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, EthanolPowerpoint: Chemistry - Section 3 – Lesson 2Textbook pages:Page 288 – Drawing and naming the alcoholsPage 288 – The oxidation of ethanolPage 290 – The production of ethanolPage 291 – Comparing the two methods of producing ethanol | Page 292 Qs. (1) to (3)Chapter 26 Answers to textbook questionsUnit 4-26 Alcohols exam question - pdfUnit 4-26 Alcohols - exam question mark scheme – pdfSection 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)