

**SEMESTER LEARNING PROGRAM AND ACTIVITY PLAN**  
***RENCANA PROGRAM DAN KEGIATAN PEMBELAJARAN SEMESTER (RPKPS)***



AKU 6472

**INFORMATION SYSTEMS AUDITING**

Master of Accounting

**UNIVERSITAS GADJAH MADA**

Faculty of Economics and Business

2022



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Master of Accounting

SEMESTER LEARNING PROGRAM AND ACTIVITY PLAN

COURSE CODE	COURSE NAME	CREDIT UNIT	SEMESTER	COURSE STATUS	PRE-REQUISITE COURSE
AKU 6472	Information Systems Auditing	3	2	Compulsory	-

GRADUATE COMPETENCY GOALS (CG) ADDRESSED BY THE COURSE	Graduates of the Master of Accounting program at FEB UGM shall:						
	Competency Goals	Learning Objectives		High	Med	Low	Performance Measurement
1 Students demonstrate the ability to communicate effectively	1.1	Demonstrate the ability to write highly organised reports	√			Assignment	
	1.2	Demonstrate the ability to follow a standard writing style	√			Assignment	
	1.3	Demonstrate the ability to write with a consistent flow of thought	√			Assignment	
	1.4	Demonstrate the ability to use visual aids professionally	√			Assignment	
	1.5	Demonstrate the ability to present in an organised manner	√			Assignment	
	1.6	Demonstrate the ability to answer questions	√			Assignment	
2 Students demonstrate the ability to work in teams	2.1	Demonstrate a leadership role in managing the team			√	Exam	
	2.2	Deliver strong efforts and contribute ideas for task completion			√	Exam	
	2.3	Demonstrate the ability to appreciate opinions from different perspectives			√	Exam	
3 Students are able to exercise professional ethics	3.1	Demonstrate the ability to identify ethical issues in the accounting profession		√		Assignment	
	3.2	Demonstrate the ability to apply the appropriate judgment in making ethical decisions		√		Assignment	
4 Students demonstrate the ability to analyse financial statements for decision making	4.1	Demonstrate the mastery of accounting concepts and theories			√	Exam	
	4.2	Demonstrate comprehensive knowledge of accounting standards			√	Exam	
	4.3	Demonstrate the ability to make accounting adjustments to conform with economic reality		√		Final Project	
	4.4	Demonstrate the ability to predict prospects based on fundamental data		√		Final Project	
	4.5	Demonstrate the ability to apply alternative valuation models			√	Final Project	
	4.6	Demonstrate the to identify accounting problems	√			Final Project	

		4.7	Demonstrate the ability to identify use relevant accounting numbers in making decisions	√			
		4.8	Demonstrate the ability to solve accounting problems	√			
5	Students demonstrate the ability to deal with international exposure	5.1	Demonstrate the ability to write the thesis on international topics		√		Exam
		5.2	Demonstrate participation in the international environment		√		Exam

COURSE OBJECTIVES	Upon the completion of the <b>Information System Auditing</b> course, students are expected to be able to:						
	CO 1	Demonstrate understanding of the fundamental concept of Information System Auditing and create the student's abilities to practice auditing in the information systems area					
	CO 2	Demonstrate understanding of the ongoing business challenges of information systems auditing that is constantly evolving and can be used for strategy and auditing techniques. However, this development requires ethical values.					
	CO 3	Demonstrate understanding of the components of information systems auditing, which include software, hardware, networks, and resource management technology					
	CO 4	Demonstrate understanding of the strategy of developing and implementing an information system audit and its formation process in auditing planning.					
	CO 5	Demonstrate that the implementation of information system auditing is used to unify concepts and practices and information system tools to make decisions for the auditor's opinion.					
COURSE OBJECTIVES TO CGs MAPPING	Upon the completion of the <b>Information System Auditing</b> course, students are expected to be able to:						
	CG 1	Demonstrate understanding of the fundamental concept of Information System Auditing and create the student's abilities to practice auditing in the information systems area.					
	CG 2	Demonstrate understanding of the ongoing business challenges of information systems auditing that is constantly evolving and can be used for strategy and auditing techniques. However, this development requires students to consider ethical values.					
	CG 3	Demonstrate understanding of information systems auditing components, including software, hardware, networks, and resource management technology.					
	CG 4	Demonstrate understanding of the strategy of developing and implementing an information system audit and its formation process in auditing planning, fieldwork, and reporting.					
	CG 5	Demonstrate that information system auditing is used to unify concepts and practices and information system tools to make decisions for giving the auditor's opinion.					

