
SCSSE

**School of Computer Science and Software Engineering
Faculty of Informatics**

CSCI398 Introduction to Enterprise Computing Subject Outline Spring Session 2009

Head of School –Professor Willy Susilo, Student Resource Centre, Tel: (02) 4221 3606

GENERAL INFORMATION

Subject Coordinator

Telephone Number:

Email:

Location:

Associate Professor Neil Gray

02 4221 3812

nabg@uow.edu.au

3.206

Associate Professor Gray's consultation times during session:

Day

Monday

Tuesday

Time

10.30-12.30

10.30-12.30

Subject Organisation

Session:

Credit Points

Contact hours per week:

Spring Session, Wollongong Campus

6 credit points

3 hours lectures + + 5 @ 2-hour laboratory demonstrations during session

Lecture Times & Location:

Lecture A 13:30–15:30 Mon, 1-G03

Lecture B 9:30-10:30 Wed, 1-G02

Tutorial Day, Time and Location can be found at:

<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

The primary aim of this subject is to equip students with a thorough understanding of the technologies that underlie distributed enterprise systems. The origins of these technologies and the development of container/component models for applications will be explored. The subject will include coverage of remote invocation mechanisms (such as RPC, Java RMI, CORBA, XML/RPC, SOAP, Service Oriented Architectures etc), lifecycle issues (in Java RMI, CORBA, EJB), and supporting services (transactions, automated data persistence, events/messaging, naming, trading, security, and XML-parsing). Students will complete introductory assignments that provide basic experience in a number of these advanced technologies.

Subject Objectives

On successful completion of this subject, students should be able to:

1. Explain how “enterprise systems” have evolved from the use of simple transaction monitors through to the deployment of “application servers”
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2. Explain the operations of distributed systems at a generic “object request broker” level covering communications, request dispatching, and lifecycle management issues
3. Explain the roles of supporting services such as transactions, messaging, naming, and data persistence.
4. Implement distributed applications using a number of these technologies.
5. Use effectively classes from the J2EE packages when building applications.
6. Develop client-server applications with tight binding mechanisms (Java RMI, CORBA, EJB), loosely bound mechanisms (events/messaging), or open integration mechanism (SOAP, SOA etc)
7. Appreciate the new technologies that are being introduced to further extend the scope of distributed enterprise software systems.

Graduate Qualities

This subject will continue to the following graduate qualities:

Informed

Problem Solvers

Effective Communicators

Further information can be found at:

<http://www.uow.edu.au/informatics/scsse/current/SubjectInformation/UOW049401.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, tutorials and laboratories. If you are present for less than 80% and would have otherwise passed you need to apply for student academic consideration, otherwise a TF (technical fail) grade will be recorded.

Method of Presentation:

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

Lecture Schedule:

A proposed Lecture schedule for the subject is as follows:

Week	Topic
1	Subject overview
2	Evolving technologies
3-4	Distributed objects
5-8	CORBA – a reference model for mechanisms and services
9-11	Application servers – containers and components
12-13	XML-based technologies

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):

Apart from the lectures, the majority of the subject materials are available for download from the Internet. Copies of some standard reference materials, such as the CORBA documentation from the Object Management Group and Sun's "Enterprise Java" tutorial, are in the /share/cs-pub/398 directory.

There are no "recommended texts". The Internet is a better source of information – free and more frequently updated. If you are stuck on something, ask Google.

The library does have a number of holdings including:

EJB 3 in action / Debu Panda, Reza Rahman, Derek Lane

Enterprise JavaBeans 3.0 / Bill Burke and Richard Monson-Haefel

Mastering Enterprise JavaBeans / 3rd ed. / Ed Roman, Rima Patel Sriganesh, Gerald Brose

Pure Corba / Fintan Bolton

Enterprise CORBA / Dirk Slama, Jason Garbis, Perry Russell

Java.rmi : the remote method invocation guide / Esmond Pitt and Kathy McNiff (also as electronic resource)

Assessment:

This subject has the following assessment components.

ASSESSMENT ITEMS & FORMAT	% OF FINAL MARK	GROUP/ INDIVIDUAL	DUE DATE
Assignment-1: object-oriented client server basics	10%	Individual	August 28 th
Assignment-2: CORBA, lifecycle management and naming services	10%	Individual	September 11 th
Assignment-3: CORBA services	10%	Individual	September 25 th
Assignment-4: EJB	10%	Individual	October 16 th
Assignment-5: XML technologies	10%	Individual	October 30 th
Examination	50%	Individual	Scheduled by university

Notes on Assessment:

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

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 be accepted.

The assignments require the preparation of reports containing variously design artifacts, code, evidence for correct operation of code, and other components as specified. These reports are prepared as PDF documents and submitted electronically.

Assignments are submitted electronically using the turnin program on the University's banshee computer (the main server for CS undergraduate work). Details of the use of turnin are included in the assignments.

Procedures for the return of assessment items:

Marks are posted to the SOLS system. Marker comments will be returned to students via the university's email system.

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 10% of the assessment mark that they are late.

Work more than (4) 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.

This subject outline can be found at: <http://www.uow.edu.au/informatics/scsse/current>

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/studentacademicconsiderationpolicy.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://staff.uow.edu.au/ohs/commitment/ohspolicy/index.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	SCSSE Internet Access & Student Resource Centre http://www.uow.edu.au/informatics/common/uow024466.html
SCSSE Computer Usage Rules http://www.uow.edu.au/informatics/common/uow024457.html	SCSSE Subject Outlines http://www.uow.edu.au/informatics/scsse/current