



**UNIVERSITAS NEGERI PADANG**  
**FAKULTAS TEKNIK**  
**MAGISTER CHIEF INFORMATION OFFICER**



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**SILABUS DAN RANCANGAN AGENDA PERKULIAHAN**  
**MAGISTER CHIEF INFORMATION OFFICER**  
**Semester : 2**

Berlaku mulai: Januari 2012

JUDUL MATA KULIAH	: <b>AUDIT TEKNOLOGI INFORMASI</b>
NOMOR KODE / SKS	: CIO007 / 2 SKS
PEMBINA	: <b>Muhammad Adri, S.Pd, MT</b>
JADWAL	: <b>Selasa/ 10.30 – 12.20</b>
PRASYARAT	: -
DESKRIPSI SINGKAT	: Mata kuliah ini memberikan konsep audit TI yang hasilnya dapat memberikan perbaikan bagi organisasi.
MANFAAT MATA KULIAH	: Mata Kuliah ini m
TUJUAN INSTRUKSIONAL UMUM	: Setelah mengikuti mata kuliah ini, mahasiswa dapat memahami konsep dan dasar audit TI yang hasilnya dapat memberikan perbaikan bagi organisasi.
DAFTAR PUSTAKA	: <b>Bacaan Utama :</b> Hall, James A. 2011. <i>Information Technology Auditing and Assurance, 3<sup>rd</sup> Edition</i> , Florida, USA : Auerbach Publications <b>Bacaan Wajib :</b> 1. Senft, Sandra; Gallegos, Frederick., 2009. <i>Information Technology Control and Audit. Third edition</i> . Auerbach Publications 2. Davis, Chris., 2007. <i>IT Auditing : using control to protect information assets</i> . McGraw-Hill
PROSENTASE PENILAIAN	: ABSENSI : 10 % TUGAS : 25 %, QUIS : 10 % UTS : 25 % UAS : 30 %

PERT KE	TUJUAN INSTRUKSIONAL UMUM	POKOK BAHASAN	SUB POKOK BAHASAN	SUMBER BELAJAR
1	<b>10 Januari 2012</b> Introduction of Curriculum and Course Programme	- Introduction	1. Design of Course Material 2. Assessment System 3. Course Methodology	
2	<b>17 Januari 2012</b> Presents the IT environment today and discusses why issues involving IT control and audit are so important. It	A Foundation for IT Audit and Control (1)	4. Information Technology Environment: Why Are Controls And	1 (h.3 – h.17)



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	briefly discusses what IT auditing involves and the development of guidance by a number of organizations worldwide to deal with IT control and auditability issues. Information integrity, reliability, and validity are extremely important in today's competitive business world		Audit Important ? 5. Legal Environment and Its Impact on Information Technology 6. Audit and Review: Its Role in Information Technology 7. Audit Process in an Information Technology Environment	1 (h.21 – h.43) 1 (h.47 – h.68) 1 (h.75 – h.97)
3	<b>24 Januari 2012</b>	A Foundation for IT Audit and Control (3)  A Foundation for IT Audit and Control (4)	8. Auditing Information Technology Using Computer-Assisted Audit Tools and Techniques 9. Managing IT Audit 10. IT Auditing in the New Millennium	1 (h.101 – h.125)  1 (h.129 – h.149) 1 (h.155 – h.173)
4	<b>31 Januari 2012</b> <ul style="list-style-type: none"> <li>- Know the difference between attest services and advisory services and be able to explain the relationship between the two.</li> <li>- Understand the structure of an audit and have a firm grasp of the conceptual elements of the audit process.</li> <li>- Understand the relationship between general controls, application controls, and financial data integrity.</li> </ul>	Auditing and Internal Control	1. Overview of Auditing 2. The Role of the Audit Committee 3. Financial Audit Components 4. Audit Risk 5. The IT Audit 6. Internal Control 7. Internal Control Objectives, Principles, and Models	Utama : Chapter 1
5	<b>7 Februari 2012</b> After studying this chapter, you should: <ul style="list-style-type: none"> <li>- Understand the risks of</li> </ul>	Auditing IT Governance Controls	1. Information Technology Governance 2. Structure of the	Utama : Chapter 2



