

UNIVERSITY OF NEW SOUTH WALES
School of Information Systems, Technology and Management

	INFS5905-4805 Course Outline Session 2, 2004 Information Systems Auditing
---	---

1. PRE-REQUISITES

INFS 5988 Business Information Systems - under certain circumstances, previous relevant study or experience may allow the pre-requisite to be waived. This can only be granted by the lecturer-in-charge, on the basis of an individual application.

2. OBJECTIVES AND LEARNING OUTCOMES

This course aims to review concepts, theory, methodologies and techniques discussed in the Information Systems (IS) Audit literature and current practice. During the course, students will develop and enhance their skills, understanding and experience of IS Auditing.

Specific learning outcomes for the student will be to:

- understand and apply the concepts and theory underlying IS Auditing;
- review and evaluate internal control in an IS environment - emphasising the auditor's role in risk analysis, contingency planning and systems development, etc;
- understand IS Auditing practice - considering techniques and methods for auditing computerised information systems
- describe and differentiate between contemporary IS auditing techniques, such as test decks, audit software packages, ITF, tracing, mapping and code comparison techniques;
- experience current IS audit methods by 'hands on' use of current IS audit tools and techniques, such as the design, construction and running of audit software to analyse information held on auditee computer files;
- appraise the audit significance and implications of technologies such as:
 - Electronic Commerce (EC - B2C, B2B, Mobile Commerce)/ EDI
 - E-Crime and e-Forensics
 - ID Fraud
 - Future IS Audit Technologies
- review and assess the current status of professional and legal requirements; and
- understand and discuss current research issues in IS auditing by use of the web to review current research efforts in IS auditing.

3. STAFFING

Academic Staff:

Geoff Dick - QUAD 2092A
 Telephone: 9385-5284
 Email: g.dick@unsw.edu.au

Seminar Details:

Monday 6-8 pm Heffron Bldg E12 Mellor Theatre

Laboratory Details:

Mon 8-9pm Quad Lab 1

4. LECTURES/SEMINARS, READINGS & SHORT ASSIGNMENTS

The course will consist of one stream of 2 hours lecture/seminar and, in most weeks, a one hour laboratory. It is essential that students undertake a significant amount of pre-reading before each class. Readings will be set for each week and students may be required to complete a small assignment on these readings or set cases. Students may be randomly asked to answer questions in the course of the seminar. At various times students may also be asked to provide short written answers to some of the questions during the seminar. These short assignments, verbal and written answers, and general discussion will be important elements of assessment in the course.

5. COURSE REQUIREMENTS

Students will be required to show proficiency and in both the practical and theoretical aspects of the course. To enhance the understanding of relevant issues as well as practical considerations each student will be required to:

1. participate in seminar and online discussions and lead case studies presentations. Written answers to case studies should be prepared and may be collected and marked at the end of each seminar. Lotus Notes may be used to aid discussion and sharing of findings.
2. participate in computer laboratory work to run audit software to interrogate selected data files and solve IS audit cases during weeks 3-8.
3. undertake a technology related research assignment spanning weeks 8-12.

6. UNIVERSITY, FACULTY AND SCHOOL NOTICES

Academic Misconduct

Students are reminded that the University regards academic misconduct as a very serious matter. Students found guilty of academic misconduct are usually excluded from the University for 2 years. Because of the circumstances in individual cases the period of exclusion can range from one session to permanent exclusion from the University.

The following are some of the actions that have resulted in students being found guilty of academic misconduct in recent years:

- taking unauthorised materials into an examination;
- submitting work for assessment knowing it to be the work of another person;
- improperly obtaining prior knowledge of an examination paper and using that knowledge in the examination.
- failing to acknowledge the source of material in an assignment.

Supplementary Assessments and Other School Notices & Policies

Please refer to the School policies at <http://sistm.web.unsw.edu.au/student/schoolpolicies.html>. These include policies for the lodging of applications for special consideration, and supplementary assessments.

General Course Assessment Requirements

- In order to pass the course, a satisfactory performance is required in each component of the assessment and mark of less than 45 percent in a component of the course would normally be regarded as unsatisfactory.
- Each component of the course may be scaled to a mean of 65 percent.
- Late submission of assignments and tutorial work will incur a penalty of 10 percent of the maximum assessment mark per day. An extension in the time before submission **will only be granted in exceptional circumstances by the lecturer-in-charge** - please note that work commitments are not normally deemed to be an exceptional circumstance. In all cases documented evidence **must** be provided.
- In the case of peer assessed group work, the mark assigned to each member of the group will be scaled based on peer assessment of each member's contribution to the task. It should be noted that group members are expected to work in a harmonious and professional manner, which

includes adequate management of non-performing members. Each member of the group will need to clearly demonstrate their participation and contribution to the project if requested.

