
SISAT

School of Information Systems & Technology
Faculty of Informatics

ISIT100 Systems Analysis Subject Outline Spring Session 2009

Head of School –Associate Professor Peter Hyland, Student Resource Centre, Tel: (02) 4221 3606

GENERAL INFORMATION

Subject Coordinator

Telephone Number:

Email:

Location:

Prof Peter Eklund

4221 3874

peklund@uow.edu.au

39.213

Prof Eklund's consultation times during session:

Day

Tuesday

Friday

Time

10.30-12.30

9.30-11.30

Subject Organisation

Session:

Credit Points

Contact hours per week:

Lecture Times & Location:

Tutorial Day, Time and Location can be found at:

Spring Session, Wollongong Campus

6 credit points

2 hr lectures, 2hr tuts

Tuesday 8:30 – 10:30 AM 20-LT5

<http://www.uow.edu.au/student/timetables/index.html>

Students should check the subject's web site regularly as important information, including details of unavoidable changes in assessment requirements will be posted from time to time via e-Learning space <http://www.uow.edu.au/student/>. Any information posted to the web site is deemed to have been notified to all students.

Subject Description

This subject aims to introduce the student to the techniques and technologies of structured systems analysis. It examines the complementary roles of systems analysts, clients and users in life cycle development methods. Data flow analysis and process descriptions are introduced and the relation to object orientation examined. The student will make use of a Computer Aided Software Engineering (CASE) tool to document solutions to typical problems.

Subject Objectives

On successful completion of this subject, students should be able to: demonstrate an understanding of the origin and development of formal systems analysis methods; demonstrate an ability to analyse the key elements of a narrative and interview; demonstrate an appreciation of the relationship between information strategy and organisational structure; information systems requirements and organisational objectives; complementary roles of clients, users and analysts in the development of computer based information systems and demonstrate an ability to analyse a system and present a system description, demonstrate an appreciation of CASE tools as an aid to systems modelling.

Graduate Qualities

This subject will continue to the following graduate qualities:

- Informed
- Independent learners
- Problem solvers
- Effective communicators
- Responsible
- Teamwork
- Innovation and Design

Further information can be found at:

<http://www.uow.edu.au/informatics/sisat/current/SubjectInformation/UOW051055.html>

Attendance Requirements:

It is the responsibility of students to attend all lectures/tutorials/labs/seminars/ practical work for subjects for which you are enrolled. It should be noted that the amount of time spent on each 6 credit point subject should be at least 12 hours per week, which includes lectures/tutorials/labs etc.

Satisfactory attendance is deemed by the University, to be attendance at approximately 80% of the allocated contact hours.

Attendance rolls will be kept for lectures and tutorials/laboratories. If you are present for less than 80% of any of these and would have otherwise passed you need to apply for student academic consideration, otherwise a TF (technical fail) grade will be recorded.

Students **MUST** attend their **allocated** tutorial unless they have the written permission of the subject coordinator.

Method of Presentation:

In order to maximize learning outcomes, it is strongly recommended that students attend all lectures.

The subject will be presented as a series of lectures and tutorials. In the lectures, students will be introduced to systems analysis concepts and related materials. During tutorials (which are held in the computer laboratories) students will engage in practical work related to the application of the systems analysis concepts and materials covered in lectures.

Lecture Schedule: (Subject to variation)

A proposed Lecture schedule for the subject is as follows:

Week	Lecture Topic	Textbook Chapter(s)	Tutorials/ Computer Laboratories
1	Emergency Evacuation Procedures, Subject Overview and Introduction	1	No Tutorials or Computer Laboratories
2	Approaches to software development	2	Assignment 1
3	Project management	3	
4	Investigating system requirements	4	Assignment 2
5	Modelling systems requirements	5	
6	Modelling systems requirements	5	Assignment 3
7	Traditional approaches to requirements	6	
8	Object Oriented (OO) approaches to requirements	7	Group work in lab or elsewhere
9	Mid Term Quiz (in Lecture time)	1-7	Analysis Report Part 1 due, group presentation
Mid Session Recess 28 Sept – 5 Oct			
10	Object Oriented (OO) approaches to requirements	7	Assignment 4
11	Evaluating alternatives	8	
12	Current Trends in System Development	17	Analysis Report Part 2 due, group presentation
13	Review and Subject Summary		No Tutorials or Computer Laboratories
Study Recess 2 November – 6 November			
University Examination Period (7 November – 19 November)			

Changes to the above schedule will be posted via e-Learning space <http://www.uow.edu.au/student/>. Any information posted to the web site is deemed to have been notified to all students.

Subject Materials:

Any readings/references are recommended only and are not intended to be an exhaustive list. Students are encouraged to use the library catalogue and databases to locate additional readings

Textbook(s):

Required Textbook

Satzinger, J., Jackson, R. and Burd, S. (2007), **Systems Analysis & Design In A Changing World**, 4th ed., Thomson Course Technology, Boston, available from the UniCentre bookshop for \$109.95.

