

Fall 2006 Course Outline  
**AK/ADMS4552 3.0 C Information Systems Audits**

Course Website: <http://quartz.atkinson.yorku.ca/2006f-akadms4552c-03>

[Enrol Here](#)

Term	Section	Status	Course Type	Day	Time	Location*	Catalogue #
	C		In Class	Thursday	7-10 p.m.		

**Important Dates:**

Classes Start	Classes End	Grade Component Deadline	Graded Feedback Deadline
07/Sep/2006	30/Nov/2006		

\*Except for Correspondence and Internet courses, some final examinations could take place in a different room and on a different day from the regularly scheduled class. Check the published Examination Schedule for a complete list of days and times.

**Course Outline:**

**Course Director:** Frederic Guimont

E-mail: [guimont@yorku.ca](mailto:guimont@yorku.ca)

\*Except for Correspondence and Internet courses, some final examinations could take place in a different room and on a different day from the regularly scheduled class. Check the published Examination Schedule for a complete list of days and times.

**Course Description:**

This course covers the audit of computer based information systems. Topics include business and accounting information systems applications, information systems risks, management controls, control evaluation, audit strategies and computer assisted audit techniques.

**Prerequisite:** 1) Students in an Honours programme, 78 credits including AK/ADMS3595 3.0; AK/ADMS4551 3.0; or 2) other students, these above-listed courses and an average grade of "B" or better in AK/ADMS3585 3.0 and AK/ADMS3595 3.0. AK/ADMS 2511 3.0

(or AK/ADMS 3511 3.0)

Students are personally responsible to ensure they have the required prerequisites as stated in the course outline or in the course calendar. Students who do not have the prerequisites are at risk of being dropped from the course at any time during the course.

### **Required Texts:**

- *Information Technology Control and Audit*, 2nd edition, Gallegos, Senft, Manson and Gonzales, 2004.

- C.I.C.A. Handbook, Canadian Institute of Chartered Accountants, most recent edition of Assurance sections [This is available online to all York Students]

Readings would also be required from:

- *Auditing and Other Assurance Services*, 10th edition, Arens, Elder, Beasley and Spletstoeser-Hogeterp, 2007.

- *IT CONTROL OBJECTIVES FOR SARBANES-OXLEY, 2ND EDITION*  
(<http://www.isaca.org/Content/ContentGroups/Research1/Deliverables/Sarbanes-Oxley-exposure-draft-30april06.pdf>)

### **Warning:**

Photocopying more than 10% of a textbook is illegal, and may involve penalties. Do not duplicate textbooks or obtain these photocopies. Students are reminded of York University's policy regarding academic dishonesty as outlined in the York student calendars.

### **Evaluation Methods:**

Group Term Paper - 20% [15% Term Paper 5% presentation] (Signup Session 1, Term Paper due Session 9. Presentations occur during sessions 9 through 11.)

Midterm Test - 30% (Session 7, covering Sessions 1 through 6)

Individual Folio Assignment – 10% (Due in Session 5)

Examination - 40% (During regular examination schedule)

Total - 100%

Any term paper or Folio assignment handed in late or handed in incomplete will be subject to a 10% late penalty per business day.

Further details on the assignments will be announced in class and posted on the class website.

## Course Schedule:

### Session 1 – September 7, 2006

#### **Group Term Paper sign-up and group formation**

Information systems audit, assurance and internal control;

- Overview of Information Systems (Reliance of Businesses on IT)
- Various I/S Resources and Processes
- Types of I/S Auditing [Financial Statements Audit | SAS70 / Sec5970 | Special Audits (e.g. Forensics) ]
- Impact of Information Technology (IT) on accounting systems.
- How IT affects risks and internal controls.
- How IT affects attest and assurance functions.
- Categories of internal controls
- Introduction to IT General Controls & IT Application Controls

Readings:

*Information Technology Control and Audit*, 2nd edition

Chapter 2 – Audit and Review: Its Role in Information Technology

Chapter 3 – The Audit Process in an Information Technology Environment

Case:TBA

### Session 2 – Sep 14, 2006

Information Technology Control Environment.

