



Waikato Diocesan School for Girls



Course Information Booklet

2017

NCEA Level 1 PhysiChem Student Course Information

Welcome to Level 1 PhysiChem, a course designed to incorporate different aspects of Physics and Chemistry in one comprehensive programme. Throughout the year we will be exploring four different Achievement Standards, of which two relate to Physics and two to Chemistry.

Level 1 PhysiChem Matrix

Level 1 Achievement standards	Credits	Assessment Mode	Literacy	Numeracy
AS 90940 Science 1.1 Demonstrate an understanding of aspects of mechanics	4	External	-	Y
AS 90937 Physics 1.3 Demonstrate an understanding of aspects of electricity and magnetism.	4	External	-	Y
AS 90944 Science 1.5 Demonstrate an understanding of aspects of acids and bases.	4	External	-	-
AS 90947 Science 1.8 Investigate selected chemical reactions	4	Internal	-	-
Total Credits Available	16			

The **Internal Achievement Standard** will be assessed as follows:

AS 90947 (Science 1.8) *Investigate selected chemical reactions*; will be assessed over two hours during the derived grade examinations in Term 3. This will be a practical and individual assessment.

The **Three External Achievement Standards** will be assessed in two external NCEA examination at the end of the year. (Level 1 Science and Level 1 Physics).

You can gain the following grades in the Achievement Standards:

Standard not Attempted	SNA	Did not attempt the standard
Not Achieved	NA	Did not meet the standard
Achieved	A	The standard was achieved
Achieved with Merit	M	The standard was achieved demonstrating very good work
Achieved with Excellence	E	The standard was achieved demonstrating excellent work

Assessment Policy and Procedures

The Science Department will follow the procedures in the Waikato Diocesan School for Girls Assessment Policy booklet. Please ensure that you have carefully read the guidelines on; *Authenticity, Appeals, Course completion, Deadlines* and *Absences*.

Opportunity for Further assessment

Teachers may offer **F**urther **A**ssessment **O**pportunities (FAO) for Achievement Standards and Unit Standards according to the following guidelines:

- A maximum of **one** FAO for a standard can be provided within a year if it is practical and manageable
- The Department must publicise any FAO
- FAO are only appropriate if additional teaching and learning has taken place since the first assessment opportunity
- If a FAO is offered, it must be offered to all students
- All grades must be available as a result of a FAO (i.e. Not Achieved, Achieved, Merit, and Excellence, in the case of achievement standards)

Resubmissions can occur where a student is *offered* the opportunity to correct a minor error in an assessment but only if she is capable of identifying the error independently. Resubmissions will be limited to one per assessment opportunity.

Note: A further assessment opportunity **will not** be offered for *Achievement Standard 90947 (Science 1.8)* as it is not manageable and/or practicable.

Verifying Grades

Students are required to verify the final grades awarded by checking and signing the recorded results.

Compassionate Considerations

Internal Achievement Standard – compassionate consideration for a student who is absent from an internal assessment may be made if there is sufficient evidence available from other work related to the same skill/content and no other further assessment opportunity is available.

External Achievement Standards – NZQA guidelines will be followed.

Retention of Student Work

Student internal assessment material will be retained by the Department until it is no longer required for moderation purposes.

Student Obligations

1. Ensure you understand the assessment programme and policy.
2. Ensure you understand the requirements of each assessment being completed.
3. Ensure **you** keep a record of each assessment on your student tracking sheet.
4. Discuss problems/concerns with the Teacher/Head of Department.

Conditions for Assessment

Normal examination rules will apply.

Assessed by Assurance Process:

- Assessed by class teacher.
- Samples across the range 'Not Achieved, Achieved, Achieved with Merit, Achieved with Excellence' of assessed work will be submitted for assurance to another Physics teacher.
- Samples make comparisons to exemplars.
- Samples indicate assessment decisions made by teacher across the whole class.
- Students' results are confirmed once assurance process has occurred.

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Course Assessment Statement NCEA Level 1 Physichem



Standard number	Credits	Version	Title	Status	Internal/ External	Timing/ Due date	FAO
Science 1.1 AS 90940	4	V3	Demonstrate understanding of aspects of mechanics.		External	Term 1, Week 7 and Prelim exam	
Physics 1.3 AS 90937	4	V3	Demonstrate understanding of aspects of electricity and magnetism.		External	Term 2, Week 10 and Prelim exam	
Science 1.5 AS 90932	4	V4	Demonstrate understanding of aspects of acids and bases		External	Term 1, Week 5 and Prelim exam	
Science 1.8 AS 90947	4	V3	Investigate selected chemical reactions		Internal	Term 3 Prelim exam period	no

Level 1 PhysiChem Calendar 2017

Click on the link above to view the term by term breakdown for Level 2 Physics as well as the assessment time frames.

Waikato Diocesan School for Girls NCEA Level 1 PhysiChem Calendar 2017



Term 1

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11
31/01 -03/02	06/02 -10/02	13/02 -17/02	20/02 -24/02	27/02 -03/03	06/03 -10/03	13/03 -17/03	20/03 -24/03	27/03-31/03	03/04 - 07/04	10/04- 13/04
Intro Week	A.S 90940 Science 1.1 Mechanics (external) 4 credits						A.S 90944 Science 1.5 Acids and Bases (external) 4 credits			
Welcome. Significant figures and graphing.	Speed and Distance-time graphs.	Acceleration and Speed-time graphs. Distance calculations.	Force, mass and acceleration. Free body diagrams, balanced and unbalanced forces. Net Force.	Mass and Weight. Friction and air resistance. Pressure.	Energy transformations, and the conservation of energy.	Work and Power.	Atoms, elements, ions and the periodic table.	Ionic compounds: writing and understanding chemical formulae. Polyatomic ions.	Chemical word equations and Chemical symbol equations. Balancing equations.	Chemical reactions. Rates of reactions.

Term 2

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
01/05 -05/05	08/05 -12/05	15/05 - 9/05	22/05 -06/05	29/05 -02/06	05/06 -09/06	12/06 -06/06	19/06 -03/06	26/06 -30/06	03/07 -07/07
Year 11 camp	Science 1.5 Acids and Bases continued				A.S 90937 Physics 1.3 Electricity and Magnetism (external) 4 credits				
Rates of reactions: Temperature, Concentration, Surface Area and Catalysts	Acids and Bases. Concentrated and Dilute vs Strong and Weak. pH scale	Neutralisation reactions and the production of salts.	Electricity and the role of the electron. Static Electricity, charging by friction and charge distribution	Charge by induction, charge by contact. Discharge and Earthing	Voltage, Current and Resistance. Series and parallel circuits.	Ohm's law. Resistance and Ohm's law. Power and combination circuits.	Bar magnets, magnetic fields, electromagnets.	RH rules, and applications of electromagnets.	