<p><b>COURSE DESCRIPTION</b></p>	<p>Information System Auditing is a course designed to make students understand the process of information system auditing in a particular business entity. This course is the logical impact of financial and non-financial activities that have been processed through a computer system. Observing the process, the computer information system causes changes in the characteristics and nature of transactions so that the auditing changes the nature, scope and audit techniques.</p> <p>This course discusses the meaning of information system auditing, its characteristics and scope, information technology risk management, and internal control models in computerised information systems. Further discussion on the impact of information technology applications, such as ERP systems, e-commerce and e-business. This discussion is on implementing information technology-based audits. In addition, this course discusses auditing software as an auditor's tool used in collecting and testing electronic evidence. Finally, this syllabus explains that understanding various computer-based auditing techniques is an induction of competence and capability that cannot be ignored anymore.</p> <p>Students need to understand all concepts related to auditing information systems because of the hope of future involvement in business processes that have nothing but information technology. In addition, under the growth or development of business entities in Indonesia which are currently and will change to businesses with an information technology system, students are increasingly becoming obliged to compete in national and global competition.</p>																																								
<p><b>COURSE MATERIAL</b></p>	<ul style="list-style-type: none"> <li>● Hall, A. James, <i>Information Technology Auditing and Assurance</i>, 3<sup>ed</sup> edition, South-Western, Cengage Learning, 2011.</li> <li>● Cascarino, E. Richard, <i>Auditor's Guide to Information Systems Auditing</i>, John Wiley and Sons, 2007.</li> <li>● Hunton, E. James, <i>Core Concept of Information Technology Auditing</i>, 1<sup>st</sup> ed., John Wiley &amp; Sons, 2004.</li> </ul>																																								
<p><b>ASSESSMENT METHODS AND LINKAGE TO COURSE OBJECTIVES</b></p>	<table border="1" data-bbox="435 1045 1328 1375"> <thead> <tr> <th rowspan="2">ASSESSMENT CRITERIA</th> <th rowspan="2">PERCENTAGE (%)</th> <th colspan="5">COURSE OBJECTIVES</th> </tr> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> </tr> </thead> <tbody> <tr> <td>Midterm exam</td> <td>20</td> <td>√</td> <td>√</td> <td>√</td> <td>√</td> <td></td> </tr> <tr> <td>Final exam</td> <td>20</td> <td>√</td> <td>√</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Assignment and homework</td> <td>30</td> <td>√</td> <td>√</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Class participation</td> <td>30</td> <td></td> <td></td> <td></td> <td>√</td> <td>√</td> </tr> </tbody> </table>	ASSESSMENT CRITERIA	PERCENTAGE (%)	COURSE OBJECTIVES					1	2	3	4	5	Midterm exam	20	√	√	√	√		Final exam	20	√	√				Assignment and homework	30	√	√				Class participation	30				√	√
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**Mid-term and Final Exam**

The mid-term and final examinations will be conducted to test the student's knowledge, understanding, comprehension, and capability to apply the course material in solving actual negotiation problems.

**Assignment and Homework**

- Chapter Critical Summary (CCS) contains chapter motivation and chapter structure discussion in 1-page maximum.

