

SOUTHAMPTON SOLENT UNIVERSITY

UNIT REPORT 2009-2010

Unit Code: SWD301	Unit Name: Advanced and Distributed Databases
Faculty: TEC	Unit Leader: AL MONGER
<p>Key strengths and issues arising from student performance. Including any actions taken from last year;</p> <p>Student performance was generally good by those who engaged with the unit throughout the year and took advantage of the formative feedback opportunity for each theme. In particular, the report submissions show that the aim of achieving a balance of practical skills (design and implementation) and analysis/theory in 5 contemporary and advanced database themes is generally being realised.</p> <p>However, the pass rate of 82% for the “1st sitting” was affected by:</p> <ul style="list-style-type: none"> - 3 students did not submit (inc. 2 with exceptional circumstances). - Several students who had the potential to achieve decided to focus on other units leaving this unit as a referral. - 3 students started reasonably well but simply did not submit sufficient deliverables for the later themes. <p>As expected, the pass rate after referral has risen to above 90% following an 83% pass rate of the 6 who submitted referral work.</p> <p>Three key improvements were implemented this year:</p> <ol style="list-style-type: none"> 1. “XML and Databases” in the context of Oracle was introduced in the first theme. This is a relatively new technology, and considerable time was invested over the summer researching this technology and developing teaching and learning resources. 2. The key requirement to evaluate technologies, tools and methods is now better supported with explicit guidance, examples and time allocated in the tutorials (although refer evaluation discussion below). 3. The work involved in producing the final report has been reduced and simplified (as part of an initiative to reduce the workload across some other units on the courses). <p>Generally, the majority of reports show that 1. and 2., in particular, proved effective. XML/SQL was generally well implemented, and some good research and application of XQuery was evident (a majority of students chose this advanced topic). Most reports (although surprisingly not all) were clearly structured as prescribed in the UIG.</p>	

However, the evaluation was still not that well done in many cases. On reflection, requiring an evaluation of technologies, tools and methods across all 5 themes (including the advanced topic) is probably too wide-ranging, time-consuming and challenging to complete. Action 1. below is a response to this.

The cohort is an unusual dichotomy in that 43 are from the b.i.b. International College in Germany and 9 are BIT students taking the unit as an option. The b.i.b students again generally performed well with software implementation. However, some still need more preparation and support in research and other academic skills. This was provided at b.i.b., on the April visit and the induction week, and this will be continue to be developed. 6 of the 9 BIT students performed well this year, and a positive outcome from making this unit available to BIT students. 2 of the 3 UK Computing students performed at bare pass level, and the third did not submit.

Many of the poorly performing students did not include key required analysis and design artefacts (eg relating to OLAP) and/or did not upload draft theme submissions for formative feedback. This was particularly the case as the year progressed. In order to try to address this issue action plan points 2. and 3. will be implemented.

Special Note: The unit leader has participated throughout the year in a HEA/NTFS funded "Disciplinary Commons in Computing Education" for Databases with 14 academics from other universities in the UK. All aspects of this unit (under the prescribed headings Context, Content, Instructional Design, Delivery, Assessment and Evaluation) have been documented, peer-reviewed and will be published in the public domain.

Key strengths and issues arising from student feedback. Please indicate how feedback was obtained during the year;

The SUE feedback continues to be positive with all the scores well above 4 including 4.46 for "I received useful feedback on my course work".

With respect to the comments about database access, there is limited access to the databases from off-campus. Liasion with the University's ICT systems teams will continue to try to improve access.

Actions for improvement next year;

Four key improvements will be implemented in time for next year:

1. Limit the detailed criteria-based evaluation to the advanced topic only. In place of the evaluation of each theme, the requirement will be a reflective account of the development of the artefacts including key references used.
2. Elaborate the three assessment criteria to clarify what is expected and how it is assessed (refer to the new marking guide).
3. Improved learning support for the OLAP dimension modelling activity.
4. Introduce an additional week after the 3rd theme to enable further time for formative feedback, update and completion of the deliverables.

Employer Links: please note below formal and informal links you have with employers
The main employer link is with the University as a major user of Oracle-based systems and an employer of graduates and internees skilled in this subject area. This link has continually informed the delivery of the unit since its inception in 2001-02.
This includes talks by Kenton Wheeler and Anton Jenkins about the development of the University's SIERRA data warehouse.
The employability links and skills should be further developed in the future as a consequence of one of the main outcomes from the b.i.b.-School SDP "Enhancing Employability" project that the unit leader is leading.

Employability Skills: please note below the employability skills associated with this unit
The unit develops and requires general employability skills including report-writing, team-working and e-communication. The unit (as reflected in the learning outcomes) develops subject-specific employability skills of analysis, design, implementation and evaluation relating to database systems.

Analysis of Student Performance as of 26/07/2010 16:19:25									
	No	Mean	SD	0 - 34	35 - 39	40 - 49	50 - 59	60 - 69	70 - 100
Report 1	54	46.31	17.36	9	4	12	19	8	2
Overall	54	46.48	17.28	9	1	15	19	8	2

Student Survey Results	
No Eligible for SUE Survey	55
No Completed	13
Rate	23.64

Analysis of Unit Feedback Survey	
The teaching in this unit helped me to learn effectively	4.23
The assessment in this unit allowed me to demonstrate what I had understood	4.38
I received useful feedback on my course work	4.46
I have been given the opportunity to share my views on this unit with the tutor	4.62

SWD301 - Advanced and Distributed Databases

The unit is well organised	4.69
Learning resources are suitable for my needs	4.46
Overall I was satisfied with the quality of the unit	4.62

Tell us about the strengths of this unit;

- Al Monger has put together some good practical powerpoint resources for a couple of the topics. These generally had a contents page which on click hyperlinked to the relevant slide which was handy.

- Well organised - Very good work load - Excellent resources - Ready feedback

- well organised - well structured material - support for themes

Structure , Individual talk with the tutor

The topics are interesting, because they were completely new to me. especially the topics about data warehousing and data mining have been great. The lessons have been diversified by attendance of external experts (the guy from the sierra project or the guy from leeds).

breaking the unit down in to five sub units

good content, well structure, practice examples from the real life

tutor was very supportive and coursework was systematic

Tell us about how this unit can be improved;

- The unit focused a bit too much on the theme as per getting an assignment done rather than pressing on knowledge - The lack of access of multiple database from home meant it was very very difficult to work from home hampering greatly on the work. - The course assumes a lot of knowledge like the knowledge of Java programming seems to give distinct advantage while aiming for higher marks.

Smaller parts of hand-ins for assignments would be helpful, since students in general are really busy at the end of the year (also it is caused by laziness). In general I do not know how this unit could be improved.

Accessibility of the database

There is whole lot to read and the presentations contained huge amounts of information in small fonts (which sometimes were unrecognisable when sitting in the 4th or 5th row). Maybe it would be easier to have a concise basic presentation which refers to more detailed ones.

