**2016 STAGE TWO BIOLOGY**

Planner + Summary

**2016 Stage Two Biology: Assessment Task Summary**

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| Assessment Type | Weighting  (%) | Name of Assessment | Approximate Completion Date |
| Investigations folio | 40 | Enzyme practical (10%) | Term 1 Week 5 (4/3/16) |
| Osmosis practical (10%) | Term 2 Week 2 (13/5/16) |
| Fermentation practical (10%) | Term 2 Week 10 (8/7/16) |
| Issues investigation (10%) | Term 1 Week 10 (8/4/16) |
| Skills and applications tasks | 30 | Macromolecules test (7.5%) | Term 1 Week 8 (25/3/16) |
| Cells test (7.5%) | Term 2 Week 5 (3/6/16) |
| Organisms test (7.5%) | Term 3 Week 3 (12/8/16) |
| Ecosystems test (7.5%) | Term 3 Week 9 (23/8/16) |
| External component | 30 | Examination (30%) | Term 4 Week 5 (14/11/16) |

NOTES:

All tasks in the Investigations Folio will be researched at home and completed (in test conditions) during one lesson. Materials, notes and pre-prepared documents can be brought into class. You will be given feedback on your submission and can resubmit ONE draft. I will also look over notes prior to your submission if you would like me to.

All tests will be one lesson in length and cover 3 sections (multiple choice, short response and long response).

Check the assessment criteria (rubric) for each task to see how the task will be assessed.

If this schedule is adhered to, Term 4 will be set aside for exam practise and revision.

Term One

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| **Wk** | **Content** | **Homework** |
| 1 | Intro, text books, issues investigation, structure of DNA, RNA, proteins, chromosomes, genes | Revision sheets 1 & 2  Issues Investigation (create question) |
| 2 | Protein synthesis (transcription / translation) | Revision sheet 4 **Issues Investigation Part A (draft)** |
| 3 | Protein 3d shape, polysaccharides, lipids. | Revision Sheets 5 & 6 |
| 4 | DNA replication, enzyme activity | Revision Sheet 3, 7 |
| 5 | Enzyme prac and write-up | **Enzyme Practical** |
| 6 | Macromolecules as energy stores, DNA evidence for evolution, mutation | Revision sheets 8 & 9 |
| 7 | genetic modification, DNA sequencing | Practice test (check answers)  Revision sheets 10, 11, 12  Crossword (end of chapter) |
| 8 | Revision | **Macromolecules Test** (revision) |
| 9 | Plant vs animal, eukaryotic vs prokaryotic, organelles | Revision sheet 13 |
| 10 | Membranes, movement across membranes | **Issues Investigation Due**  Revision sheets 14 & 15 |
| 11 | Regulation of cellular environment & Cellular Energy | Revision sheet 16 |

*Term One Highlights:*

**At the end of this term you will complete:**

2 (out of 4) assessments from the Investigations Folio.

1 (out of 4) assessments from the Skills and Applications tasks

The Issues Investigation is in two parts.

* Part A is an analysis of the sources (1 main source, 3 minor sources) that you plan to use for your investigation. This is one A4 page only. The main source should be a peer reviewed journal article.
* Part B is the issues investigation (maximum 1500 words). Introduction, main arguments, conclusion. Must cover 3 arguments from both sides of the issue.

The enzyme practical will be completed in the week. The practical will be completed during the first lesson of the week. After the practical, you may start writing / researching / presenting your findings. You will be given the second lesson of the week (in the computer room) to finish writing your practical investigation. This will be treated as your sole draft and will be returned to you ASAP.

The enzyme prac is designed by Mr Drake. You will need to follow the method provided and report on your findings.

The macromolecule test will be one lesson in length and cover 3 sections (multiple choice, short response and long response).

Term Two

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| **Wk** | **Content** | **Homework** |
| 1 | Cellular Energy and cell division / cancer | Revision sheets 17 & 18 |
| 2 | Osmosis prac & write-up | **Osmosis Practical** |
| 3 | Cell evolution, cell culture | Revision sheets 19 & 20 |
| 4 | Effects of chemicals | Revision Sheet 21  Crossword (end of chapter)  Practice test (check answers) |
| 5 | Revision | **Cells Test** (revision) |
| 6 | Organisation (tissues) | Revision sheet 22 |
| 7 | Nervous vs hormonal, detecting change (receptors) | Revision sheets 23 & 24 |
| 8 | Exchange surfaces and capillaries | Worksheets 25, 26 & 27 |
| 9 | Capillaries and Cellular energy (autotrophic / heterotrophic) | Worksheets 28 & 29 |
| 10 | Fermentation prac & write-up | **Fermentation Practical** |

*Term Two Highlights:*

**At the end of this term you will complete:**

2 (out of 4) assessments from the Investigations Folio.

1 (out of 4) assessments from the Skills and Applications tasks

The Osmosis and Fermentation practicals will be completed in a week (each). The practical will be completed during the first lesson of the week. After the practical, you may start writing / researching / presenting your findings. You will be given the second lesson of the week (in the computer room) to finish writing your practical investigation. This will be treated as your sole draft and will be returned to you ASAP.

The Osmosis practical is designed by YOU. You will be assessed on your prac design, so make sure you think of good prac design (reduce random errors, control, etc).

The fermentation prac is designed by Mr Drake. You will need to follow the method provided and report on your findings.

The macromolecule test will be one lesson in length and cover 3 sections (multiple choice, short response and long response).

If all goes to plan, you will complete all items from the investigations folio in term 2. Now only 2 tests to go!Term Three

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| **Wk** | **Content** | **Homework** |
| 1 | Reproduction, asexual, meiosis | Revision sheets 30 & 31 |
| 2 | Lifestyle choices, revision | Revision sheet 32, practice test (check answers), crossword |
| 3 | Revision | **Organisms Test** (revision) |
| 4 | Interactions, populations, species, factors determining ecosystem | Revision Sheet 33 & 35 |
| 5 | Trophic levels, energy | Revision sheets 34 & 36 |
| 6 | Succession, reproductive strategies | Revision sheets 37 & 38 |
| 7 | Natural selection and evolution | Revision sheet 39 |
| 8 | Speciation, Human impact | Revision sheets 40 & 41  Practice test (check answers) |
| 9 | Revision | **Ecosystems Test** |
| 10 | Mr Drake in Japan? | Exam revision |

*Term Two Highlights:*

**At the end of this term you will complete:**

2 (out of 4) assessments from the Skills and Applications tasks

The Organisms and Ecosystems tests will be one lesson in length and cover 3 sections (multiple choice, short response and long response).

Term Four

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| **Wk** | **Content** | **Homework** |
| 1 | Macromolecules & Cells Revision | Revision sheets (all), past exams, practice tests |
| 2 | Organisms & Ecosystems Revision | Revision sheets (all), past exams, practice tests |
| 3 | Revision, Past Exams | Revision sheets (all), past exams, practice tests |
| 4 | Revision, Past Exams | Revision sheets (all), past exams, practice tests |
| 5 | **EXAM (Monday 14/11/16)** | **EXAM** (revision) |

*Term Four Highlights:*

**At the end of this term you will complete:**

THE EXAM! Yew!