- Part of participation is to attend lectures/seminars. It is expected that you will attend 80% of lectures - please sign the attendance sheet at every lecture/seminar/laboratory you attend.

Plagiarism, Discussion, Citations & Referencing

Student discussion and comparison of the ideas and concepts raised in this course is encouraged. However, students may not submit the work of anyone else in an individual assignment unless full credit for the source is given. Use of another person's work from any source without proper acknowledgement is considered to be plagiarism — this is a serious academic offence. In the case of group work, any material from outside the group should also be referenced and credited to the appropriate author.

If you are uncertain about how to cite or reference the work of others please refer to the collection of resources about citations and referencing located on the UNSW Library Web Site. This can be found at the following URL: http://www.library.unsw.edu.au/links/Research_and_Study_Skills/

Electronic Mail

Please check the information available at the course web site before sending any email query to lecturing staff. Any e-mail with an unidentifiable or an unreliable source will not be attended to.

7. ASSESSMENT

Course assessment is based on the following sections:

Criteria	%
Seminar Participation & Online Discussion	10
Audit Software Assignment	20
IS Audit Technology Research Report	20
Final Exam	50
Total	100%

Material covered in seminars that is not covered in your set readings will be examinable.

ACL Assignment

Will involve use of an audit retrieval tool ACL (Audit Command Language) to investigate a fraud situation in a company requiring analysis of corporate data files.

Major Assignment

This assignment will involve use of the Internet and a case study approach to investigate ID Fraud in relation to e-crime specifically within an organisation's Electronic Business. Details will be advised later in the course.

Final Examination

The final examination will be a 3 hour closed book exam held in the examination period.

8. COURSE RESOURCES

COURSE WEBSITE

The course website INFS5905/4805 – IS Auditing 2003 is accessed at <http://www.webct.unsw.edu.au/>

The website is an integral part of the course and is used as the primary repository for all information about the course. Login is the same as for Student Online (student id and unipass). Access to the course website is restricted to students enrolled in the course. If you are unfamiliar with the operation of WebCT the help is available at:

http://www.webctsupport.unsw.edu.au/student/content/T1_getstart.cfm

The greatest cause of confusion in using WebCT is the need to activate new student UniPass accounts by first agreeing to the Rules for Online Services at UNSW. This is not the same as agreeing to the rules found on the NewSouth Student login page:

- If you experience login difficulties please look at the Disconnect page first <http://www.disconnect.unsw.edu.au/student/getstart/acthomez.htm>.
- If this doesn't resolve the problem then submit a help request at http://www.webctsupport.unsw.edu.au/student/content/T3_supprequest1.cfm.

Seminar Slides and Other Course Materials & Information

Slides, weekly study objectives, discussion questions and other materials used in the seminars will be placed on the website on a weekly basis.

Articles and Papers

Most weeks will involve readings one or more articles from academic journals, professional journals and other sources. These readings form the key readings for course and must be read. The location (electronic) will be provided for each of the readings. It is your responsibility to acquire a copy of the readings. The class hand-ups typically address these readings.

Announcements

All announcements concerning the course are posted on the website as required. Important announcements will also be made at the commencement of each lecture. All information regarding assignments, examinations, administration and various policies are also posted on the website.

9. OTHER NOTICES

Prizes - KPMG prize for the student achieving the highest marks in the course and the best research report will be eligible for a prize and certificate donated by the Information Systems Audit & Control Association.

Should any illness or other difficulties arise, please talk to your lecturer as soon as possible to try and resolve any problems. Do not leave it until after the exam or a few days before the assignments are due. A medical certificate must support any reported illness.

Students wishing to further contacts and professional association may be interested in joining the Information Systems Audit & Control Association which holds regular monthly meetings and annual conferences. Membership details are available from Ms Helen Gulson Secretary of the Association on Phone & Fax (02) 9958-0143.

10. STUDYING INFORMATION SYSTEMS AUDITING

The most important part of any course is your own study. Each week you will need to set aside at least 8 hours to prepare for the seminar and lab and revise the topics covered.

Weekly Preparation

The nature of seminars and labs is such that you will get the most out of the class if you have properly prepared. Preparation allows you to follow what is going on and participate. Your weekly preparation for the seminar should include all readings, reviewing the slides, working through any activities set and reviewing other notes / websites listed. Classes will proceed on the basis that you have adequately prepared.

Ongoing study

The cumulative nature of the course makes it very important that you keep on top of your studies as you go. Your weekly revision should include the completion of notes on the readings and seminar, a review of the difficult aspects of the topic at hand, and review of the activities undertaken from the text to practice your new knowledge.

