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	*Thesis*
Semester(s) in which the module is taught	*3*
Person responsible for the module	*Team*
Language	*Indonesian.*
Relation to curriculum	*Compulsory*
Teaching methods	*Discussions and assignments*
Workload (incl. contact hours, self-study hours)	*Total workload is 272 hours per semester which consists of 100 minutes lectures, 120 minutes structured activities, and 120 minutes self-study per week for 16 weeks.*
Credit points	*6*
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	*After taking this course the students have ability to:* *CO1. Develop valid research instruments.* *CO2. Analyze research data accurately.* *CO3. Formulate appropriate conclusions from the developed thesis.* *CO4. Prepare a well-structured and accurate research report in accordance with established procedures.* *CO5. Defend the arguments and findings presented in the thesis.* *CO6. Write an article based on the data obtained from the conducted research.*

Content	*The thesis is a final project prepared by students as a form of scientific work in the field of mathematics education. It is developed based on the knowledge and skills acquired from previous coursework and is conducted in accordance with the principles of scientific research. As a continuation of the Thesis Proposal course, the Thesis course focuses on the development and validation of research instruments, data collection, data analysis, drawing conclusions, writing the thesis research report, thesis defense, and article writing.*
Examination forms	*Presentations and Projects.*
Study and examination requirements	*The course assessment is divided into two main components:* 1. ***Cognitive Assessment (10%)*** *This includes the following elements:* ○ *Attendance: 10%* ○ *Quiz: 0%* ○ *Assignment:10%* ○ *Midterm Exam (UTS): 0%* ○ *Final Exam (UAS): 0%* 2. ***Participatory Assessment (90%)*** *This includes:* ○ *Case Study: 0%* ○ *Team-Based Project: 90%* ***Total: 100%***

Reading list	*1. Panduan Tesis Universitas Negeri Yogyakarta Tahun 2023* *2. Journal for Research in Mathematics Education (https://www.nctm.org/Publications/journal-for-research-in-mathematics-education/All-Issues/)* *3. Educational Studies in Mathematics (https://www.springer.com/journal/10649)* *4. ZDM - International Journal on Mathematics Education (https://www.springer.com/journal/11858)* *5. International Journal of Science and Mathematics Education (https://www.springer.com/journal/10763)* *6. Journal of Mathematics Teacher Education (https://www.springer.com/journal/10857)* *7. Mathematics Education Research Journal (https://www.springer.com/journal/13394* *8. Canadian Journal of Science, Mathematics and Technology Education (https://www.springer.com/journal/42330)* *9. Research in Mathematics Education (https://www.tandfonline.com/toc/rrme20/current)* *10. Advances in Mathematics Education (https://www.tandfonline.com/toc/rrme19/current)* *11. International Journal of Mathematical Education in Science and Technology (https://www.tandfonline.com/toc/tmes20/current)* *12. Mathematical Thinking and Learning (https://www.tandfonline.com/toc/hmtl20/current)* *13. PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies (https://www.tandfonline.com/toc/upri20/current)* *14. Gall, M.D., Gall, J.P., Borg, W.R. 2003. Educational Research: An Introduction. Seventh Edition. Boston: Pearson Education, Inc.* *15. Creswell, John W.. 2007. Qualitative Inquiry and Research Design: Choosing Among Five Approach. 2nd Ed. Sage Publication.* *16. Creswell, John W.. 2012. Educational Research: Planning, Conducting and Evaluating Quantitatif and Qualitative Research. 4th Edition. Pearson.* *17. Keith R. Leatham (Editor). 2019. Designing, Conducting, and Publishing Quality Research in Mathematics Education. Springer.* *18. Editors Plomp, T. & Nieveen, N. 2007. An Introduction to Educational Design Research. Enscede: SLO* *19. Tjeerd Plomp & Nienke Nieveen. 2013. EDUCATIONAL DESIGN RESEARCH - PART A: AN INTRODUCTION. Netherlands Institute for Curriculum* *Development (SLO).* *20. Tjeerd Plomp & Nienke Nieveen. 2013. Educational design research Part B: Illustrative cases. Netherlands Institute for Curriculum Development (SLO).* *21. Arthur Bakker. 2019. Design Research in Education: A Practical Guide for Early Career Researchers. Routledge.* *22. an van den Akker, Koeno Gravemeijer, Susan McKenney and Nienke Nieveen. 2006. Educational Design Research. Routledge.*

	23. Patricia D. Morrell & James B. Carroll. 2010. Conducting Educational Research: A Primer for Teachers and Administrators. NSE PUBLISHERS. *24. Rita C. Richey, et. al. DEVELOPMENTAL RESEARCH: STUDIES OF INSTRUCTIONAL DESIGN AND DEVELOPMENT.*