UNIVERSITAS NEGERI YOGYAKARTA
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
DEPARTMENT OF CHEMISTRY
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Module name:	Petroleum Chemistry and Energy
Module level, if applicable:	Undergraduate
Code:	KMA 6238
Sub-heading, if applicable:	-
Classes, if applicable:	-
Semester:	7th
Module coordinator:	Ir. Endang Dwi Siswani, M.T
Lecturer(s):	Ir. Endang Dwi Siswani, M.T
Language:	Bahasa Indonesia and English
Classification within the curriculum:	Elective Subject
Teaching format / class hours per week during the semester:	100 minutes lectures, 120 structured activities and 120 individual study per week
Workload:	Total workload is 90,67 hours per semester which consists of 100 minutes lectures, 120 structured activities and 120 individual study per week for 16 weeks
Credit points:	2 SKS (3 ECTS)
Prerequisites course(s):	-
Course Outcomes	After taking this course, the students are expected to be able to: CO1 Analyze the results of renewable energy research to solve petroleum problems CO2 Analyzing the utilization of petroleum refining products in daily life CO3 Presenting alternative products as renewable energy innovations
Content:	Chemistry course Petroleum Chemistry explains to students the importance of petroleum mining and its results for life and human activity in general. In this course, the process of formation of the earth oil is explained, the process of processing it into a product that can be used. Besides that, he also explained about some petroleum products, including: how to manufacture, chemical and physical properties, as well as quality standards. In addition, this course also explains the stages in the design of the establishment of the petroleum refining industry. • Petroleum Formation Process • Petroleum Processing • Petroleum Refining Products • Petroleum Industry
Study / exam achievements:	Attitude assessment is carried out at each meeting by observation and/or self-assessment techniques using the assumption that basically every student has a good attitude.

<table>
<tr><td></td><td>The student is marked very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not taken into account in the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude. The final mark will be weight as follow:
<table>
<tr><th>No</th><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr>
<tr><td>1</td><td>CO1,
CO2,
CO3,</td><td>a. Assignments
b. Activity
c. Final Exam
d. Midterm Exam</td><td>Presentation / written test</td><td>20%
20%
30%
30%</td></tr>
<tr><td colspan="4">Total</td><td>100%</td></tr>
</table></td></tr>
<tr><td>Forms of media:</td><td>Handout, Board, LCD Projector, Laptop/Computer, Module</td></tr>
<tr><td>References:</td><td>• Endang Dwi Siswani (2017), Diktat Kimia Minyak Bumi, Jurusan Pendidikan Kimia FMIPA UNY
• Shreve, R.N, and Brink, J, A, Jr, (1990), Chemical Process Industries, Mc Graw Hill International Book Co, Tokyo
• Hardjono A (2006) “ Teknologi Minyak Bumi, Gadjah Mada University Press, Yogyakarta.
• Handbook of Petroleum Product Analysis (2015). James G.Speight. 2nd Edition. John Wiley and Sons.</td></tr>
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PLO and CO mapping

	PLO									
	Attitude	General Skill		Knowledge				Specific Skill		
	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9	PLO10
CO1					√					
CO2							√			
CO3									√	