruments. |
| | CO10. Mastering Techniques for Estimating Instrument Validity and Reliability. |
| | CO11. Mastering Data Analysis Techniques in Both Quantitative and Qualitative Research. |
| | CO12. Mastering Techniques for Reporting Research Findings. |
| | CO13. Mastering Techniques for Reviewing Research Results in the |
| | Form of Reports and Journals. |
| | CO14. Preparing a Research Proposal. |
| Content | This course presents and discusses fundamental aspects of educational research, including: research paradigms, formulation of research problems, research questions or hypotheses, research variables/focus, literature review related to operational and conceptual definitions, sampling techniques, research instruments, internal validity, and various research methods such as quantitative, qualitative, and mixed methods. It also covers the writing of research proposals and research reports. |
| Examination forms | Oral presentation, essay, and discussion. |
| Study and examination | The course assessment is divided into two main components: |
| requirements | 1. Cognitive Assessment (50%) This includes the following elements: |
| | o Attendance: 5% |
| | o Quiz: 5% |
| | o Assignment:5% |
| | o Midterm Exam (UTS): 15% |
| | o Final Exam (UAS): 20% |
| | Participatory Assessment (50%) This includes: |
| | o Case Study: 25% |
| | o Team-Based Project: 25% |
| | Total: 100% |
| L | |



| Reading list | 1. Ernest, P. (2010). The Philosophy of Mathematics Education. Washington DC: Routledge Falmer |
|--------------|---|
| | 2. Leder, G.C., Pehkonnen, E., & Torner G. (2002). Beliefs: A hidden variable in mathematics education? Dordrecht: Kluwer Academic Publishers. |
| | 3. Treffers, A. (1987). Three Dimensions: A Model ofGoal and Theory Description in Mathematics Instruction - The Wiskobas Project. Dordrecht: D. Reidel Publishing Company |