

Name	<i>Petrochemistry</i>
ECTS credits	<b>6</b>
Year / Semester	<i>III /1°</i>
Specific learning outcomes	<p><i>On successful completion of this module students should be able to know :</i></p> <p><i>1 – The composition of oil and petroleum fractions and the determination of their properties.</i></p> <p><i>2 – Oil refining schemes, nomenclature and characteristics of petroleum products, main patterns of manufacturing processes, environmental constraints and evolution of refining.</i></p> <p><i>3 - Petrochemical manufacturing schemes, diversity of products of the petrochemical industry, Main routes of manufacture in petrochemistry.</i></p> <p><i>4 – Participate in class discussions with colleagues and with teachers</i></p>
Contents	<p><i>Origins of oil; oil ; prospecting and production; chemical composition of oil; properties of petroleum fractions; Analysis of petroleum and petroleum fractions; oxygenates, nitrogen compounds; amines; sulphur; water; sulfur content; aromatic content; Chemistry of petroleum processing processes; petroleum fractions; natural gas; associated gases and refinery gas and chemistry of their transformations.</i></p>
Teaching and learning methods	<i>Face to face, 45 hours</i>
Teaching techniques	<p><i>Lectures, 35 hours</i></p> <p><i>Practical classes, 25 hours</i></p>
Assessment methods	<p><i>Written and oral.</i></p> <p><i>A mid-term written test and a final-term written test are foreseen.</i></p> <p><i>The mid-term written test will be devoted to the assessment of the level of achievement of LOs 1 and 2.</i></p> <p><i>The final term written test will be devoted to the assessment of the level of achievement of LOs 1 and mainly, 2 and 3.</i></p>
Assessment criteria	<p><i>In the mid-term test students should .....</i></p> <p><i>In the final term test students will be required to .....</i></p> <p><i>Finally, students' ability to participate in class discussions with teachers and colleagues will be assessed in practical classes.</i></p>
Assessment metrics	<i>Attribution of a final grade</i>
Criteria of attribution of the final grade	<p><i>The grade goes from 1 (minimum) up to 20 (maximum). The minimum threshold to pass is 7. To pass the exam students should obtain the minimum evaluation in all the assessments.</i></p> <p><i>The final grade will be determined according to the following rules:</i></p> <ul style="list-style-type: none"> <li><i>- Mid-term written test: 40%</i></li> <li><i>- Final term written test: 60%</i></li> </ul>
Preparatory course units	<i>N.A.</i>
Didactic material	<ul style="list-style-type: none"> <li><i>- Sellami Mohamed Hassen ; Université Kasdi Merbah Ouargla « Raffinage et pétrochimie » (cours et exercices)</i></li> <li><i>- J. P. Wauquier « Raffinage du Pétrole TOME 1. Pétrole Brut. Produits Pétroliers. schémas de fabrication</i></li> </ul>