Participation in class

All students are expected to actively participate in class and make contributions drawn from their experience and reading. Participation includes involvement in class discussion and group activities, volunteering answers to the class, commenting on the topic under consideration, raising issues and providing examples. Remember that effective communication skills are of critical importance in Information Systems Auditing and are highly sought after in industry. The assessment of this course includes a mark for participation.

11. EXPECTATIONS

INFS5905/INFS4805 is an advanced elective course and, as such, there are certain expectations about your approach to your studies and your behaviour in class.

Thinking and learning

As a postgraduate student you are expected to have a high level of engagement with the literature and explore current thinking within the field of information systems management. That is, not only analysing and interpreting the ideas and work of others, but also making sense of it within your own work/learning environment. This means sharing ideas, drawing on your experiences and looking at new information in light of the existing knowledge. The kind of debate encouraged in this course is reasoned, well thought out, and exploratory. All involved in the course need to demonstrate a high level of interpersonal communication skill and to listen to the perspectives of others as well as to be able to convey our own beliefs and assumptions.

Integrity of submitted work

It is expected you will give your best effort when completing the various assignments for this course. It is also expected that your work is of the highest integrity, completed in an honest and open manner, and not including any work which is not your own (unless appropriately referenced – see section on plagiarism).

Prioritisation and time management

Like all advanced postgraduate courses, this course will require considerable effort on your behalf. As you are enrolled in the course it is assumed you are interested in studying IS Management and are prepared to give the course work a high priority and put aside sufficient time from your busy schedule to properly undertake the work. Effective time management is a key prerequisite of effective study and assignment completion.

Weekly preparation

You are expected to have completed adequate preparation for each week's seminar (as discussed above). The seminars will proceed on this basis.

Behaviour in class and towards fellow students

You are expected to behave in a considerate, polite and courteous manner at all times. Those few students who are unable to conduct themselves in an appropriate fashion will find themselves excluded from course activities. By way of example, students who treat fellow group members poorly may find themselves 'groupless'.

It is important that all students involved in the course conduct themselves in an appropriate manner that encourages learning and allows participation from all concerned.

Text

James A Hall (2002): Information Systems Auditing and Assurance, South Western College publishing (Hall)

References

Ron Weber (1999): Information Systems Control and Audit, Prentice Hall Inc. (RW)
 IT Governance Institute, Governance, Control and Audit for Information and Related Technology (COBIT Version 3), 2000, (also 1996, (COBIT 2), 1998.
 James R Hickman (1997): Practical IT Auditing, Warren, Gorman & Lamont (H).
 Warren J D, Edelson L W & Parker X L, Handbook of IT Auditing, Warren, Gorham & Lamont, 1997 (looseleaf Manual, from Coopers & Lybrand). (WEP)
 Gordon Morris (1992): EDP Auditing Guidelines, Irwin Professional Publishing (McGraw Hill). (G)
 Chambers A and Rand G. (1994): Auditing and the IT Environment, Pitman Publishing (CR).

12. SEMINAR/LECTURE OUTLINE

WK	Begins	Topic	Preliminary Readings
1	26/7	Introduction - the IS Audit Process	Hall Chp 1, Standards & Guidelines (ISACA)
2	2/8	IS Audit Management & IS Mgt Review	Hall Chp 2 pp32-44
3	19/8	Information Technology Centre Audit	Hall Chp 2 pp44-68
4	16/8	IT Centre Audit Review	Video & Review
5	23/8	IS Development Audit & Quality Assurance	Hall Chp 4
6	30/8	IS Controls Review IS Controls/Audit Evaluation	Hall Chp 6 pp214-235 Hall Chp 8, 9
7	6/9	Basic IS Auditing Techniques - Test Data, Integrated Test Facility, Audit Software, Parallel Simulation	Hall Chp 3, 6 pp 235-245 Hall Chp 7 pp 251-271, 274-282
8	13/9	Concurrent and Advanced IS Audit Techniques - SCARF, Statistical Techniques, Performance Measurement (<i>hand in IS Audit Software Assignment</i>)	Hall Chp 7 pp 271-273
9	20/9	E-Crime and e-Forensics	Hall Chp 10 pp 401-420
	27/9	MID SESSION RECESS	
10	4/10	Public Holiday	
11	11/10	The Auditor, The Internet & Electronic Commerce	Hall Chp 5
12	18/10	ID Fraud (<i>hand in IS Audit Technology Research Report</i>)	Readings
13	25/10	IT Governance & the Auditor	Readings
14	1/11	Ethics - Social Responsibilities and Implications Future IS Audit Technologies, IS Audit Research	Hall Chp 10 pp392-401

Refer to detailed week's readings set out on the IS Auditing WebCT course web site.