MONASH University

**FIT3068
Systems integration**

Unit guide

Semester 1, 2009

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Unit leader :

Sue Foster

Lecturer(s) :

Caulfield

- Sue Foster

South Africa

- TBA

Introduction

Welcome to FIT3068, System Integration for Semester 1, 2009. This is a 6 point unit and is a core unit in the BITS Information system major. This unit has been designed to provide you with an understanding of enterprise systems. It will define Enterprise System scale (ERP) packages as the main business information system in the portfolio of large organisations. The unit will examine the forms and mechanisms of business process integration and of data integration within the Enterprise System package, and between the Enterprise System and other business information systems and databases. The unit will introduce the different types of integration associated with various types of middleware software. The unit will address the role of middleware in the specification and implementation of business process workflow systems in both the homogenous environment of an Enterprise System package and in heterogenous software environments.

Unit synopsis

ASCED Discipline Group classification: 020305 Systems Analysis and Design

This unit will give students an understanding of the portfolio of information systems needed to support a large organisation and identify Enterprise Systems (ERP) packages as the principal business information system in large organisations. It will examine the forms and mechanisms of business process integration and data integration between the Enterprise System and other business information systems, including legacy systems and office systems. It will introduce students to the concept of workflow and to selected software tools for process modelling and workflow design, and to the different types of integration software (middleware) and technologies that enable business process integration through workflow automation.

Learning outcomes

Knowledge and Understanding

Systems Integration has the general objective of preparing IS major students for professional practice as systems analysts in corporate environments that implement complex workflow solutions for mainstream business processes.The unit intends to equip students to be able to hold informed discussions with both the business users and the technology implementers about the software tools available to deliver the required business functionality.

Cognitive Domain Objectives At the completion of the unit students will have knowledge of:

the evolution and current application of Enterprise Systems the scale and complexity issues associated with Enterprise Systems

and have an understanding of:

the concepts of integrated data and processing across different business processes the business and technological benefits of such integration the limitations and constraints that accompany the above benfits the differences in structure between enterprise scale and personal scale information systems Attitudes, Values and Beliefs

Affective Domain Objectives At the completion of the unit students will have been exposed to attitudes, values and beliefs consistent with the following objectives:

to develop attitudes which enable the setting of reasonable expectations for ES performance to acknowledge and value the perspectives of business, IT and managerial users to maintain the highest ethical and professional standards in the evaluation, analysis, recommendation and implementation of integrated solutions Practical Skills

Psychomotor Domain Objectives At the completion of the unit students will be able to:

design appropriate workflow solutions for common business processes develop facility in the use of a mainstream process modelling and integration software product Relationships, Communication and TeamWork

Social Domain Objectives At the completion of the unit students will be able to:

work as part of a professional team in evaluating and recommending IT solutions to identified business situations be able to communicate ES related concepts and issues to business clients, managers, IT peers and business partners

Workload

For on campus students, workload commitments are:

- two-hour lecture and
- 1.5 hour tutorial in a laboratory
- a minimum of 2-3 hours of personal study per one hour of contact time in order to satisfy the reading and assignment expectations.

Unit relationships

Prerequisites

Candidates are expected to have an understanding of the business andtechnology concepts associated with the concept of Information Systemsas abstract models of business processes. These would normally beobtained from study in an FIT or Faculty of Business and Economicsundergraduate program. .

Relationships

FIT3068 is a core unit at 3rd year level in the BITS major in Information Systems and is an elective available to any other degree.

Before attempting this unit you must have satisfactorily completed 12 credit points of second year FIT units or be simultaneously enrolled.

Continuous improvement

Monash is committed to 'Excellence in education' (Monash Directions 2025 - http://www.monash.edu.au/about/monash-directions/directions.html) and strives for the highest possible quality in teaching and learning.

To monitor how successful we are in providing quality teaching and learning Monash regularly seeks feedback from students, employers and staff. One of the key formal ways students have to provide feedback is through Unit Evaluation Surveys. The University's Unit Evaluation policy (http://www.policy.monash.edu/policy-bank/academic/education/quality/unit-evaluation-policy.html) requires that every unit offered is evaluated each year. Students are strongly encouraged to complete the surveys as they are an important avenue for students to "have their say". The feedback is anonymous and provides the Faculty with evidence of aspects that students are satisfied and areas for improvement.

Faculties have the option of administering the Unit Evaluation survey online through the my.monash portal or in class. Lecturers will inform students of the method being used for this unit towards the end of the semester.

Student Evaluations

If you wish to view how previous students rated this unit, please go to
http://www.adm.monash.edu.au/cheq/evaluations/unit-evaluations/

Improvements to this unit

Students found this unit stimulating. As the unit was a new unit the content and learning objectives will be reduced.