Other Resources:

References

Avison, D. E. and Fitzgerald, G., "Information Systems Development: Methodologies, Techniques and Tools", 4th ed., 2006, McGraw-Hill International (UK), London.

Beck, K., "Extreme Programming Explained", 2000, Addison-Wesley, Boston.

- Bentley, C., "PRINCE2: A Practical Handbook", 2002, Butterworth-Heinemann, Oxford.
- Cockburn, A., "Agile Software Development", 2001, Addison-Wesley Pub Co.
- Crinnion, J., "Evolutionary Systems Development: a practical guide to the use of prototyping within a structured systems methodology", 1991, Pitman, London.
- Davenport, T. H., "Process innovation: reengineering work through information technology", 1993, Harvard Business School Press, Mass
- Gelinas, Jr, U. J., Sutton, S. G. and Fedorowicz, J., *Business Processes and Information Technology*, 2004, Thomson South-Western, Mason, Ohio.
- Jacobson, I, G. Booch, J. Rumbaugh, "The unified software development process", 1999, Reading, Mass. Addison-Wesley.
- Jeffries, R., "Extreme Programming Installed", 2001, Pearson Education, London.
- Martin, J., "Rapid application development", 1991, New York: Macmillan Pub. Co.; Toronto: Collier Macmillan Canada; New York: Maxwell Macmillan International.
- Mumford, E., "Effective systems design and requirements analysis: the ETHICS approach", 1995, Basingstoke: Macmillan.
- Stapleton, J., "DSDM Dynamic Systems Development Method, The Method in Practice", 1997, Addison-Wesley, Harlow, UK.
- Vidgen, R., Avison, D. E., Wood, R., and Wood-Harper, A. T., "Developing Internet Applications", 2002, Butterworth-Heinemann, Oxford.
- Warren, I., "The Renaissance of Legacy Systems: Method Support for Software-System Evaluation", 1999, Springer-Verlag, London.
- Welti, N., "Successful SAP R/3 Implementation", 1999, Addison-Wesley, Harlow, UK.

Assessment:

This subject has the following assessment components.

ASSESSMENT ITEMS & FORMAT	% OF FINAL MARK	GROUP/ INDIVIDUAL	DUE DATE
1. 4 x fortnightly practical assignments using MS Visio, MS project and MS Access, each worth 5%.	20%	Individual	Due in your enrolled tutorial as specified in the requirements for each of the assignments.
2. Mid session quiz, multiple choice and short answer questions on work covered in Weeks 1 to 8 inclusive.	20%	Individual	Conducted during the Week 9 lecture.
3. Analysis Report Part 1: Narrative and use case analysis including other modelling artefacts as specified.	10%	Group	Hardcopy due in your enrolled tutorial in Week 9. Softcopy due by Tuesday 12:30pm of that week.
4. Analysis Report Part 2: System description and requirements and other artefacts as specified. Report and 10 min presentation.	10%	Group	Hardcopy due in your enrolled tutorial in Week 12. Softcopy due by Tuesday 12:30pm of that week.
6. Final exam	40%	Individual	During the University's examination period

Notes on Assessment:

All assignments are expected to be completed independently. Plagiarism may result in a FAIL grade being recorded for that assignment.

All assessment items are expected to be completed independently. Plagiarism may result in a FAIL grade being recorded for that assessment item. Students are strongly advised to carefully and thoroughly read the **Plagiarism** section below.

Requirements for assessment items 3 and 4 will be distributed in tutorials in Week 3.

Students must refer to the Faculty Handbook and online references that contains a range of policies on educational issues and student matters.

Electronic Submission of Assessment Items:

Unless otherwise notified by the subject coordinator, all written assignments must be submitted electronically.

Submission of assessment items via email will not normally be accepted.

Assessment Items 3 and 4 are to be submitted electronically and in hardcopy format. Information regarding submission requirements will be in the Assessment Item Requirements.

Other Procedures for the submission of assessment items:

In addition to electronic submission students are required to submit assignments in hard copy to their tutor.

All assignments will be returned to students within 2 weeks of their submission. Laboratory and tutorial exercises will be marked in class with feedback as indicated.

To be eligible for a Pass in this subject a student must achieve a mark of at least 40% in the final exam for the subject. Students who fail to achieve this minimum mark & would have otherwise passed will be given a TF (Technical Fail) for this subject.

Procedures for the return of assessment items:

All Assessment Items will be returned within 2 weeks of submission. In class assignments will be marked in class in the second week of the assignment by the tutors.

Penalties for late submission of assessment items:

Penalties apply to all late work, except if student academic consideration has been granted. Late submissions will attract a penalty of 20% of the assessment mark. This amount is per day including weekends.

Work more than (5) days late will be awarded a mark of zero.

Tutorial/Lab Closure Policy

If for any reason, the number of students in a tutorial or lab falls below a sustainable enrolment level, as determined by the Head of School, tutorials/labs offered for that subject may be collapsed or deleted.

You will have to attend the new tutorials/lab if this closure affects the one you are attending.

We will endeavour to make this decision no later than Week 4 of session.

