Embedding graduate attributes in modules/programmes

Adapted from a powerpoint presentation at the UWC Teaching and Learning Retreat in May 2011 designed and presented by Dr Melvyn November.

Background to graduate attributes at UWC

Graduate Attributes are understood to speak to what employers and the world of work beyond the university expect of graduates in terms of knowledge, skills and attitudes or dispositions. UWC’s attributes are linked to the findings from ‘A baseline study on South African graduates from the perspective of employers’ (Griesel & Parker, 2009).

Components of employer expectations:

- Communication skills
- Technical ability and computer literacy
- Ability to find and access information
- Able to follow and construct logical argument
- General knowledge about local and global affairs
- Interest in ideas and desire to continue learning
- Appreciation of different cultural contexts

There are two tiers of graduate attributes (Barrie, 2004):

Tier 1 includes ‘complex interwoven aspects of human ability’ (Barrie, 2005:3). In UWC terms these translate into ‘generic’ attributes such as:

- Scholarship
- Citizenship and the social good
- Lifelong learning

Tier 2 includes clusters of personal skills and abilities. This translates into attributes such as being or having:

- Inquiry-focused and knowledgeable
- Critically and relevantly literate
- Autonomous and collaborative
- Ethically, environmentally and socially aware and active
- Skilled communicators
- Interpersonal flexibility and confidence to engage across difference
**Curriculum Alignment and graduate attributes**

Graduate attributes

*(What are the overarching attitudes, skills and dispositions for UWC students?)*

↓

Learning Outcomes

*(What do I want my students to be able to do at the end of this module?)*

↓

Assessment Criteria

What do I need to see to know they can do it?

↓

Teaching and Learning Activities

*(What will they be able to do, to know, how will their thinking and behaviour change as a result of the teaching/learning experience?)*

↓

Assessment Tasks

*(How can I get them to show me those things?)*

↓

Assessment Strategy

*(How can all my tasks be ‘combined’ to fit the time and cover all outcomes?)*

↓

Evaluation

*(What do I need to do to improve student learning?)*

---

Graduate attributes are embedded in all the aspects of curriculum alignment that flow from them – all teaching, learning and assessment should aim to develop different, appropriate attributes in students and provide students with opportunities to both acquire and develop the relevant knowledge, skills and dispositions related to their field of study and practice.
**Curriculum alignment tables: an example of showing how attributes can be embedded and recognised**

<table>
<thead>
<tr>
<th>UWC Graduate Attributes</th>
<th>Learning outcomes</th>
<th>Teaching/Learning activities</th>
<th>Assessment tasks and criteria</th>
<th>Practical</th>
<th>Portfolio</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inquiry-focused</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Apply physics principles (of electricity and magnetism, vibrations and waves) to qualitatively analyse real-world phenomena or examples</td>
<td>Class discussion and in-class exercises</td>
<td>Oral presentation</td>
<td>1. Student identifies the relevant physics principles in a real-world phenomenon or application (e.g., earthquakes, ultrasound scanners, photocopiers) 2. Student clearly explains the real-world phenomena in terms of these principles.</td>
<td>NA</td>
<td>See portfolio assessment rubric</td>
</tr>
<tr>
<td>2. Solve qualitative physics problems, both in familiar and novel contexts</td>
<td>Tutorial exercises</td>
<td>Text and exam questions</td>
<td>1. Student identifies the relevant physics principles 2. Student models the situation (explains simplifications and assumptions made) 3. Student uses appropriate representations of the situation (e.g., graphical, mathematical) 4. Student evaluates solution</td>
<td>NA</td>
<td>See portfolio assessment rubric</td>
</tr>
<tr>
<td>3. Conduct scientific investigations</td>
<td>Lab exercises and practical investigations</td>
<td>Pre-practical exercises</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td><strong>Critically and relevantly literate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Conduct research using the library, the web and other sources of information</td>
<td>Oral presentation</td>
<td>Practical reports</td>
<td>See rubric for practical reports in practical manual</td>
<td>NA</td>
<td>See rubric for practical reports in practical manual</td>
</tr>
<tr>
<td>5. Reference sources of information correctly</td>
<td>Practical reports</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>See rubric for practical reports in practical manual</td>
</tr>
</tbody>
</table>