

Faculty	Management and Social Sciences	
Department	Sociology	
Course Title	Information system Security Management	
Year of Study	4	
Course Code	CSS 410	
Credit Hours	2	
Contact Hours	30	
Mode of Delivery	Classroom Lectures	
Mode of Assessment		Weight%
Continuous Assessment		30%
Final Examination		70%
Total		100%
Course Lecture/Instructor	Prof. A. A. ATERE	
Course Description	This course examines the basic aspect of information system security management. Part of the expected areas the course is to cover are: Information gathering; Information security in the 21st century with special emphasis on computer security; Introduction to system analysis and design; Information system security ; a guide to the use of water quality management principles; ethics of information communication technology; information security integration; ways of integrating information assurance into system administration; the innovation system and the economics of innocent fraud management.	
Course Objectives	At the end of this course students should be able to know the basic aspect of information system security management. Part of the expected areas the course is to cover are: Information gathering; Information security in the 21st century with special emphasis on computer security; Introduction to system analysis and design; Information system security ; a guide to the use of water quality management principles; ethics of information communication technology; information security integration; ways of integrating information assurance into system administration; the innovation system and the economics of innocent fraud management.	
Learning Outcomes	At the end of this course students will know the basic aspect of information system security management. Part of the expected areas the course is to cover are: Information gathering; Information security in the 21st century with special emphasis on computer security; Introduction to system analysis and design; Information system security ; a guide to the use of water quality management principles; ethics of information communication technology; information security integration; ways of integrating information assurance into system administration; the innovation system and the economics of innocent fraud management.	
Teaching and Learning	The class will meet for two hours each week. Class time will be used for a combination of lectures and practical sessions	
Detailed Course Content	the basic aspect of information system security management. Part of the expected areas the course is to cover are: Information gathering; Information security in the 21st century with special emphasis on computer security; Introduction to system analysis and design; Information system security ; a guide to the use of water quality management principles; ethics of information communication technology; information security integration; ways of integrating information assurance into system administration; the innovation system and the economics of innocent fraud management.	
Course Content Sequencing		
Weeks	Detailed Course Outline	Allocated Time

Week 1	<p>Introduction to Information System Security Management</p> <p>Overview of Information Security Management. Importance of Information Security in the 21st Century. Basic Concepts of Computer Security.</p>	2 hours
Week 2	<p>Information Gathering and Assessment</p> <p>Methods for Information Gathering in Security Management. Identifying and Assessing Information Security Risks. Risk Assessment Tools and Techniques.</p>	2 hours
Week 3	<p>System Analysis and Design in Security</p> <p>Introduction to System Analysis and Design. Incorporating Security into System Development. Security Considerations in the System Development Life Cycle.</p>	2 hours
Week 4	<p>Information System Security Frameworks</p> <p>Overview of Information System Security Frameworks. Applying Security Frameworks to Real-World Scenarios. Developing a Security Strategy for Information Systems.</p>	2 hours
Week 5	<p>Water Quality Management Principles and Security</p> <p>Application of Water Quality Management Principles to Information Security. Analogies between Water Quality Management and Data Protection. Environmental Security and Information Security Parallels.</p>	2 hours
Week 6	<p>Ethics of Information Communication Technology</p> <p>Ethical Considerations in Information Security. Ethical Dilemmas in Technology and Security. Building an Ethical Framework for IT Professionals.</p>	2 hours
Week 7	<p>Information Security Integration</p> <p>Integrating Information Security into Organizational Culture. Strategies for Seamlessly Integrating Security Measures. Case Studies on Successful Information Security Integration.</p>	2 hours
Week 8	<p>Information Assurance in System Administration</p> <p>Understanding the Role of System Administration in Information Assurance. Best Practices for Secure System Administration. Tools and Techniques for Monitoring and Assurance.</p>	2 hours
Week 9	<p>Innovation Systems and Security</p> <p>The Role of Innovation in Information Security. Adapting to New Threats and Technologies.</p>	2 hours

	Balancing Innovation and Security in IT Environments. Economics of Innocent Fraud Management	
Week 10	Economic Aspects of Information Security. Detecting and Preventing Innocent Fraud. Cost-Benefit Analysis in Security Decision-Making.Final Projects and Future Trends	2 hours
Week 11	Student Presentations on Information Security Projects. Emerging Trends in Information Security Management. Preparing for a Career in Information Security.	2 hours
Week 14	Examination	

RECOMMENDED MATERIALS

Week 1: Introduction to Information System Security Management

Reference: "Information Security Management Principles" by David Alexander and Amanda Finch.

Week 2: Information Gathering and Assessment

Reference: "Risk Management in Information Security" by M. Kabay and D. Blyler.

Week 3: System Analysis and Design in Security

Reference: "Security Engineering: A Guide to Building Dependable Distributed Systems" by Ross J. Anderson.

Week 4: Information System Security Frameworks

Reference: "ISO/IEC 27001:2013 - Information technology -- Security techniques -- Information security management systems -- Requirements" (International Standard).

Week 5: Water Quality Management Principles and Security

Reference: "Water Quality: Guidelines, Standards, and Health" by World Health Organization.

Week 6: Ethics of Information Communication Technology

Reference: "Computer Ethics" by Deborah G. Johnson.

Week 7: Information Security Integration

Reference: "Security Culture: A How-To Guide for Improving Cybersecurity Culture and Dealing with People Risk in Your Organisation" by Kai Roer.

Week 8: Information Assurance in System Administration

Reference: "Principles of Information Security" by Michael E. Whitman and Herbert J. Mattord.

Week 9: Innovation Systems and Security

Reference: "Innovation and Its Enemies: Why People Resist New Technologies" by Calestous Juma.

Week 10: Economics of Innocent Fraud Management

Reference: "Security Economics: A Guide for Decision Makers" by Ross Anderson, Tyler Moore, and Shishir Nagaraja.

Week 11: Final Projects and Future Trends

Reference: "Future Crimes: Everything Is Connected, Everyone Is Vulnerable, and What We Can Do About It" by Marc Goodman.