- Article Critical Review (ACR), with the content format below:

TITLE:

AUTHOR:

JOURNAL:

1. Research problem or question
2. Why is the problem/question important?
3. Author's approach to solving the problem
4. Assumptions about the real world
5. Relevant theories
6. Hypotheses
7. Dependent and independent variables

Dependent variable:

Independent Variable

Intervening, moderating, dan control variables

8. Sample
9. Statistical tests
10. Results
11. Conclusions
12. Improvement/Extensions

**Class Participation**

Student participation is in the form of students being asked questions by the lecturer face-to-face. The lecturer assesses student participation by considering the quality of the answers with a score of 0, ¼, ½, ¾, 1.

**GRADING**

Grade	Range	Cumulative Weighted Grade
A+	96-100	4.0
A	91-95	4.0
A-	86-90	3.5
B+	81-85	3.25
B	76-80	3
B-	71-75	2.75
C+	66-70	2.25
C	61-65	2
C-	56-60	1.75
D	51-55	1
E	00-50	0

Below is the explanation for each grade:

Grade	Explanation
A+ and A	With consistent evidence of doing homework on time and never being late according to the syllabus
A- and B+	Having one assignment late
B and B-	Having a delay of two to three assignments
C+ to C-	Having a delay of four to six assignments
D and F	Do not submit more than three assignments

INSTRUCTOR	Sumiyana, Dr., M.Si., Ak., CA.		
STUDENT'S RESPONSIBILITIES	<ol style="list-style-type: none"> <li>1. Students are expected to attend the class with proper preparation by reading the materials required in each session.</li> <li>2. Contribute to the class by actively participating in the discussion led by the facilitator.</li> <li>3. Listen to the lecture, summarise, and note essential items to be discussed further during the course.</li> <li>4. Do all course assignments.</li> <li>5. Do the midterm and final exams in the scheduled week. Students have no right to ask for mid-term and final exams on other occasions except in force majeure conditions.</li> </ol>		
ACADEMIC INTEGRITY	<p>Universitas Gadjah Mada does not tolerate any form of plagiarism as this is a severe violation of academic integrity. Plagiarism encompasses presenting someone else's words, work, opinions, or factual information as one's own without giving proper acknowledgement. When you copy someone else's work, you are plagiarising. You must not copy work sections (paragraphs, diagrams, tables, and words) from any other person, including another student or author. Cutting and pasting are clear examples of plagiarism. All discovered instances involve the assignment's negative grading and the course's failure (Grade = E). In the case of group work, the entire team members will fail the course (Grade = E).</p> <p>Participation is a fundamental part of the course. Therefore, punctuality and regular attendance in class are of prime importance for completing this course. Students will be expected to attend the class on time and remain in class until the end of the class session. Therefore, students must comply with all assessed activities. If you have an emergency that leads you to come late, you should contact your instructor in advance.</p>		
AUTHORISATION	DATE	COURSE COORDINATOR	HEAD OF THE STUDY PROGRAM
	20 January 2022	Sumiyana, Dr., M.Si., Ak., CA.	Abdul Halim, Prof., Dr., MBA, Ak., CA.

