

IS4435: GOVERNANCE & REGULATORY COMPLIANCE FOR FINANCIAL INFORMATION SYSTEMS

Effective Term

Semester A 2022/23

Part I Course Overview

Course Title

Governance & Regulatory Compliance for Financial Information Systems

Subject Code

IS - Information Systems

Course Number

4435

Academic Unit

Information Systems (IS)

College/School

College of Business (CB)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

Nil

Part II Course Details

Abstract

This course aims to explain how financial information systems are regulated, and how the regulatory requirements affect the banking and financial services industries, particularly in terms of safeguarding the public's savings, bringing stability to the financial system, and preventing abuse of financial-service customers; provide the skills to evaluate and assess the role of the compliance process, including international and local regulations and regulatory requirements for information systems; familiarize students with the risks that information systems face under different regulations and regulatory requirements; describe operational risks for information technology, and equip students with the ability to apply recognized control objectives to reduce operational risks.

Course Intended Learning Outcomes (CILOs)

CILOs		Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Describe and gain insights of the control objectives for financial information systems to reduce operational risks.	20	x		
2	Evaluate critically risks of financial information systems under different international regulatory requirements.	40	x	x	
3	Apply recognized management processes and the Control Objectives for Information and related Technology (COBIT) framework innovatively to address the role of information technology in reducing operational risks.	40		x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Teaching and Learning Activities (TLAs)

TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lecture	IT regulatory requirements for financial services and their implications on operations, in particular for banks and financial institutions are explained by the instructor using real life examples.	1, 2, 3 Seminar: 3 Hours/Week

2	Tutorial	Instructor and students will discuss how IT regulatory requirements apply to the design and operation of financial information systems with real cases.	1, 2, 3	Seminar: 3 Hours/Week
3	Group Project	Students investigate a real life application of IT regulatory requirements for financial information systems.	2, 3	

Assessment Tasks / Activities (ATs)

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1. Participation Students are encouraged to discuss and reflect on the materials covered in lectures and tutorials.	1, 2, 3	10	
2. Individual Exercises Exercises will be given to students to assess their competence level of skills learnt in the course.	1, 2, 3	10	
3. Group Project A group project, which includes a written report and an oral presentation, will be assigned to students to describe, evaluate and analyse a real-life application of IT regulatory requirements for financial information systems.	1, 2, 3	30	

Continuous Assessment (%)

50

Examination (%)

50

Examination Duration (Hours)

2

Assessment Rubrics (AR)**Assessment Task**

AT1: Participation

Criterion

Ability to clearly describe and explain the concepts related to the control objectives for information systems to reduce operational risks.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels.

Assessment Task

AT1: Participation

Criterion

Ability to accurately analyze and evaluate the information systems risks under different international regulatory requirements.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

AT1: Participation

Criterion

Ability to accurately analyze and apply recognized management processes and the COBIT framework to address the role of information technology in reducing operational risks.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

AT2: Individual Exercises

Criterion

Ability to demonstrate understanding of the course topics through individual exercises

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels.

Assessment Task

AT2: Individual Exercises

Criterion

Ability to accurately analyze and evaluate the information systems risks under different international regulatory requirements

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

AT2: Individual Exercises

Criterion

Ability to accurately analyze and apply recognized management processes and the COBIT framework to address the role of information technology in reducing operational risks.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

AT3: Group Project

Criterion

Ability to demonstrate understanding of the course topics through group project.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels.

Assessment Task

AT3: Group Project

Criterion

Ability to accurately analyze and evaluate the information systems risks under different international regulatory requirements.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

AT3: Group Project

Criterion

Ability to accurately analyze and apply recognized management processes and the COBIT framework to address the role of information technology in reducing operational risks

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

AT4: Final Examination

Criterion

Ability to demonstrate understanding of the course topics related to the control objectives for information systems to reduce operational risks.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels.

Assessment Task

AT4: Final Examination

Criterion

Ability to accurately analyze and evaluate the information systems risks under different international regulatory requirements.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Assessment Task

AT4: Final Examination

Criterion

Ability to accurately analyze and apply recognized management processes and the COBIT framework to address the role of information technology in reducing operational risks.

Excellent (A+, A, A-)

High

Good (B+, B, B-)

Significant

Fair (C+, C, C-)

Moderate

Marginal (D)

Basic

Failure (F)

Not even reaching marginal levels

Part III Other Information**Keyword Syllabus**

IT governance; Control framework; COBIT; Regulation for financial information systems; Sarbanes-Oxley Act (SOX); Basel Accords (Basel II); Operation risk; Compliance for SOX Act; COSO framework; Security management; Trend of information technology regulation.

Reading List**Compulsory Readings**

Title	
1	David G. Hill, Data Protection: Governance, Risk Management, and Compliance, CRC Press, 2009.

Additional Readings

Title	
1	Krag Brothby, Information Security Governance: A Practical Development and Implementation Approach, Wiley, 2009.
2	IT Governance Institute, IT Control Objectives for Sarbanes-Oxley: The Role of IT in the Design and Implementation of Internal Control Over Financial Reporting, ISACA, 2nd edition, 2006.
3	James J. DeLuccia IV, IT Compliance and Controls: Best Practices for Implementation, Wiley, 2008.
4	IT Governance Institute, COBIT 5, 2012.