MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY
UNIVERSITAS SRIWIJAYA
FACULTY OF TEACHER TRAINING AND EDUCATION
MATHEMATICS EDUCATION STUDY PROGRAM
Jl. Raya Palembang – Prabumulih Km.32, Indralaya Ogan Ilir 30662 Website: Fkip.unsri.ac.id

Doctoral Program in Mathematics Education **MODULE HANDBOOK**

Module name/ Code	:	Topic in geometry/ GMA7207
Module level, if applicable	:	Doctor
Code	:	GMA7207
Subheading, if applicable	:	-
Class, if applicable	:	-
Semester	:	2nd (second) / even
Module coordinator	:	Dra. Nyimas Aisyah, M.Pd., Ph.D.
Lecturer(s)	:	Dra. Nyimas Aisyah, M.Pd., Ph.D.
Language	:	Bahasa Indonesia and English
Classification within the curriculum	:	Study Program Elective Course
Teaching methods	:	Expository (1st meeting), Case-Based Learning (2nd-4th meeting), Discovery Learning (5th-7th meeting), Proof Based Approach (9th-12th meeting), Project Based Learning (13th-15th meeting), Examination (8th and 16th meeting)
Workload	:	14 weeks per semester consisting of: ➢ 1 hour lecture (1 x 50 minutes) per week, ➢ 2 hours assignments (2 x 50 minutes) per week, ➢ 2 hours individual study (2 x 75 minutes) per week, Total workload: 14x2x300 minutes=8,400 minutes= 5.6 ECTS*
Credit points	:	2 (5.6 ECTS)
Prerequisite's course(s)	:	-
Course outcomes	:	After taking this course, students should be able to: CO-1: able to describe the concept of philosophy, definitions, and important properties of geometry according to a scientific and critical attitude. CO-2: able to prove important properties of geometry related to effective and communicative scientific arguments. CO-3: able to apply topic in geometry approaches to design problem-solving from the social and natural sciences.
Content	:	This course provides knowledge and understanding of a logical foundation starting with providing undefined geometric elements in the axioms of incidence and alignment, the concept of sequence, the concept of rays, the concept of angles, and the concept of congruence. Furthermore, the following concepts

<table>
<tr><td></td><td></td><td>will be studied and developed in the form of theorems and their proofs by analysis and assisted by incident geometric shapes that support his/her research. Topics and syllabus depend on the research.</td></tr>
<tr><td>Study/exam achievements</td><td>:</td><td>➢ Students are considered competent and pass if the final score calculated from the score of the midterm exam, assignments, participation, and final exam is at least 56 or C.
➢ Students are expected to attend 80% of the total meetings in the modules.
➢ 35% midterm exam + 15% assignments + 10% participation + 40% final exam.
➢ The final index is defined as follows:
The total score is converted into a qualitative score,
<table>
<tr><th>Total Score</th><th>Grade</th><th>Description</th></tr>
<tr><td>86 – 100</td><td>A</td><td>Excellent</td></tr>
<tr><td>71 – 85.99</td><td>B</td><td>Good</td></tr>
<tr><td>56 – 70.99</td><td>C</td><td>Fair</td></tr>
<tr><td>41 – 55.99</td><td>D</td><td>Bad</td></tr>
<tr><td>0 – 40.99</td><td>E</td><td>Worse</td></tr>
</table></td></tr>
<tr><td>Forms of media</td><td>:</td><td>Laptop and LCD projectors</td></tr>
<tr><td>Literature</td><td>:</td><td>1. Zwikker, C. (2011). The advanced geometry of plane curves and their applications. Courier Corporation
2. Edward C. Wallace and Stephen F. West, 2003, Roads to Geometry, 3rd Edition, Pearson.
3. Richard S. Millman and George D. Parker, 1991, Geometry: A Metric Approach with Models, Springer.
4. Glencoe McGraw‑Hill., “Geometry Concepts and Applications”, United States of America, 2008.
5. David A. Brannan, Matthew F. Esplen Jeremy J. Gray., ”Geometry”, Cambridge University Press, 1999.</td></tr>
<tr><td>Note</td><td>:</td><td>*Total hours per 1 credit in 1 semester = {(1 credit x 300 minutes x 14 weeks)/60 minutes} = 70 hours.</td></tr>
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		Each ECTS equals 25 hours therefore 1 credit in 1 semester equals 2.8 ECTS.

Date of last amendments: August 2024

PLO and CO Mapping

	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9
CO1					✔				
CO2					✔				
CO3					✔				