Unit staff - contact details

Unit leader

Ms Susan Foster
Lecturer
Phone +61 3 990 32404
Contact hours : Friday, 10.00-11.30

Lecturer(s) :

Ms Susan Foster
Lecturer
Phone +61 3 990 32404
Contact hours : TBA

Teaching and learning method

A combination of lecture and related laboratory work will link together and provide the basis for this unit.

Lectures will include webcasts, guest speakers from industry appropriate discussion topics that relate to enterprise system integration. Assignments will support the learning of these issues.

Tutorials:

Students will use SAP to understand enterprise system integration issues. Students are required to have hands on experience in sap and appropriate process modelling tools.

Students will also be involved in tutorial discussions about topical issues that relate to enterprise systems.

Tutorial allocation

On-campus students should register for tutorials/laboratories using Allocate+

Communication, participation and feedback

Monash aims to provide a learning environment in which students receive a range of ongoing feedback throughout their studies. You will receive feedback on your work and progress in this unit. This may take the form of group feedback, individual feedback, peer feedback, self-comparison, verbal and written feedback, discussions (on line and in class) as well as more formal feedback related to assignment marks and grades. You are encouraged to draw on a variety of feedback to enhance your learning.

It is essential that you take action immediately if you realise that you have a problem that is affecting your study. Semesters are short, so we can help you best if you let us know as soon as problems arise. Regardless of whether the problem is related directly to your progress in the unit, if it is likely to interfere with your progress you should discuss it with your lecturer or a Community Service counsellor as soon as possible.

Unit Schedule

Week	Topic	Key dates
1	Introduction to information systems	2 March
2	Information systems in organisations	9 March
3	The challenge of integration	16 March
4	Business process view	23 March
5	Enterprise Systems (1)	30 March
6	Enterprise systems (2)	6 April
	Mid semester break	
7	Enterprise systems (3)	20 April
8	Enterprise systems (4)	27 April
9	SOA and webservices	4 May
10	Enterprise systems (5)	11 May
11	Organisational change strategies	18 May
12	Future issues and trends	25 May

13	Review	1 June

Unit Resources

Prescribed text(s) and readings

There are no prescribed texts for this unit. Students will be given recommended readings that are pertinent to the topic they are studying each week. Below are a list of recommended texts and readings that students may find helpful in preparing for lectures and tutorials and assignments.

Students are expected to find appropriate references for the various topics discussed in the lectures and assignments using the facilities provided by the Monash University Libraries.

Recommended text(s) and readings

Britton & Bye (2004) "IT Architectures and Middleware". 2e. Addison-Wesley. Hohpe & Woolf (2004) "Enterprise Integration Patterns". Addison-Wesley.Monk, E.F. and Wagner, B.J. (2006) "Concepts in Enterprise Resource Planning". 2e. Thomson Course Technology.Sandoe, K., Corbitt, G., & Boykin, R. (2001).   Enterprise Integration. Wiley & Sons: New York.O'Rourke, Fishman & Selkow (2003) "Enterprise Architecture: Using the Zachman Framework". Thomson Course Technology.

Required software and/or hardware

On campus students will have access to software that they require for this unit, which is installed in the computing labs. This will include: SAP (version to be advised)

Equipment and consumables required or provided

Students studying off-campus are required to have the minimum system configuration specified by the Faculty as a condition of accepting admission, and regular Internet access. On-campus students, and those studying at supported study locations may use the facilities available in the computing labs. Information about computer use for students is available from the ITS Student Resource Guide in the Monash University Handbook. You will need to allocate up to **n** hours per week for use of a computer, including time for newsgroups/discussion groups.

Study resources

Study resources we will provide for your study are:

- Weekly detailed lecture notes outlining the learning objectives, discussion of the content, required readings and exercises;
- Weekly tutorial or laboratory tasks and exercises
- Assignment specifications
- A sample examination
- Discussion groups
- This Unit Guide outlining the administrative information for the unit;
- The unit web site on MUSO, where resources outlined above will be made available.

Library access

The Monash University Library site contains details about borrowing rights and catalogue searching. To learn more about the library and the various resources available, please go to http://www.lib.monash.edu.au.

The Educational Library and Media Resources (LMR) is also a very resourceful place to visit at http://www.education.monash.edu.au/library/

Monash University Studies Online (MUSO)

All unit and lecture materials are available through MUSO (Monash University Studies Online). Blackboard is the primary application used to deliver your unit resources. Some units will be piloted in Moodle. If your unit is piloted in Moodle, you will see a link from your Blackboard unit to Moodle (http://moodle.monash.edu.au) and can bookmark this link to access directly. In Moodle, from the Faculty of Information Technology category, click on the link for your unit.