## WEEKLY LEARNING ACTIVITY PLAN

Session	Course Sub-Objective	Topic	Material	Assignment	Facilitator
1	Be able to explain the structure of an IT audit: the relationship between management assertions, audit objectives, controls tests, substantive tests are explained, and the evidence collection and validation model.	Auditing, Assurance, and Internal Control	Ch. 1: Auditing, Assurance and Internal Control Yu, Chien-Chih, Hung-Chao Yu, and Chi-Chun Chou. <i>The Impact of Electronic Commerce on Auditing Practice: An Auditing Process Model for Evidence Collection and Validation</i> . International Journal of Intelligent Systems in Accounting, Finance and Management. Vol. 9, 2001, pp. 195-216	CCS  ACR	Sumiyana, Dr., M.Si., Ak., CA.
2	Be able to understand the structure of the IT function, the components of the computer system, including software, hardware, networks, and resources, and how to operate it.	Computer Operations	Ch. 2: Computer Operations Gonzales, George C., Pratyush N. Sharma, and Dennis F. Galletta. <i>The Antecedents of The Use of Continuous Auditing in The Internal Auditing Context</i> , International Journal of Accounting Information Systems Vol. 13, 2012, pp. 248-262.	CCS ACR	Sumiyana, Dr., M.Si., Ak., CA.
3	Be able to present a conceptual overview of the database model and illustrate how problems associated with the flat-file model are resolved under this approach.	Data Management System	Ch. 3: Data Management Systems Bernado, Merce, Marti Casadesus, Stanislav Karapetrovic, and Inaki Heras. <i>Relationship between The Integration of Audits and Management Systems</i> , The TQM Journal Vol. 23 (6), 2011, pp.659-672.	CCS ACR	Sumiyana, Dr., M.Si., Ak., CA.
4	Be able to describe the participants' roles in developing an organisation's information system, including systems professionals, users, and stakeholders. Then it outlines the key activities that constitute the systems development life cycle (SDLC).	System Development and Maintenance Activities	Ch. 4: System Development and Maintenance Activities Majdalawieh, Munir, Sofiani Sahrouni, and Reza Barkhi. <i>Intra/Inter-Process Continuous Auditing (IIPCA), Integrating CA within An Enterprise System Environment</i> , Business Process Management Journal Vol. 18(2), 2012, pp. 304-227.	CCS  ACR	Sumiyana, Dr., M.Si., Ak., CA.

5	Be able to understand networks, the internet and e-commerce, present the risk and control system of e-commerce, understand audit procedures for e-commerce	Networks, Internet, and E-Commerce	Ch. 5: Networks, Internet, and E-Commerce Kotb, Amr, Clare Robert and S. Sian. <i>E-Business Audit: Advisory Jurisdiction or Occupational Invasion? Critical Perspective on Accounting</i> , Vo.: 23, 2012, pp. 468-482. Abu-Musa, Ahmad A. <i>Auditing E-Business: New Challenges for External Auditors</i> , The Journal of American Academy of Business, Vol. -, March 2004, pp. 28-41.	CCS ACR ACR	Sumiyana, Dr., M.Si., Ak., CA.
6	Be able to present and elaborate number of issues related to the implementation and audit of enterprise resource planning (ERP) systems.	Enterprise Resources Planning Systems	Ch. 6: Enterprise Resources Planning Systems Madani, H. Haider. <i>The Role of Internal Auditors in ERP-Based Organisations</i> , Journal of Accounting and Organizational Change Vol. 5(4), 2009, pp. 514-526.	CCS ACR	Sumiyana, Dr., M.Si., Ak., CA.
7	Be able to understand the impact of electronic commerce assurance on financial analysts' earnings forecast and stock price estimates, and utilisation of Generalised and Specialised Audit Software (G&SAS)	-	Ch. -: - Hunton, James E., Tanya Benford, Vicky Arnold and Steve G. Sutton. <i>The Impact of Electronic Commerce Assurance on Financial Analysts' Earnings Forecast and Stock Price Estimates</i> , Auditing: A Journal of Practice and Theory, Vol. 19, 2000, pp. 5-22. Ahmi, Aidi, and Simont Kent, <i>The Utilisation of Generalized Audit Software (GAS) by External Auditors</i> , Managerial Auditing Journal, Vol. 28(2), 2013, pp. 88-113. Review Soal Ujian Mid	- ACR ACR	Sumiyana, Dr., M.Si., Ak., CA.
Mid-term exam					
8	Be able to understand Computer Assisted Audit Tools and Techniques (CAATs) to implement processing controls, including run-to-run, operator intervention, and audit trail controls.	Computer-Assisted Audit Tools and Techniques	Ch. 7: Computer-Assisted Audit Tools and Techniques Stoel, Dale, Douglas Havelka, Jeffrey W. Meerhout, <i>An Analysis of Attributes that Impact Information Technology Audit Quality: A Study of IT and Financial Audit Practitioners</i> ,	CCS ACR	Sumiyana, Dr., M.Si., Ak., CA.



