Edexcel iGCSE Biology 4BI0 Learning Plan

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| **Section F21: Using Microorganisms** | | |
| Specification | Resources | Assessment |
| 5.5 understand the role of yeast in the production of beer  5.6 describe a simple experiment to investigate carbon dioxide production by yeast, in different conditions  **5.7 understand the role of bacteria (Lactobacillus) in the production of yoghurt**  **5.8 interpret and label a diagram of an industrial fermenter and explain the need to provide suitable conditions in the fermenter, including aseptic precautions, nutrients, optimum temperature and pH, oxygenation and agitation, for the growth of micro-organisms** | Video: Biology Section 5 – Lesson 1 – Population Growth and Food Production – 12.25 to 18.38  Powerpoint: Biology Section 5 – Lesson 1 – Slides 43 to 77  Textbook: Ch.21 Using Microorganisms  Page 228 – What are microorganisms?  Page 229 – Fermentation and Biotechnology  Page 231 – ‘Traditional’ biotechnology  Page 234 – End of Chapter Checklist  Chapter 21 – using Microorganisms - Student checklist.doc  DVD Revision check list  <http://biology-igcse.weebly.com/use-of-microorganisms-and-fermenter-to-manufacture-enzymes.html>  <http://biology-igcse.weebly.com/use-of-microorganisms-to-manufacture-antibiotic-penicillin.html> | Textbook  Page 234 – Questions (1) to (3)  Textbook Answers (PDF)  DVD Multiple choice test  Section F21 - exam question - pdf  Section F21 - exam question mark scheme – pdf  Talking paper video – Section F21 – Using Microorganisms |

Videos – www.igcsesciencecourses.com

Textbook Ref: Edexcel International GCSE Biology Student Book - Pearson (Bradfield and Potter)

DVD Video Clips – see resource DVD in textbook.