You can access MUSO and Blackboard via the portal: http://my.monash.edu.au

Click on the Study and enrolment tab, then Blackboard under the MUSO learning systems.

In order for your Blackboard unit(s) to function correctly, your computer needs to be correctly configured.

For example:

- Blackboard supported browser
- Supported Java runtime environment

For more information, please visit: http://www.monash.edu.au/muso/support/students/downloadables-student.html

You can contact the MUSO Support by phone : (+61 3) 9903 1268

For further contact information including operational hours, please visit:
http://www.monash.edu.au/muso/support/students/contact.html

Further information can be obtained from the MUSO support site:
http://www.monash.edu.au/muso/support/index.html

Assessment

Unit assessment policy

This unit is assessed with two assignments and a two hour final formal supervised assessment.

To pass this unit which includes an examination as part of the assessment a student must obtain:

- 40% or more in the unit's examination and
- 40% or more in the unit's non-examination assessment andattain
- an overall unit mark of 50% or more

If a student does not achieve 40% or more in the unit examination or the unit non-examination assessment then a mark of no greater than 44-N will be recorded for the unit."

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The following are examples that detail how the policy works:

Example 1:
Student A
Assignment 1 - 10 marks out of 20
Assignment 2 - 2 marks out of 20
Exam - 35 marks out of 60

To pass the hurdle requirements set by the above Faculty policy the student would need:
- at least 16 out of the 40 available marks for the assignments (student has received 12 marks only therefore they have not met the hurdle requirement)
- at least 24 marks out of the 60 available marks for the exam (student has received 35 marks for the exam)
- at least 50 marks overall to pass (student has received 47 marks overall)

Because the student has not met the Assignment hurdle and their overall mark is greater than 44, their mark of 47 N will be downgraded to a 44 N. This ensures that the student does not become eligible for an NP.

Example 2:
Student B
Assignment 1 - 15 marks out of 20
Assignment 2 - 17 marks out of 20
Exam - 20 marks out of 60

To pass the hurdle requirements set by the above Faculty policy the student would need:
- at least 16 marks out of the 40 available marks for the assignments (student has received 32 marks)
- at least 24 marks out of the 60 available marks for the exam (student has received 20 marks - has not met the hurdle requirement)
- at least 50 marks overall (student has received 52 marks overall)

Because the student has not met the Exam hurdle and their overall mark is greater than 44, their mark of 52 P will be downgraded to a 44 N.
Example 3:
Student C
Assignment 1 - 9 marks out of 20
Assignment 2 - 7 marks out of 20
Exam - 24 marks out of 60

To pass the hurdle requirements set by the above Faculty policy the student would need:
- at least 16 marks out of the 40 available marks for the assignments (student has received 16 marks)
- at least 24 marks out of the 60 available marks for the exam (student has received 24 marks)
- at least 50 marks overall (student has received 40 marks overall)

Because the student has not met the overall unit mark of 50%, they will fail the unit, and since their overall mark is less that 44, their mark of 40 N remains unchanged.

Assignment tasks

- **Assignment Task**

  Title : Assignment 1: TBA

  Description :

  Weighting : 20%

Criteria for assessment :

Due date : TBA

- **Assignment Task**

Title : Assignment 2: TBA

Description :

Weighting : 20%

Criteria for assessment :

Due date : TBA

Examinations

- **Examination 1**

Weighting : 60%

Length : 2 hours

Type (open/closed book) : Closed book

Assignment submission

All assignments will be submitted by paper submission to **level 6, Caulfield School of IT FIT3068 assignment drop box by 4 pm on the day the assignment is due. However students who have completed their assignment and are ready to hand it in, may do so by leaving it in the allocated assignment drop box before the due date.**

The assignment must include the appropriate cover sheet correctly filled out and attached at the front of the assignment.

Do not email submissions.

The due date is the date by which the submission must be received.

Assignment coversheets

Assignments

Standards for presentation

All printed assignment work must be word processed and meet the standards set out in the assignment. Refer to the following URL for writing assignments and for referencing styles:

http://www.infotech.monash.edu.au/resources/student/assignments/sims-style-guides.html

All assignments must include an appropriate *signed* CaSIT assignment cover page. Located at:

http://www.infotech.monash.edu.au/resources/student/assignments/

http://www.infotech.monash.edu.au/resources/student/assignments/policies.html

University and Faculty policy on assessment

Due dates and extensions

The due dates for the submission of assignments are given in the previous section. Please make every effort to submit work by the due dates. It is your responsibility to structure your study program around assignment deadlines, family, work and other commitments. Factors such as normal work pressures, vacations, etc. are seldom regarded as appropriate reasons for granting extensions. Students are advised to NOT assume that granting of an extension is a matter of course.

