

**FACULTY OF SCIENCE, TECHNOLOGY AND ENGINEERING
QUALITY ASSURANCE OF UNITS**

Report by Unit Co-ordinator

Unit code: MAT1DM	Year: 2008	Campus: Bundoora
Unit coordinator: Marcel Jackson.		
Teaching staff: Marcel Jackson, Narwin Perkal. Tutors: , Banks, Bicknell, Jackson, Mond, Perkal, Pitkethly, van der Kamp.		

SECTION A: NUMERICAL INFORMATION

Number enrolled: 153 (154 if unenrolled failing student included)

Number completing the QAU questionnaire: 59

Grade distribution this year : A: 31 B: 20 C: 28 D: 26 N: 38 NS: 8 SP-E: 4, SA-E: 4

Grade distribution last year:

Sem 1. A: 19 B: 11 C: 13 D: 20 N: 18 NS: 17 SP-E: 3

Sem 2. A: 19 B: 4 C: 9 D: 9 N: 27 NS: 13 SP-E: 1

Pass rates: **2008:** 77% (exam, minus SP-Es of <50%), 68% (enrol)

2007 (S1/S2): 78%/61% (exam – SP-E), 60%/? (enrol).

2006 (S1/S2): 75%/71% (exam) 64%/60% (enrol)

SECTION B: STUDENT RESPONSES TO THE QUESTIONNAIRE

		Current Mean (s.d.)	2007
b	Work in this unit enhanced my analytic skills	4.1 (.75)	3.7
c	Learning in this unit helped me develop my problem-solving skills	4.1 (.63)	3.8
d	I have developed my skills in written communication in this unit	3.7 (.96)	3.7
e	The unit has helped enhanced my confidence in tackling unfamiliar problems	3.8 (.84)	3.5
1	The aims of the unit were made clear at the start	4.0 (1.0)	3.8
2	The teaching staff put a lot of time into commenting on my work	4.0 (.94)	3.6
3	I was generally given enough time to understand the things I had to learn	3.8 (1.0)	3.6
4	The staff made a real effort to understand difficulties I might be having with my work	4.0 (.78)	4.0
5	Appropriate forms of assessment were used in this unit	4.0 (.93)	3.8
6	The teaching staff gave me helpful feedback	4.1 (.76)	3.9
7	My teaching staff were extremely good at explaining things	4.1 (.82)	3.8
8	The workload was manageable	4.0 (1.0)	3.8
9	The teaching staff worked hard to make this unit interesting	4.1 (.88)	3.8
10	I was able to access the learning resources	4.3 (.82)	3.9
11	The teaching staff of this unit motivated me to do my best work	3.9 (.95)	3.5
12	Overall, I was satisfied with the quality of this unit	4.1 (.77)	3.8
13	The tutorials helped me understand the unit	4.3 (.85)	4.2 (prac)
14	I found the lecture-workshops helpful (answer only if you attended)	4.1 (.87)	
15	I found the HACs helpful (answer only if you attended)	4.2 (.85)	
16	The Quizzos gave me useful feedback	4.1 (.86)	
17	The unit text Discrete Mathematics helped me understand the material	4.0 (1.0)	

(b) Summary of student comments on best aspects

Tutorials/tutors x9, Lect-Work x 3, Content interesting/enjoyable x3, everything x2, lecturers/ lectures x5, Marcel/M's lectures x5, Narwin/N's attitude x3, "logics" x2, John Banks' tutorials, classroom discussions, exam revision in L-Ws, HACs, easy, assistance outside of lectures, access to materials, notes.

(c) Summary of student comments on needed improvements

5 comments appeared to state that there were no aspects in need of improvement ("none", "nothing" x2 "everything fine" etc).

2 students complained that the Quizzos tended to cause disinterested students to attend who then disrupted the class.

More examples of homework problems, lecture notes need to be put online earlier, more time/depth of combinatorics, "logics" (including one who indicated "logics" as the best aspect of the unit!?), "text book more specified", time, more tutorials and L-Ws, extra explanation in revision lectures, greater consistency with how comp sci teaches similar/same topics, shoes.

SECTION C: UNIT COORDINATOR'S COMMENTS

(d.1) Last year's suggested improvements

The comments mostly related to the intended demise of the digital logic labs, and speculations regarding possible additions to the unit to complete the resulting four extra lectures. There was also a comment to continue making further refinements in consultation with staff involved with DM.

(d.2) Were they implemented?

Yes: the unit underwent the scheduled restructuring. As planned, the Part 1 material was spread out across the extra two lectures, while additional material was added to Part 2, namely an extension of the digital logic component (previously half a lecture, now 1 and a half lectures) and the spreading of the automata from 1 lecture to 1 and a half, and the inclusion regular expression notation for the remaining half.

(e) Unit coordinator's comments on the unit this year

DM underwent substantial changes this year with the loss of the old tutorials and practice classes and the introduction of the new tutorials, the diagnostic tests (Quizzos) and Homework Assistance centres. The unit appears to have emerged from this transition as successful as ever, with the same (or greater) satisfactory pass rate as in recent previous years. The number of positive responses in the student questionnaires was very pleasing, and all teaching staff involved should be congratulated.

Note that both the Quizzos, HACs and Lecture/Workshops (which were all new features of 2008) were well received, although two (consecutive) students mentioned that the Quizzos tended to draw in uninterested students who disrupted the class.

(f) Unit coordinator's suggestions for improvements next year (pass rates less than 70% require detailed measures for improvement of the pass rate)

- There were a lot of new tutorial sheets this semester: while these generally went smoothly, there were inevitably a few minor teething problems (typos, too long etc). Many of these have already been appropriately revised. Continued revision should occur where appropriate.

- There should be a revision of the notes before 2009. In Part 2, there are already two new sections that were handed out separately in Semester 1, but need to be incorporated for 2009. Marcel plans to undertake a fairly major revision of Part 2 in Semester 2 of 2008.
- There are no really strong themes from amongst the student suggestions, but two issues raised should be considered: one is the tendency of Quizzos to draw in disruptive students, and the other is the consistency with Computer Science.
 - The first issue is tricky: part of the point of the Quizzos is to get students to attend, and the issue raised by students here seems to be an inevitable by product of this. While this deserves discussion, it may be that this is a “necessary evil”.
 - The second issue: there has been consultation with Computer Science on topics in DM on numerous previous occasions, and copies of our notes a frequently passed on to relevant staff in Computer Science. Perhaps it might be worthwhile requesting a copy of the relevant notes from Computer Science.

SECTION D: COMMENTS BY HEAD OF SCHOOL OR NOMINEE

Signed

(Head of School)

Date