- Role of information technology strategic planning
- Impact of control environment on general controls
- Identification of risk areas in IT operations
- The Audit Process (Test of effectiveness of Design of internal controls & Test of Operating Effectiveness of internal controls in accordance with audit assertions /

operational auditing)

- Sampling requirements
- Impact of Bill 198 and Sarbanes Oxley Act (SOx) on IS Audits.
- Documentation of Audit work ( PCAOB Standard 3)

Readings:

*Information Technology Control and Audit*, 2nd edition

Chapter 5 – IT Strategy and Standards

Chapter 15 – Assessing Risk in IT Operations (p. 363-79; 394-400)

CICA Handbook, Section 5141, paragraph. 67,69,76-79

Cases: TBA

Session 3 – Sep 21, 2006

General Controls – Access to programs & Data

- A framework for organizing Access Controls
- Segregation of Duties.

General Controls - Operations

- A framework for organizing operations controls
- Data centre audit
- Disaster recovery planning
- Audit of end-user computing

Readings:

*Information Technology Control and Audit*, 2nd edition

Chapter 14 – Operational Control Issues

Chapter 16 – Audit Methods and Techniques for Operations

*Auditing and Other Assurance Services*, 10th edition

## Appendix C

Case: TBA

### Session 4 – Sep 28, 2006

General controls – Systems Development

- Review of the systems development process
- Control and risk implications of SDLC phases and methodologies.
- The role of the auditor.
- Audit and control of the systems development process

Readings:

*Information Technology Control and Audit*, 2nd edition

Chapter 6 - Planning and Controlling

Chapter 7 – Project Management

Chapter 8 - Quality Management

Cases: TBA.

### Session 5 – Oct 5th, 2006

#### ***Individual Folio Assignment Due***

Systems Acquisition; Controlling Systems Implementation

- Controls over the software acquisition process
- Controls over the implementation process
- Conversion audit
- Issues in systems acquisition

Readings:

*Information Technology Control and Audit*, 2nd edition

Chapter 9 – Software acquisition

Chapter 10 – System Implementation

*Auditing and Other Assurance Services*, 10th edition

Appendix D

Cases: TBA

Session 6 – Oct 12, 2006

Systems development maintenance; change management

- Risks in the change management process
- Controlling the program change process

Chapter 11 – Application risks and controls (p. 278-79)

Chapter 12 – Change Management

Cases: TBA

Session 7 – Oct 19, 2006 – Midterm Examination Covering Sessions 1 – 6

Session 8 – Oct 26, 2006

The Nature of Application controls

- Classifying and understanding Application system controls

Readings:

*Information Technology Control and Audit*, 2nd edition

Chapter 11 – Application risks and controls

Cases: TBA

Session 9 – Nov 2, 2006

**Group Term Paper Due**

**Group Term Paper Presentations**

Testing Application controls

- Approaches to testing Application system controls

Readings:

*Information Technology Control and Audit*, 2nd edition

Chapter 4 – Auditing Information Technology Using Computer-Assisted Audit Tools and Techniques

*Auditing and Other Assurance Services*, 10th edition

Appendix F

Case: TBA

Session 10 – Nov 9, 2006

**Group Term Paper Presentations**

Advanced Issues in Operational Controls

- Network control issues and audit
- E-commerce control issues and audit

Readings:

*Information Technology Control and Audit*, 2nd edition

Chapter 13 – IT Operations Environments: Complexities and Control Issues

Chapter 15 – Assessing Risk in IT Operations (p. 363-79; 394-400)

Chapter 16 – Audit Methods and Techniques for Operations (p.420-28)

Case: TBA

Session 11 – Nov 16, 2006

**Group Term Paper Presentations**

Security and Privacy Issues

- Risks in maintaining data privacy and security
- Controls for security and privacy issues
- Auditing security and privacy controls

Readings:

*Information Technology Control and Audit*, 2nd edition

Chapter 19 – Security and Privacy of Information Technology: From the individual to the extranet/intranet/internet

Case: TBA

Session 12 – Nov 23, 2006

**Group Term Paper Discussions**

Integrating IT Audit with Financial Statement Audit Concepts

- Review of the audit planning process
- Substantive testing; computer assisted audit testing for substantive tests
- Audit of service organizations providing information technology services

Readings:

**CICA Assurance Handbook:**

Section 5141 – Understanding the entity and its environment and assessing the risks of material misstatement. Read the following paragraphs: 54 – 124, and Appendix B: Internal Control Components

Section 5143 – The auditor's procedures in response to assessed risks

Section 5310 - Evidence Considerations when an Enterprise uses a Service Organization

Section 5970 - Auditor's Report on Controls at a Service Organization

AuG-42 Electronic Commerce — Effect on the Audit of Financial Statements

Cases: TBA

**Session 13 - FINAL EXAMINATION (covers the entire course) During the regularly scheduled examination period**

Last date updated: July 24, 1006