Academic orientation and skills development in the Department of Biological and Medical Sciences through inclusion of academic advisor-led tutorials in a first year module

Andrew Rendell

PASS (Pastoral and Academic Support Scheme): a potted history

From September 2004:

- Revision of Stage 1 with more focus on skills development
- Assessment made use of standardised pro-formas
- Work returned to students *via* PTs to promote monitoring and support

From September 2005:

- Some scientific/transferable skills development activities moved from modules to form a series of tutorials (PASS) run by PTs

From September 2007:

- PASS integrated into a Stage 1 skills module
- More formalised tutorials, with clear objectives and activities
- Coursework set and returned in tutorials, marked by PTs

PASS: principles and objectives

- To help students make the transition from school to university, in terms of academic expectations, through the development of good study habits
- To provide a focus for the introduction and development of key skills
- The small-group context facilitates the development of ideas and understanding through discussion, oral feedback and review of assessment

- The development of the student–advisor relationship makes it more likely that:
  i. Academic Advisors will be in a position to identify students with academic or other problems and refer them to the Student Support Co-ordinator at an early stage, and
  ii. students will seek advice from their academic advisors on academic matters over the course of their degree

- Academic Advisor involvement in student development of key skills in Stage 1 raises awareness of what students have covered in Stage 1 and can inform the design of follow-on activities in Stage 2

The PASS programme: semester 1

Week	Activities (all group-based tutorials unless stated)
0	Induction (individual meetings): introductions; checking programme & timetable
2	Time management (including deadlines & mitigating circumstances); module timetables (Google, PIP, module handbook schedules); setting the essay assignment
4	Peer review of field notebooks; finding literature sources & making notes; the scientific writing style
6	The University's Cheating statement; Turnitin & originality reports; citing sources & referencing
8	Receiving and making sense of feedback (essay assignment work); assessment criteria, study time expectations
11	Receiving and making sense of feedback (essay assignment work); reflecting on time management & semester 1

The PASS programme: semester 2

Week	Activities (all group-based tutorials unless stated)
1	Peer review of scientific reports; discussion of report-writing
4	Receiving and making sense of feedback (scientific report); groupwork roles & problems; discussion of groupwork task & literature search strategies
8	Individual meetings to discuss Stage 2 programme planning
10	Receiving and making sense of feedback (oral presentation and poster); review of the year

Organisational features

1. Need for homogenous student groups (*i.e.,* representing a single programme) of reasonably uniform size (8 – 12)
   - Requires manual allocation/re-allocation of students to academic advisors (PIP programme does not work!)
2. Scheduling of tutorials (not part of formal module timetable, so not on Google Calendar)
   - Academic Advisors responsible for booking rooms and informing students

2 Module Schedule

2.1 *Teaching Schedule for Semester 1*

L = lecture; P = practical; W = workshop; S = seminar; T = PASS tutorial (with Academic Advisors)*

AR = Andrew Rendell, BR = Bruce Riddoch, SA = Saad Arif, DSN = Dani Santos Nunes, RP = Richard Persaud

Week (week commencing)	FRIDAY			WED, THU or FRI*
	1:00 – 2:00	2:00 – 3:00	3:00 – 4:00	12:00 – 1:00 or 4:00 – 5:00
1 (26 Sep)	Introduction to module (AR)	L: Laboratory/fieldwork notebooks (AR)		
2 (3 Oct)	P: Investigating vegetation density and distribution (keeping a field notebook) (BR, AR)			T: The essay assignment
3 (10 Oct)	L: Introduction to literature search strategies (RP)			
4 (17 Oct)	L: The scientific method; the anatomy of a scientific report (BR)			T: Scientific writing
5 (24 Oct)	L: Formulating hypotheses; introduction to sampling and data collection (BR)			
6 (31 Oct)	W: The assessment and presentation of data (BR, SA, DSN)			T: Citing sources
7 (7 Nov)	L: Data distributions and testing for normality (BR)			
8 (14 Nov)	W: Data distributions and testing for normality; t-tests and the Mann-Whitney U test (BR, SA, DSN)			T: Assessment criteria
9 (21 Nov)	S: Writing a scientific report (AR)			
10 (28 Nov)	P: Interpreting measurements of water quality** (AR)			
11 (5 Dec)				T: The role of feedback

