LEVEL 2 BIOLOGY, BIO 222 2009

Learning outcomes:
At the end of this course, students should be able to

1. investigate and identify inter-relationships and possible patterns within populations and communities, using New Zealand examples.
2. investigate diversity in animals and plants by comparing aspects of their structure and function above the cellular level of organisation.
3. investigate the structure and function of cells, including cell organelles, to identify their similarities and differences.
4. examine the scientific evidence for evolution, and explain how genetic variation and natural selection can lead to genetic changes within populations.
5. process information to enable informed debate on the impact of human activities within ecosystems.

Content of the course:
See Write-on notes.

Assessment details: ncea level 2
Details of each of these are included in the tracking sheet.

Further assessment opportunities
If you do not achieve Internal Achievement Standard 2.4, (AS90461), then you may resit early in Term 2.
There is an opportunity to resit parts of Unit Standard 8925 early in Term 4.
It is not possible to resit Science Achievement Standard AS90771.

Appeal procedures
Any queries about marking decisions should be made to your class teacher when work is handed back. Any formal appeals should be made within a school week of the results being received to the Head of Biology, Mrs Rid. Any dispute over the grade will be investigated by Mrs Rid or the NZQA Principal's Nominee, Ms Lynch term 1 or Mrs Butler terms 2-4. Work containing 'white-out' corrections or written in pencil will not be considered unless the task specifically requires pencil.

Good luck, work hard and enjoy this year.

BIOLOGY 222
COURSE OUTLINE, 2009

ASSESSMENT EVENTS AND DATES	TOPIC DATES	TOPIC AND ACHIEVEMENT OBJECTIVES	CREDITS	MY RESULT
External achievement standard 2.5 (AS 90461) version 2 *Describe concepts and processes relating to ecology* Internal achievement standard 2.4 (AS90460) version 2 *Investigate an interrelationship or pattern in an ecological population or community* March 12 onwards (field trip date, plus follow-up class work) Duration – field work plus 2 periods	February 4– March 27	**Ecology and field trip** **Investigate and identify interrelationships and possible patterns within populations and communities, using New Zealand examples**	3 3	
Draw organisms (1-2 hours field work) March 12				/20
End of topic test (1 period) March 31 - April 3				
External achievement standard 2.8 (AS90464) version 2 *Describe cell structure and function*		**Cell biology**	3	
Cell structures test (part period) May11-15 End of topic test (1 period) August 17-21	March 30 – May8 July 27 – August 21	**Investigate the structure and function of cells, including cell organelles, to identify their similarities and differences.**		
External Achievement Standard 2.3 (AS90459) version 2 *Describe genetic variation and change*	May 11 – June 10	**Genetics and Evolution** **Examine scientific evidence for evolution, and explain how genetic variation and natural selection can lead to genetic change in populations.**	3	
End of topic test (1 period) June 8-12				

Internal Achievement Standard Science 2.2 (AS90771) version 1 *Research information to present a scientific report* Research time for AS 2.2 will be 3 library periods, 3 class periods plus homework time**.** Your assignment MUST be handed in by July 3	June 11 – July 3	**Applied biology and biotechnology** **Process information to enable informed debate on the impact of human activities within ecosystems**	3	
School examination 2 hours	Term 3 August 23 - 28	**School examination**		
Internal Unit Standard US8925 version 3 *Investigate diversity in animals* Practical assessment activity (several periods) Written test (2 periods) September 14 - 25	August 31 – Sep 25	**Diversity in Animals** **Investigate diversity in animals by comparing aspects of their structure and function above cellular level of organisation**	3	
External achievement standard 2.7 (AS90463) version 2 *Describe diversity in the structure and function of plants* End of topic test (1 period) October 28 - 30	October 12 – November 6	**Diversity in Plants** **Investigate diversity in plants by comparing aspects of their structure and function above cellular level** **Classification**	3	