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 If you believe that your assignment will be delayedbecause of circumstances beyond your control such as illness, you should applyfor an extension at least three days prior to the due date. All applications for extensions must bemade in writing to your lecturer.

In cases of illness, medical certificates or other supporting documentation will be required and a copy of the email or other written communication confirming acceptance of the extension must be attached to the assignment submission.

Late assignment

Assignments received after the due date will be subject to a penalty.

Late assignments submitted without an approved extension may be accepted (*up to one week late*) at the discretion of your lecturer, but will be penalised at the rate of 10% of total assignment marks per day (including weekends). *Example*:

Total marks available for the assignment = 100 marks

Marks received for the assignment = 70 marks

Marks deducted for 2 days late submission (20% of 100) = 20 marks

Final mark received for assignment = 50 marks

Return dates

Students can expect assignments to be returned within two weeks of the submission date or after receipt, whichever is later.

Assessment for the unit as a whole is in accordance with the provisions of the Monash University Education Policy at http://www.policy.monash.edu/policy-bank/academic/education/assessment/

We will aim to have assignment results made available to you within two weeks after assignment receipt.

Plagiarism, cheating and collusion

Plagiarism and cheating are regarded as very serious offences. In cases where cheating has been confirmed, students have been severely penalised, from losing all marks for an assignment, to facing disciplinary action at the Faculty level. While we would wish that all our students adhere to sound ethical conduct and honesty, I will ask you to acquaint yourself with the University Plagiarism policy and procedure (http://www.policy.monash.edu/policy-bank/academic/education/conduct/plagiarism-procedures.html) which applies to students detected plagiarising.

In this University, cheating means seeking to obtain an unfair advantage in any examination or any other written or practical work to be submitted or completed by a student for assessment. It includes the use, or attempted use, of any means to gain an unfair advantage for any assessable work in the unit, where the means is contrary to the instructions for such work.

When you submit an individual assessment item, such as a program, a report, an essay, assignment or other piece of work, under your name you are understood to be stating that this is your own work. If a submission is identical with, or similar to, someone else's work, an assumption of cheating may arise. If you are planning on working with another student, it is acceptable to undertake research together, and discuss problems, but it is not acceptable to jointly develop or share solutions unless this is specified by your lecturer.

Intentionally providing students with your solutions to assignments is classified as "assisting to cheat" and students who do this may be subject to disciplinary action. You should take reasonable care that your solution is not accidentally or deliberately obtained by other students. For example, do not leave copies of your work in progress on the hard drives of shared computers, and do not show your work to other students. If you believe this may have happened, please be sure to contact your lecturer as soon as possible.

Cheating also includes taking into an examination any material contrary to the regulations, including any bilingual dictionary, whether or not with the intention of using it to obtain an advantage.

Plagiarism involves the false representation of another person's ideas, or findings, as your own by either copying material or paraphrasing without citing sources. It is both professional and ethical to reference clearly the ideas and information that you have used from another writer. If the source is not identified, then you have plagiarised work of the other author. Plagiarism is a form of dishonesty that is insulting to the reader and grossly unfair to your student colleagues.

Register of counselling about plagiarism

The university requires faculties to keep a simple and confidential register to record counselling to students about plagiarism (e.g. warnings). The register is accessible to Associate Deans Teaching (or nominees) and, where requested, students concerned have access to their own details in the register. The register is to serve as a record of counselling about the nature of plagiarism, not as a record of allegations; and no provision of appeals in relation to the register is necessary or applicable.

Non-discriminatory language

The Faculty of Information Technology is committed to the use of non-discriminatory language in all forms of communication. Discriminatory language is that which refers in abusive terms to gender, race, age, sexual orientation, citizenship or nationality, ethnic or language background, physical or mental ability, or political or

religious views, or which stereotypes groups in an adverse manner. This is not meant to preclude or inhibit legitimate academic debate on any issue; however, the language used in such debate should be non-discriminatory and sensitive to these matters. It is important to avoid the use of discriminatory language in your communications and written work. The most common form of discriminatory language in academic work tends to be in the area of gender inclusiveness. You are, therefore, requested to check for this and to ensure your work and communications are non-discriminatory in all respects.

Students with disabilities

Students with disabilities that may disadvantage them in assessment should seek advice from one of the following before completing assessment tasks and examinations:

- Faculty of Information Technology Student Service staff, and / or
- your Unit Coordinator, or
- Disabilities Liaison Unit

Deferred assessment and special consideration

Deferred assessment (not to be confused with an extension for submission of an assignment) may be granted in cases of extenuating personal circumstances such as serious personal illness or bereavement. Information and forms for Special Consideration and deferred assessment applications are available at http://www.monash.edu.au/exams/special-consideration.html. Contact the Faculty's Student Services staff at your campus for further information and advice.