*PASS tutorials (weeks 2, 4, 6, 8 & 11) will be organised by your Academic Advisor at one of the days/times indicated above

**The practical will run in week 10 and week 11, go to the session you have been directed to

3. Good communication with and between students and academic advisors
   - Schedule for staff provided before the start of each semester (including assessment responsibilities and timing)
   - Advance reminder for each tutorial (staff and students)

4. Provision of tutorial materials
    - Web-style upgraded handbook (*A Handbook of Writing and Presentation Skills for Science Students*)
    - Tutorial activities
    - Assessment schemes
    - Skills development/assessment was the focus of my University Teaching Fellowship (2006)
    - Sue Robbins devised the induction/transition/support activities

Tutorial 1 (Semester 1, Week 2)

Key themes

- Time management
- Setting the essay assignment
- Module timetabling

Learning objectives

On completing this tutorial, your advisees will have:

- recognised the need for forward planning and time management, and identified effective strategies for practising them;
- been informed about the University's policy on submission of late work (*i.e.*, no mark, unless mitigating circumstances have been accepted in advance of the deadline);
- been informed about the University's Mitigating Circumstances Policy, how to make mitigating circumstance claims, and to whom;
- a clear understanding of what they are expected to do for the essay assignment (topic set by you, and overall task);
- recognised that Google Calendar provides the most reliable module timetabling information, but to look out for e-mails from module leaders with details on errors or omissions;
- received a copy of *A Handbook of Writing and Presentation Skills for Science Students*.

Background and suggested approaches

(i) Time management

By now, your advisees will have been set assignments and may not be used to working to deadlines on different timescales, including some deadlines that may be some weeks away. Good time management will be very important: work submitted late will get a zero mark unless mitigating circumstances have been agreed in advance. Students cannot therefore afford to miss coursework deadlines!

Please review with your advisees the University policy on Mitigating Circumstances. You and they can view a concise explanation and guidance on submitting a claim *via* the link *Handouts, Assessment, and the Preparation and Submission of Coursework* that appears on the Moodle page for *U15503 Science in Practice: Current Topics in Biology and Environmental Sciences* (and all BMS modules). Alternatively the University policy (and the claim form) can be accessed *via* link(s) on Record and Results tab of student PIP pages.

Good time management is probably best addressed through discussion, seeded with your own ideas and experiences: what practices individuals have followed, whether they have worked, what lessons can be drawn. They may find the attached template (p7) useful for recording deadlines and other commitments (please make extra copies, as needed).

An optional time management activity is appended (see **Additi**

(ii) Setting the

Tutorial 5 (Semester 1, Week 11)

Key themes

- Giving feedback on essays and library research logs
- The role of feedback in learning
- The effectiveness of their time management
- Receiving feedback from your students on their Br

Learning objectives

On completing this tutorial, your advisees will have:

- a good grasp of the strengths and weaknesses o need to work on for future assignments that hav
- an understanding of the role and importance of
- assessed the effectiveness of their time mana need to do to improve on any deficiencies;
- had opportunity to provide feedback on thei semester.

Background and suggested approaches

(i) Giving feedback on essays and library res

Please remember to log your marks on *Library Research Marks 2016-17*) before

Please highlight any examples of good examples to illustrate key learning po features that are worth emulating (in son highlighted below).

