

406/1

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HUMAN BIOLOGY

(Year 11 D406)

Grade-Related Descriptors



GRADE-RELATED DESCRIPTORS

THE GRADING PROCESS

The current model for assigning grades at the conclusion of a subject is “standards-referenced”. In such a system each student’s performance in a subject is considered with reference to a set of predetermined standards at each grade level. The “predetermined standards” are defined through the use of grade-related descriptors.

Grade-related descriptors aim to capture and describe (as explicitly as possible and in relatively broad terms) those behaviours expected to be typically displayed by students at each grade level for each subject. For teachers they are a *point of reference* against which they must match their professional judgment in determining students’ final grades.

FEATURES OF GRADE-RELATED DESCRIPTORS

As a general principle, grade-related descriptors should:

- summarise the *general characteristics* of student performance at each level of achievement
- express, in *positive terms*, what a student knows, understands and is able to do
- *clearly define* on a continuum of performance the level of proficiency for *all grades* (A, B, C, D and E)
- be readily *usable* by teachers in making judgments about final grades to be assigned
- provide a ‘*target*’ for students in their efforts to obtain various grades
- be developed with reference to student work samples as *source material* at each grade level
- relate directly to the content of the course

USING GRADE-RELATED DESCRIPTORS

In planning the assessment program and developing each component task teachers will need to ensure that:

- the nature of each task takes account of the ways that students typically develop over the period of studying the subject
- the rubric for numerical assessment (marking key) for each task is designed with reference to the grade-related descriptors.
- each task that counts towards the awarding of a grade provides students with the opportunity to demonstrate achievement across the full range of performance described in the relevant section/objective of the grade-related descriptors.

The *critical use* of grade-related descriptors is to assist teachers in making comparable judgments about the grades to be awarded at the conclusion of a subject. They do not stand alone. They are *one of a number* of mechanisms available to teachers in deciding summative assessments to be reported to Curriculum Council. They are best used as a point of reference in determining cut-offs after the evaluation of the assessment data collected.

When applying grade-related descriptors, it is also necessary to note that an A student, for example, need not achieve an ‘A’ on all objectives. Teachers will develop a *profile* of achievement of their students across different aspects of the subject and must themselves, with reference to exemplars and moderation procedures, make the *final judgment* of the grade achieved.

GRADE-RELATED DESCRIPTORS: YEAR 11 HUMAN BIOLOGY

An 'A' student will **consistently** be able to:

Knowledge (Weighting 60-70%)

1. Demonstrate a detailed knowledge of a wide range of facts and principles related to humans as functioning organisms and continuity of the human species.
2. Give complete explanations that demonstrate a full understanding of the inter-relationships between body structures and functions.
3. Apply a detailed knowledge of human biology facts and principles to a range of new situations.

Science Process Skills (Weighting 20-30%)

1. Propose an hypothesis, design a controlled experiment to test an hypothesis; criticise the design of experiments and suggest improvements.
2. Make and record accurate and detailed observations, record numerical data in well-designed tables, construct and interpret a range of graph types.
3. Interpret and reach logical conclusions from complex data presented in a variety of formats such as text, diagrams, tables and graphs.
4. Accurately and effectively communicate human biology information avoiding misunderstanding both orally and in writing using various modes of presentation such as text, diagrams, tables and graphs.

Sensori-motor Skills (Weighting 5-15%)

1. Make accurate measurements; use a range of scientific apparatus and instruments demonstrating good technique and safe procedures.
2. Follow instructions and efficiently carry out complex experimental procedures.

A '**B**' student will **consistently** be able to:

Knowledge (Weighting 60-70%)

1. Demonstrate a sound knowledge of a range of basic facts and principles related to humans as functioning organisms and continuity of the human species.
2. Give complete explanations that demonstrate a good understanding of some inter-relationships between body structures and functions.
3. Apply a knowledge of human biology facts and principles to a range of new situations.

Science Process Skills (Weighting 20-30%)

1. Propose an hypothesis, design a controlled experiment to test an hypothesis, and criticise the design of experiments.
2. Make and record accurate and detailed observations, record numerical data in tables, construct and interpret a range of graph types.
3. Interpret and reach conclusions from complex data presented in a variety of formats such as text, diagrams, tables and graphs.
4. Accurately and effectively communicate human biology information avoiding misunderstanding both orally and in writing.

Sensori-motor Skills (Weighting 5-15%)

1. Make accurate measurements; use some scientific apparatus and instruments demonstrating good technique and safe procedures.
2. Follow instruction and efficiently carry out experimental procedures.

A 'C' student will **consistently** be able to:

Knowledge (Weighting 60-70%)

1. Recall the factual content of the course and show some understanding of the principles related to humans as functioning organisms and continuity of the human species.
2. Give simple explanations that demonstrate some understanding of some inter-relationships between body structures and functions.
3. Apply a knowledge of some human biology facts and principles to simple new situations.

Science Process Skills (Weighting 20-30%)

1. Propose an hypothesis, design simple experiments.
2. Make and record accurate observations, record numerical data in tables, construct and interpret simple graphs.
3. Interpret and reach conclusions from data presented in a variety of formats such as text, diagrams, tables and graphs.
4. Accurately communicate simple human biology information avoiding misunderstanding both orally and in writing.

Sensori-motor Skills (Weighting 5-15%)

1. Make accurate measurements; use some scientific apparatus and instruments demonstrating safe procedures.
2. Follow instructions and efficiently carry out routine experimental procedures.

A 'D' student will **consistently** be able to:

Knowledge (Weighting 60-70%)

1. Recall limited facts and principles related to humans as functioning organisms and continuity of the human species.
2. Demonstrate limited understanding of simple inter-relationships between body structures and functions.
3. Use knowledge of human biology facts and principles in simple familiar situations.

Science Process Skills (Weighting 20-30%)

1. Propose an hypothesis in simple situations and design a simple experiment.
2. Make and record accurate observations in tables and construct simple graphs.
3. Interpret and reach some conclusions from simple data presented in a variety of formats such as text, diagrams, tables and graphs.
4. Communicate simple human biology information avoiding misunderstanding.

Sensori-motor Skills (Weighting 5-15%)

1. Make accurate measurements; use simple scientific apparatus and instruments demonstrating safe procedures.
2. Follow instructions and carry out routine experimental procedures.

An 'E' student will:

Knowledge (Weighting 60-70%)

1. Recall limited facts related to humans as functioning organisms and continuity of the human species.
2. Describe simple inter-relationships between body structures and functions.
3. Recall knowledge of human biology facts and principles in familiar situations.

Science Process Skills (Weighting 20-30%)

1. Make a simple prediction and design a simple experiment.
2. Make and record simple observations in tables provided and attempt to construct simple graphs.
3. Describe trends seen in simple data presented in formats such as diagrams and graphs.
4. Communicate some simple human biology information avoiding misunderstanding.

Sensori-motor Skills (Weighting 5-15%)

1. Make measurements, use some simple scientific apparatus and instruments in a safe way.
2. Follow instructions and carry out routine experimental procedures.