Edexcel International GCSE Chemistry 4CH1 Learning Plan

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| **Unit: 4. Organic Chemistry** | | **Chapter: 26. Alcohols** | | **Hours: 3** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| **Section 4: Organic chemistry**  (e) Alcohols | Students will be assessed on their ability to:  **4.29C know that alcohols contain the functional group −OH**  **4.30C understand how to draw structural and displayed formulae for methanol, ethanol, propanol (*propan-1-ol only*) and butanol (*butan-1-ol only*), and name each compound; *the names propanol and butanol are acceptable***  **4.31C know that ethanol can be oxidised by:**   * **burning in air or oxygen (complete combustion)** * **reaction with oxygen in the air to form ethanoic acid (microbial oxidation)** * **heating with potassium dichromate(VI) in dilute sulfuric acid to form ethanoic acid**   **4.32C know that ethanol can be manufactured by:**   * **reacting ethene with steam in the presence of a phosphoric acid catalyst at a temperature of about 300 ºC and a pressure of about 60–70 atm** * **the fermentation of glucose, in the absence of air, at an optimum temperature of about 30 ºC and using the enzymes in yeast**   **4.33C understand the reasons for fermentation, in the absence of air, and at an optimum temperature.** | Video:  Section 3 – Lesson 2 – The Alkenes, Ethanol  Powerpoint:  Chemistry - Section 3 – Lesson 2  Textbook pages:  Page 288 – Drawing and naming the alcohols  Page 288 – The oxidation of ethanol  Page 290 – The production of ethanol  Page 291 – Comparing the two methods of producing ethanol | Page 292 Qs. (1) to (3)  Chapter 26 Answers to textbook questions  Unit 4-26 Alcohols exam question - pdf  Unit 4-26 Alcohols - exam question mark scheme – pdf  Section D19 - Talking paper video | |

Videos – [www.igcsesciencecourses.com](http://www.igcsesciencecourses.com)

Textbook Ref: Edexcel International GCSE (9-1) Chemistry Student Book - Pearson (Clark, Owen and Yu)