			International Journal of Accounting Information Systems, Vol. 13, 2012, pp. 60-79.		
9	Be able to understand how data is organised and accessed is central to using data extraction tools. Therefore, considerable attention is devoted to relational databases since modern business organisations use this most common data structure.	CAATs for Data Extraction and Analysis	Ch. 8: CAATs for Data Extraction and Analysis Benaroh, Michael, Anna Chernobai, and James Goldstein. <i>An Internal Control Perspective on The Market Value Consequences of IT Operational Risk Events</i> , International Journal of Accounting Information Systems, Vol. 13, 2012, pp. 357-381.	CCS ACR	Sumiyana, Dr., M.Si., Ak., CA.
10	Be able to understand the operational tasks associated with the revenue cycle under different levels of technology.	Auditing The Revenue Cycle	Ch. 9: Auditing The Revenue Cycle Chou, Chi-Chun, and C. Jaine Chang. <i>Continuous Auditing for Web-Released Financial Information</i> , Review of Accounting and Finance, Vol. 9(1), 2010, pp. 4-32.	CCS ACR	Sumiyana, Dr., M.Si., Ak., CA.
11	Be able to understand the implementation of the continuous auditing system in the ERP-based environment.	Auditing The Expenditure Cycle	Ch. 10: Auditing The Expenditure Cycle Shin, Il-Hang, Myung-Gun Lee, and Woojin Park. <i>Implementation of The Continuous Auditing System in The ERP-Based Environment</i> , Managerial Auditing Journal, Vol.28(7), 2013, pp. 592-627.	CCS ACR	Sumiyana, Dr., M.Si., Ak., CA.
			Employees		
12	Be able to examine the closely related subjects of ethics and fraud and their implications for auditing.	Introduction to Business Ethics and Fraud	Ch. 11: Introduction to Business Ethics and Fraud Herath, Hemantha SB., and Tejaswini C. Herath. <i>IT Security Auditing: A Performance Evaluation Decision Model</i> , Decision Support Systems, Vol. 57, 2014, pp. 54-63. Kanellou, Alexandra, and Charalambos Spathis. <i>Auditing in Enterprise System Environment: A Synthesis</i> , Journal of Enterprise Information Management, Vol. 24(6),	CCS ACR ACR	Sumiyana, Dr., M.Si., Ak., CA.

			2011, pp. 494-519.		
13	Be able to understand the nature and meaning of fraud, differentiates between employee fraud and management fraud, explain fraud-motivating forces, and review common fraud techniques.	Fraud Schemes and Fraud Detection	Ch. 12: Fraud Schemes and Fraud Detection Omoteso, Kamil, <i>The Application of Artificial Intelligence in Auditing: Looking Back to The Future, Expert Systems with Application</i> , Vol.: 39, 2012, pp. 8490-8495. Vasarhelyi, Miklos A., Michael Alles, Siripan Kuenkaikaew, and James Lttley, <i>The Acceptance and Adoption of Continuous Auditing by Internal Auditors: A Micro Analysis</i> , International Journal of Accounting Information Systems, Vol. 13, 2012, pp. 267-281.	CCS ACR ACR	Sumiyana, Dr., M.Si., Ak., CA.
14	Be able to understand the impact of E-Business on the audit process and the Incremental Value of Continuous Auditing and Continuous Control Monitoring	-	Ch:-/ Kotb, Amr, and Clare Roberts. <i>The Impact of E-Business on The Audit Process: An Investigation of The Factor Leading to Change</i> , International Journal of auditing. Vol, 15, 2011, pp. 150-175. Farkas, Maia, and Uday S. Murthy, <i>Nonprofessional Investors' Perceptions of The Incremental Value of Continuous Auditing and Continuous Control Monitoring: An Experimental Investigation</i> , International Journal of Accounting Information Systems, Vol. 14, 2013, pp. 1-21. Final Exam Review	ACR ACR	Sumiyana, Dr., M.Si., Ak., CA.
Final exam					