Please also draw attention to any co most likely are:

- Poorly-informed writing, resulting engagement with, or understandi
- Poor structure and/or undue em plan and/or read sufficiently wi
- Poor writing quality, either refle poor writing skills, or both (the with serious problems could
- Poor paraphrasing (revealed situation where a student is the notes they have mad

5. Development of clear assessment schemes with little ‘wriggle room’
   - Mark moderation challenging (staff team >25; 10-day coursework turnaround time)
   - Use of statement matching approaches for peer summative assessment

U15503 Science in Practice: Current Topics in Biology and Environmental Sciences

Scientific Report

Assessment Sheet

Name of Student _____ Student Number _____

Assessor's Name _____

	Mark (out of 10)	Weighting	Weighted mark
Abstract Concise, complete summary, self-contained		× 1	
Introduction Sufficiency of background science, reference to relevant literature (minimum of two sources used), outline of study and aims		× 2	
Methods Outline of all methods, reference to practical schedule for detail; written as a narrative in the past tense and passive voice		× 1	
Results Sufficiency of text for (i) introducing results, (ii) referring to and linking Tables and Figures, and (iii) drawing attention to key features; appropriate use of Tables and Figures for summarising data; calculations and statistical analysis correct; concise presentation of statistical outcomes		× 3	
Discussion Evidence-based, reasonable and complete interpretation of data		× 2	
References and general presentation Writing style, grammar, punctuation, spelling; references present, cited correctly in the text and listed accurately at the end; report formatting requirements followed		× 1	
		Overall mark (out of 100)	

Feedback

Abstract

	(tick)
Your Abstract is a concise / complete / self-contained* summary of the whole investigation	
Your Abstract reads more like an introduction. It should summarise the whole report, *i.e.,* outline what the study was about, how it was conducted, what the principal results were, and how they may be interpreted	
An Abstract should not refer to sections of the report or cite other sources. It should be self-	

U15503 Science in Practice: Current Topics in Biology and Env Sciences

Poster Peer Assessment Sheet

Overall Mark (out of 15):

Poster Title:			
Authors:			
Group Number:		**Your Name:**	
Authors' Academic Advisor:		**Your Group Number:**	

1. Attractiveness of Design		
Tick ALL that apply	Score	Tick
The layout is good.	0.5	
The choice of font and font size makes the poster easy to read.	0.5	
There is a good balance between the text and illustrations (tables and figures).	0.5	
The presentation style is consistent (headings, text, layout).	0.5	

Total Score for Section 1:

2. Navigation		
Tick ONE box only	Score	Tick
It is obvious where the reader has to start, and each section follows clearly from the last.	2	
It is obvious where the reader has to start, but the order in which the sections should be read is not always immediately clear.	1	
The order in which the sections should be read can only be appreciated after reading the whole poster through a couple of times.	0.5	
The order in which the sections should be read remains a mystery even after reading through the whole poster several times.	0	

Score for Section 2:

3. Text		
a) Content – Tick ONE box only	Score	Tick
The text is convincing. The coverage seems to be appropriately wide-ranging, the level of detail seems appropriate and the material is clearly well understood.	2	
The text is uneven. Some areas seem well-covered and well-understood, but elsewhere the coverage seems brief and understanding is not always demonstrated.	1	
The text is unconvincing. Rather few points are made and understanding is not demonstrated.	0	
b) Structure – Tick ONE box only		
The text develops logically and is easy to follow. All tables and figures are referred to in the		

6. Logging of attendance and marks (Google Sheet)

Typical student feedback …

The meetings with our academic advisor were helpful in getting stuck into university life, and understanding important ways that things are done such as referencing and scientific writing.

PASS tutorials were very helpful. Got very good and helpful feedback back on my work from my academic adviser. The essay was also very helpful in helping me learn how to search for new information on websites.

… but not always complimentary

PASS tutorials seemed to vary significantly depending on academic advisor. Most of my tutorials were 20 minutes long or less and involved my academic advisor reading a PowerPoint out and nothing else. Other students seemed to get more output and information from their PASS tutorials which helped them in this module. This is unfair.

Acknowledgements

Sue Robbins