The University of Southern Queensland

Course specification

This version produced 20 Dec 2007.
The current and official versions of the course specifications are available on the web at
Please consult the web for updates that may occur during the year.

### Description: Oracle Development

<table>
<thead>
<tr>
<th>Subject</th>
<th>Cat-nbr</th>
<th>Class</th>
<th>Term</th>
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<tr>
<td>CIS</td>
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<td>2, 2007</td>
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**Academic group:** FOBUS

**Academic org:** FOB005

**Student contribution band:** 2

**ASCED code:** 020303

### STAFFING

Examiner: Glen Van Der Vyver
Moderator: Srecko Howard

### OTHER REQUISITES

Students are required to have access to a personal computer, e-mail capabilities and Internet access to USQConnect. Current details of computer requirements can be found at http://www.usq.edu.au/business/aboutfob.htm

### RATIONALE

Large-scale databases have become core tools in modern Information Technology. The overwhelming majority of IT professionals are exposed to databases in the workplace and they are often expected to develop expertise in one or more database product. It is therefore imperative that students are introduced to the fundamentals of a major DBMS product and the development of client side and server side applications, queries and utilities within the DBMS environment. Beyond this, students should also develop the capacity to think critically about database theory and the application thereof. The Oracle DBMS is a leading edge product which is very well established in the marketplace, and is therefore highly suitable as the software vehicle for this course.

### SYNOPSIS

In this course, students gain an understanding of the practical application of the techniques and theory covered in CIS2002 Students will gain a working knowledge of Oracle SQL and the procedural extension to SQL known as PL/SQL. The course will cover client-side as well as server-side PL/SQL, including stored procedures, functions and triggers. Finally, students extend their theoretical knowledge by studying a small number of selected topics in database theory.

### OBJECTIVES

The course objectives define the student learning outcomes for a course. On successful completion of this course, students should be able to:
1. apply the modelling and normalisation skills acquired in CIS2002 to the creation of database objects
2. write statements and programs in the Oracle (SQL) environment
3. build upon the skills in the relational algebra acquired in CIS2002 to write SQL and SQL*PLUS statements at a variety of levels of complexity
4. write client-side and server-side code using Oracle PL/SQL
5. demonstrate a factual and critical knowledge of a limited number of topics in database theory
6. explain the architecture of Oracle and evaluate the extent to which it meets the requirements of selected theoretical architecture/s
7. write PL/SQL programs, stored procedures and triggers to solve problems.

**TOPICS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Weighting (%)</th>
</tr>
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<tbody>
<tr>
<td>Selected topics in database theory</td>
<td>15.00</td>
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<tr>
<td>DBMS applications programming (Oracle)</td>
<td>85.00</td>
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</table>

**TEXT and MATERIALS required to be PURCHASED or ACCESSED**

ALL textbooks and materials are available for purchase from USQ BOOKSHOP (unless otherwise stated). Orders may be placed via secure internet, free fax 1800642453, phone 07 46312742 (within Australia), or mail. Overseas students should fax +61 7 46311743, or phone +61 7 46312742. For costs, further details, and internet ordering, use the 'Textbook Search' facility at http://bookshop.usq.edu.au click 'Semester', then enter your 'Course Code' (no spaces).

CIS3010 study package available from the USQ Bookshop.


(This handbook is available on the USQ website at http://www.usq.edu.au/faculty/business/departments/infosys/isdhandbook.htm)


(international edn)


**REFERENCE MATERIALS**

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.


**STUDENT WORKLOAD REQUIREMENTS**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>Lectures</td>
<td>12.00</td>
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<tr>
<td>Practical Classes</td>
<td>24.00</td>
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<td>Private Study</td>
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**ASSESSMENT DETAILS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Marks out of</th>
<th>Wtg(%)</th>
<th>Due date</th>
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<tbody>
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<td>PRACTICAL TESTS</td>
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<tr>
<td>ASSIGNMENT 2</td>
<td>100.00</td>
<td>20.00</td>
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<td>EXAM PART A (MULTI-CHOICE)</td>
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<td>12.00</td>
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<tr>
<td>EXAM PART B (WRITTEN)</td>
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<td>END S2</td>
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**NOTES**

1. This assessment item assesses Objectives 1 - 4 and 7. Students will be provided with detailed information at the beginning of the semester.
2. This assessment item assesses Objectives 1 - 4 and 7.
3. This assessment item assesses Objectives 1 - 4 and 7.
4. This assessment item assesses Objectives 1 and 3 - 7. The examination is scheduled to be held in the end-of-semester examination period. Students will be advised of the official examination date for Exam (Parts A and B) after the timetable has been finalised. The total working time for Exam (Parts A and B) is 2 hours.