Supplementary Exams

Supplementary Exams will be dealt with in accordance with student academic consideration policy (<http://www.uow.edu.au/about/policy/studentacademicconsiderationpolicy.pdf>) 9.2 Timing of Supplementary Exams.

While the School normally grants supplementary exams when the student does not sit the standard exam for an acceptable reason, each case will be assessed on its own merit and there is no guarantee a supplementary exam will be granted. If a supplementary exam is granted, you will normally be notified via SOLS Mail the time and date of this supplementary exam. You must follow the

instructions given in the email message.

Please note that if this is your last session and you are granted a supplementary exam, be aware that your results will not be processed in time to meet the graduation deadline.

Student Academic Consideration Policy

The School recognises that it has a responsibility to ensure equity and consistency across its subjects for all students. Sometimes, in exceptional circumstances, students need to apply for student academic consideration in order to complete all assessable work.

The University applies strict criteria to the granting of student academic consideration. Before applying for student academic consideration, students should carefully read the University's policy which can be found at: <http://www.uow.edu.au/about/policy/studentacademicconsiderationpolicy.pdf>.

Plagiarism

When you submit an assessment task, you are declaring the following

1. It is your own work and you did not collaborate with or copy from others.
2. You have read and understand your responsibilities under the University of Wollongong's policy on plagiarism.
3. You have not plagiarised from published work (including the internet). Where you have used the work from others, you have referenced it in the text and provided a reference list at the end of the assignment.

Students must remember that:

Plagiarism will not be tolerated.

Students are responsible for submitting original work for assessment, without plagiarising or cheating, abiding by the University's policies on Plagiarism as set out in the University Handbook under University Policy Directory and in Faculty handbooks and subject guides. Plagiarism has led to the expulsion from the University.

Student Academic Grievance Policy

The School aims to provide a fair, equitable and productive learning environment for all its students. The Student Academic Grievance Policy seeks to support the achievement of this goal by providing a transparent and consistent process for resolving student academic grievances.

Any student who has a grievance over a result should obtain a Faculty of Informatics Appeal Against Decision or Action Affecting Academic Experience form from the Informatics Student Enquiry Centre. (<http://www.uow.edu.au/content/groups/public/@web/@inf/@faculty/documents/doc/uow017433.pdf>) The student should firstly take the form to the marker/lecturer to discuss the matter and, if the student is still not satisfied, s/he should take the next step as outlined on the form.

Once the grievance has been considered by the Faculty, if the student still feels the situation has not been fully resolved s/he may consult the Dean of Students. However, the Dean of Students can have no input into the academic judgment of the lecturer and can only review the grievance to ensure proper procedure has been followed.

Relevant University Policies, procedures and students services:

For more information students must refer to the Faculty handbook, online references or consult the UOW policy in full at <http://www.uow.edu.au/handbook/courserules/studacgrievpol.html> which contains a range of policies on educational issues and student matters.

This outline should be read in conjunction with the following documents:

Code of Practice - Teaching and Assessment http://www.uow.edu.au/handbook/codesofprac/teaching_code.pdf	Code of Practice - Students http://www.uow.edu.au/handbook/codesofprac/cop_students.html
Code of Practice-Honours http://www.uow.edu.au/handbook/CodeofPractice-Honours.pdf	Acknowledgement Practice Plagiarism will not be tolerated: http://www.uow.edu.au/handbook/courserules/plagiarism.html
Key Dates http://www.uow.edu.au/student/dates.html	Student Academic Consideration Policy: http://www.uow.edu.au/about/policy/studentacademicconsideration_policy.pdf
Course Progress Requirements: http://www.uow.edu.au/student/mrp/index.html	Graduate Qualities Policy: http://www.uow.edu.au/about/teaching/qualities/index.html#_The_new_UOW
Academic Grievance Policy (Coursework and Honours students) http://www.uow.edu.au/handbook/courserules/studacgrievpol.html	Non-Discriminatory Language Practice and Presentation http://staff.uow.edu.au/eed/nondiscrimlanguage.html
Occupational Health and Safety http://www.uow.edu.au/about/policy/ohs.html	Ownership of Work & Intellectual Property Policy: http://www.uow.edu.au/handbook/generalcourserules/UOW028651.html
Human Research Ethics Committee: http://www.uow.edu.au/research/rso/ethics/human/	Rules for student conduct: http://www.uow.edu.au/handbook/generalrules/StudentConductRules.pdf
Independent Learners' Introductory Program http://www.uow.edu.au/student/attributes/ilip/	Informatics Faculty Librarian, Ms Annette Meldrum, phone: 4221 4637, email: ameldrum@uow.edu.au
Student Support Services: http://www.uow.edu.au/student/services/ Informatics Faculty SEDLO (Student Equity and Diversity Liaison Officers) Virginie Schmelitschek, phone 4221 3833, virginie@uow.edu.au	SISAT Internet Access & Student Resource Centre http://www.uow.edu.au/informatics/sisat/current/uow024466.html
SISAT Computer Usage Rules http://www.uow.edu.au/informatics/sisat/current/uow024457.html	SISAT Subject Outlines http://www.uow.edu.au/informatics/sisat/current/UOW055502.html