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	<p>incompatible functions and how to structure the IT function.</p> <ul style="list-style-type: none"><li>- Be familiar with the controls and precautions required to ensure the security of an organization's computer facilities.</li><li>- Understand the key elements of a disaster recovery plan.</li><li>- Be familiar with the benefits, risks, and audit issues related to IT outsourcing</li></ul>		<p>Information Technology Function</p> <ol style="list-style-type: none"><li>3. The Computer Center</li><li>4. Disaster Recovery Planning</li><li>5. Outsourcing the IT Function</li></ol>	
6	<p><b>14 Februari 2012</b> After studying this chapter, you should:</p> <ul style="list-style-type: none"><li>- Be able to identify the principal threats to the operating system and the control techniques used to minimize the possibility of actual exposures.</li><li>- Be familiar with the principal risks associated with commerce conducted over intranets and the Internet and understand the control techniques used to reduce these risks.</li><li>- Be familiar with the risks associated with personal computing systems.</li><li>- Recognize the unique exposures that arise in connection with electronic data interchange (EDI) and understand how these exposures can be reduced.</li></ul>	<p>Security Part I: Auditing Operating System and Network</p>	<ol style="list-style-type: none"><li>1. Auditing Operating Systems</li><li>2. Auditing Networks</li><li>3. Auditing Electronic Data Interchange (EDI)</li><li>4. Auditing PC-Based Accounting Systems</li></ol>	<p>Utama : Chapter 3</p>
7	<p><b>21 Februari 2012</b> After studying this chapter, you should:</p> <ul style="list-style-type: none"><li>- Understand the operational problems inherent in the flat-file approach to data management that gave rise to the database approach.</li><li>- Understand the relationships</li></ul>	<p>Security Part II: Auditing Database Systems</p>	<ol style="list-style-type: none"><li>1. Data Management Approaches</li><li>2. Key Elements of the Database Environment</li><li>3. Databases in a Distributed Environment</li><li>4. Controlling and</li></ol>	<p>Utama : Chapter 4</p>



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	<p>among the fundamental components of the database concept.</p> <ul style="list-style-type: none"><li>- Recognize the defining characteristics of three database models: hierarchical, network, and relational.</li><li>- Understand the operational features and associated risks of deploying centralized, partitioned, and replicated database models in the DDP environment.</li><li>- Be familiar with the audit objectives and procedures used to test data management controls.</li></ul>		Auditing Data Management Systems	
8	<b>28 Februari 2012</b> <b>Mid Examination</b>			
9	<b>6 Maret 2012</b> After studying this chapter, you should: <ul style="list-style-type: none"><li>- Be able to identify the stages in the SDLC.</li><li>- Be familiar with common problems that can lead to failure in the systems development process.</li><li>- Understand the importance of strategic system planning.</li><li>- Have a general understanding of how accountants participate in the SDLC.</li><li>- Be able to identify the basic features of both the structured and object-oriented approaches to systems design.</li><li>- Be able to identify and discuss the major steps involved in a cost-benefit analysis of proposed information systems.</li><li>- Understand the advantages and disadvantages of the commercial</li></ul>	Systems Development and Program Change Activities	<ol style="list-style-type: none"><li>1. Participants in Systems Development</li><li>2. Information Systems Acquisition</li><li>3. The Systems Development Life Cycle</li><li>4. Controlling and Auditing the SDLC</li></ol>	Utama : Chapter 5



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	<p>software option, and be able to discuss the decision-making process used to select commercial software.</p> <ul style="list-style-type: none"><li>- Understand the purpose of a system walkthrough.</li><li>- Be familiar with the different types of system documentation and the purposes they serve.</li></ul>			
10	<p><b>13 Maret 2012</b> After studying this chapter, you should:</p> <ul style="list-style-type: none"><li>- Understand the broad objectives of the three transaction cycles and the types of transactions processed by each of them.</li><li>- Understand the relationship between traditional accounting records and their digital equivalents in computer-based systems.</li><li>- Be familiar with the documentation techniques used for representing manual and computer-based systems.</li><li>- Understand the technologies used to automate and reengineer accounting information systems.</li><li>- Understand the operational features of the general ledger system (GLS) and the financial reporting system (FRS).</li></ul>	Transaction Processing and Financial Reporting System Overview	<ol style="list-style-type: none"><li>1. An Overview of Transaction Processing</li><li>2. Documentation Techniques</li><li>3. Computer-Based Accounting Systems</li><li>4. Data Coding Schemes</li><li>5. The General Ledger System</li><li>6. The Financial Reporting System</li><li>7. XBRL— Reengineering Financial Reporting</li><li>8. Controlling the FRS</li></ol>	Utama : Chapter 6
11	<p><b>20 Maret 2012</b> After studying this chapter, you should:</p> <ul style="list-style-type: none"><li>- Be familiar with the classes of transaction input controls used by accounting applications.</li><li>- Understand the objectives and techniques used to implement processing controls, including run-to-run, operator intervention,</li></ul>	Computer-Assisted Audit Tools and Techniques	<ol style="list-style-type: none"><li>1. Application Controls</li><li>2. Testing Computer Application Controls</li><li>3. Computer-aided Audit Tools and Techniques for</li><li>4. Testing Controls</li></ol>	Utama : Chapter 7