**IMPORTANT ASSESSMENT INFORMATION**

1. Attendance requirements:
   It is the students' responsibility to attend and participate appropriately in all activities (such as lectures, tutorials, laboratories and practical work) scheduled for them, and to study all material provided to them or required to be accessed by them to maximise their chance of meeting the objectives of the course and to be informed of course-related activities and administration.

2. Requirements for students to complete each assessment item satisfactorily:
   To satisfactorily complete an individual assessment item a student must achieve at least 50% of the available marks. (Depending upon the requirements in Statement 4 below,
students may not have to satisfactorily complete each assessment item to receive a passing grade in this course.)

3 Penalties for late submission of required work:
If students submit assignments after the due date without prior approval of the examiner, then a penalty of 5% of the total marks gained by the student for the assignment may apply for each working day late up to ten working days at which time a mark of zero may be recorded. No assignments will be accepted after model answers have been posted.

4 Requirements for student to be awarded a passing grade in the course:
To be assured of receiving a passing grade a student must achieve at least 50% of the total weighted marks available for the course.

5 Method used to combine assessment results to attain final grade:
The final grades for students will be assigned on the basis of the aggregate of the weighted marks obtained for each of the summative assessment items in the course.

6 Examination information:
This is a closed examination. Candidates are allowed to bring only writing and drawing instruments into the examination. The examination consists of two parts. Part A is worth 20 marks and Part B is worth 80 marks.

7 Examination period when Deferred/Supplementary examinations will be held:
Any Deferred or Supplementary examinations for this course will be held during the next examination period.

8 University Regulations:
Students should read USQ Regulations 5.1 Definitions, 5.6 Assessment, and 5.10 Student Academic Misconduct for further information and to avoid actions which might contravene university regulations. These regulations can be found at http://www.usq.edu.au/corporateservices/calendar/part5.htm. Students should also read the Faculty of Business Policies and Procedures which can be found at http://www.usq.edu.au/business/aboutfob.htm.

ASSESSMENT NOTES

1 Assignments: (i) The due date for an assignment is the date by which a student must submit the assignment to the USQ. (ii) Students must retain a copy of each assignment submitted for assessment. This must be produced within 24 hours if required by the examiner. (iii) In accordance with university policy, the examiner may grant an extension of the due date of an assignment in extenuating circumstances. (iv) The examiner will normally only accept assessments that have been written, typed or printed on paper-based media. (v) In the event that a due date for an assignment falls on a local public holiday in their area, such as a show holiday, the due date for the assignment will be the next day. Students are to note on the assignment cover the date of the public holiday for the examiner's convenience.

2 Course weightings: Course weightings of topics should not be interpreted as applying to the number of marks allocated to questions testing those topics in an examination paper.

3 Referencing in assignments: Unless otherwise directed by the examiner, all written and oral assignments submitted by students must conform to the guidelines laid out in the 'Communication skills handbook: How to succeed in written and oral communication'. Any work not prepared in accordance with these guidelines may be subject to penalty or requirement for resubmission.

4 Make-up work: Students who have undertaken all of the required assessments in a course but who have failed to meet some of the specified objectives of a course within the normally
prescribed time may be awarded the temporary grade: IM (Incomplete - Make up). An IM grade will only be awarded when, in the opinion of the examiner, a student will be able to achieve the remaining objectives of the course after a period of non-directed personal study.

5 Deferred work: Students who, for medical, family/personal, or employment-related reasons, are unable to complete an assignment or to sit for an examination at the scheduled time may apply to defer an assessment in a course. Such a request must be accompanied by appropriate supporting documentation. One of the following temporary grades may be awarded: IDS (Incomplete - Deferred Examination); IDM (Incomplete Deferred Make-up); IDB (Incomplete - Both Deferred Examination and Deferred Make-up).

OTHER REQUIREMENTS

1 Learning resources: Prescribed texts and materials (see above); recommended reference materials (see above); printed Introductory Book*, Study Book/s*, and Book/s of Selected Readings*; and course Website accessible via USQConnect. *part of the study package available from the USQ Bookshop

2 E-mail and Internet access: Students require access to e-mail and Internet access to USQConnect for this course. Students also require a PC and Internet access for a connection to the USQ Oracle server. The PC should have the following specifications: Pentium 4 or above; 8 GB free disk space; 512 MB of memory, although 256 MB may be sufficient.

3 Some study materials and important information about the course will be made available via the online discussion group. Students are therefore expected to access the discussion group regularly and read all postings.