



### Euclid Geometry

<b>Module designation</b>	Euclid Geometry
<b>Semester(s) in which the module is taught</b>	III (Odd Semester)
<b>Person responsible for the module</b>	1. Dr. Pinta Deniyanti Sampoerno, M.Si. 2. Dwi Antari Wijayanti, M.Pd.
<b>Language</b>	Indonesian Language [Bahasa Indonesia]
<b>Relation to curriculum</b>	This course is a compulsory course and is offered in the 3 <sup>rd</sup> semester.
<b>Teaching methods</b>	Teaching methods used in this course are: - Lecture (i.e., group investigation, small group discussion, casestudy, and video-based learning) - Structured assignments (i.e., essays and case studies) - Writing for assignments.  The class size for lecture is 20 students. Contact hours for lecture is 26.67 hours, assignments are 32 hours, and private study is 32 hours.
<b>Workload</b>	For this course, students required to meet a minimum of 90,66 hours in one semester, which consist of: 26,67 hours for lecture, 32 hours for structured assignments, 32 hours for private study,
<b>Credit points</b>	3,0 ECTS
<b>Required and recommended prerequisites for joining the module</b>	Students should have attended all lectures and submitted all scheduled individual and group assignments prior to the final examination.
<b>Module objectives/intended learning outcomes</b>	2. Mampu mengembangkan kemampuan menalar deduktif. 3. Mampu mengembangkan logika kogniai analisis untuk menentukan poligon yang kongruen. 4. Mampu menganalisis definisi-definisi, postulat-postulat, dan dalil-dalil. 5. Mengembangkan kemampuan pembuktian tak langsung dengan postulat <i>Law of Excluded Middle</i> dan <i>Law of Contradiction</i> . 6. Mengembangkan kemampuan menalar deduktif melalui pembuktian dua kolom.



**MINISTRY OF EDUCATION, CULTURE, RESEARCH, AND TECHNOLOGY**  
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<b>Content</b>	<p><b>Students will learn about:</b></p> <p>Mahasiswa mampu membahas tentang Pengertian Pangkal, Definisi, Menalar Deduktif, Pernyataan Pangkal, Postulat dan Dalil, Bukti Dua Kolom, Perkawanan, Poligon Kongruen, Kognisi Analisis, Segitiga Istimewa, Lingkaran, Tegak Lurus dan Jarak, Bukti Tak Langsung, Kesejajaran, Jajar Genjang, Sudut-sudut Poligon, Segitiga Sebangun, Segitiga Siku-siku, Ratio dan Proposisi, Bagian-bagian Lingkaran: Garis dan Ruas Garis Singgung Lingkaran, Garis dan Ruas Garis Potong Lingkaran, Busur Lingkaran dan Talibusur Lingkaran, untuk memahami Metode Membangun Sebuah Geometri Euclid dengan menggunakan definisi, postulat dan dalil sebagai landasan untuk menalar yang logis.</p>
<b>Examination forms</b>	<p>Assessment of the learning process follows the following components: attendance 5%; assignments and presentations 30%; mid test 30%, and final test 35%.</p>
<b>Study and examination requirements</b>	<p><b>Study and examination requirements:</b></p> <ul style="list-style-type: none"> <li>- Students must attend 15 minutes before the class starts.</li> <li>- Students must switch off all electronic devices.</li> <li>- Students must inform the lecturer if they will not attend the class due to sickness, etc.</li> <li>- Students must submit all class assignments before the deadline.</li> <li>- Students must attend the exam to get a final grade.</li> </ul>
<b>Reading List</b>	<ol style="list-style-type: none"> <li>1. Geometry, A Contemporary Course, Harry Lewis, Edisi ke-4, 1974</li> <li>2. Geometry, For Enjoyment and Challenge, Richard Rhoad, 2000</li> <li>3. Geometri Euclid, Bahan Ajar Perkuliahan Geometri Euclid, Pinta D.S. dan Dwi Antari W., 2014</li> </ol>