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	<p>and audit trail controls.</p> <ul style="list-style-type: none"><li>- Understand the methods used to establish effective output controls for both batch and real-time systems.</li><li>- Know the difference between black box and white box auditing.</li><li>- Be familiar with the key features of the five CAATTs discussed in the chapter.</li></ul>			
12	<p><b>27 Maret 2012</b> After studying this chapter, you should:</p> <ul style="list-style-type: none"><li>- Understand the components of data structures and how these are used to achieve data-processing operations.</li><li>- Be familiar with structures used in flat-file systems, including sequential, indexes, hashing, and pointer structures.</li><li>- Be familiar with relational database structures and the principles of normalization.</li><li>- Understand the features, advantages, and disadvantages of the embedded audit module approach to data extraction.</li><li>- Know the capabilities and primary features of generalized audit software.</li><li>- Become familiar with the more commonly used features of ACL.</li></ul>	Data Structures and CAATTs for Data Extraction	<ol style="list-style-type: none"><li>1. Data Structures</li><li>2. Designing Relational Databases</li><li>3. Embedded Audit Module</li><li>4. Generalized Audit Software</li><li>5. ACL Software</li></ol>	Utama : Chapter 8
13	<p><b>03 April 2012</b> After studying this chapter, you should:</p> <ul style="list-style-type: none"><li>- Understand the operational tasks associated with the revenue cycle under different levels of technology.</li><li>- Understand audit objectives related to the revenue cycle.</li></ul>	Auditing the Revenue Cycle	<ol style="list-style-type: none"><li>1. Revenue Cycle Activities and Technologies</li><li>2. Revenue Cycle Audit Objectives, Controls, and</li><li>3. Tests of Controls</li><li>4. Substantive Tests of Revenue Cycle</li></ol>	Utama : Chapter 9



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	<ul style="list-style-type: none"><li>- Be familiar with revenue cycle control issues related to alternative technologies.</li><li>- Recognize the relationship between revenue cycle audit objectives, controls, and tests of controls.</li><li>- Understand the nature of substantive tests in achieving revenue cycle audit objectives.</li><li>- Be familiar with common features and functions of ACL that are used to perform substantive tests.</li></ul>		Accounts	
14	<b>10 April 2012</b> After studying this chapter, you should: <ul style="list-style-type: none"><li>- Understand the primary tasks associated with the expenditure cycle under different levels of technology.</li><li>- Understand audit objectives related to the expenditure cycle.</li><li>- Be familiar with expenditure cycle control issues related to alternative technologies.</li><li>- Recognize the relationship between expenditure cycle audit objectives, controls, and tests of controls.</li><li>- Understand the nature of substantive tests in achieving expenditure cycle audit objectives.</li><li>- Be familiar with common features and functions of ACL that are used to perform substantive tests.</li></ul>	Auditing the Expenditure Cycle	<ol style="list-style-type: none"><li>1. Expenditure Cycle Activities and Technologies</li><li>2. Expenditure Cycle Audit Objectives, Controls, and</li><li>3. Tests of Controls</li><li>4. Substantive Tests of Expenditure Cycle Accounts</li></ol>	Utama : Chapter 10
15	<b>17 April 2012</b> After studying this chapter, you should: <ul style="list-style-type: none"><li>- Understand the general functionality and key elements of ERP systems.</li></ul>	Enterprise Resource Planning Systems	<ol style="list-style-type: none"><li>1. What Is an ERP?</li><li>2. ERP System Configurations</li><li>3. Data Warehousing</li><li>4. Risks Associated with ERP</li></ol>	Utama : Chapter 11



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	<ul style="list-style-type: none"><li>- Understand the various aspects of ERP configuration including servers, databases, and the use of bolt-on software.</li><li>- Understand the purpose of data warehousing as a strategic tool and recognize the issues related to the design, maintenance, and operation of a data warehouse.</li><li>- Recognize the risks associated with ERP implementation.</li><li>- Be aware of the key considerations related to ERP implementation.</li><li>- Understand the internal control and auditing implications associated with ERPs</li></ul>		5. Implementation Implications for Internal Control and Auditing	
16	<b>21 April 2012</b> After studying this chapter, you should: <ul style="list-style-type: none"><li>- Understand the broad issues pertaining to business ethics.</li><li>- Understand what constitutes fraudulent behavior.</li><li>- Be able to explain fraud-motivating forces.</li><li>- Be familiar with typical fraud schemes perpetrated by managers and employees.</li><li>- Be familiar with the common anti-fraud techniques used in both manual systems and computer-based systems.</li><li>- Be familiar with the use of ACL in the detection of fraud.</li></ul>	Business Ethics, Fraud, and Fraud Detection	<ol style="list-style-type: none"><li>1. Ethical Issues in Business</li><li>2. Fraud and Accountants</li><li>3. Auditor's Responsibility for Detecting Fraud</li><li>4. Fraud Detection Techniques</li></ol>	Utama : Chapter 12
17	<b>28 April 2012</b> <b>Final Examination</b>			

Padang, Januari 2012  
Dosen Pembina





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