Republic of the Philippines
SULTAN KUDARAT STATE UNIVERSITY
COLLEGE OF COMPUTER STUDIES
ISULAN Campus
Isulan, Sultan Kudarat

A.Y. 2024-2025

UNIVERSITY VISION

A leading University in advancing scholarly innovation, multi-cultural convergence, and responsive public service in a borderless Region.

UNIVERSITY MISSION

The University shall primarily provide advanced instruction and professional training in science and technology, agriculture, fisheries, education and other relevant fields of study. It shall also undertake research and extension services, and provide progressive leadership in its areas of specialization.

UNIVERSITY STRATEGIC GOALS

a. **D**eliver quality service to stakeholders to address current and future needs in instruction, research, extension, and production
b. **O**bserve strict implementation of the laws as well as the policies and regulations of the University.
c. **A**cquire with urgency state-of-the-art resources for its service areas;
d. **B**olster the relationship of the University with its local and international customers and partners.
e. **L**everage the qualifications and competences in personnel action and staffing.
f. **E**valuate the efficiency and responsiveness of the University systems and processes.

UNIVERSITY OBJECTIVES

a. Enhance competency development, commitment, professionalism, unity and true spirit of service for public accountability, transparency and delivery of quality services;
b. Provide relevant programs and professional trainings that will respond to the development needs of the region;
c. Strengthen local and international collaborations and partnerships for borderless programs;
d. Develop a research culture among faculty and students;
e. Develop and promote environmentally-sound and market-driven knowledge and technologies at par with international standards;
f. Promote research-based information and technologies for sustainable development;
g. Enhance resource generation and mobilization to sustain financial viability of the university.

Program Objectives and its relationship to University Goals:

PROGRAM OBJECTIVES (PO) A graduate of BS in Information Systems can:	OBJECTIVES						
	a	b	c	d	e	f	G
a. Employ theoretical and practical skills in innovating latest technology in computing;	/	/			/		/
b. Design and implement business information systems;	/	/	/	/	/	/	/
c. Promote the advancement of industry-based services and technology that contributes to the development of the community; and	/	/	/	/	/	/	/
d. Demonstrate the code of conduct as well as social and legal aspects of Information Systems.	/	/	/	/	/	/	/

1. Course Code : IS211
2. Course Title : Enterprise Architecture
3. Prerequisite :
4. Credits : 3 Units

5. Course Description:

Enterprise Architecture (EA) is the analysis and design of an enterprise in its current and future states from a strategy, business and technology perspective. The objective of this course is to introduce to students the emerging area of business information architecture and security. The course provides them with an understanding of the state-of-the-art architecture and security technologies for securing and optimal use of business infrastructure.

The course will provide students with the foundational knowledge needed to understand how EA serves to integrate strategic, business, and technology planning methods, which support enterprise-wide information technology resource development and governance in the context of business requirements. This course is designed to cover the theory, frameworks, principles and best practices of enterprise architecture then move to a practical, comprehensive approach to delivering the subject matter involving real-world case studies and project discussions.

6. Course Learning Outcomes and Relationships to Program Educational Objectives

Course Learning Outcomes	Program Objectives			
At the end of the Semester the student can:	a	b	c	d
a. understand the foundational elements of EA.	/	/	/	
b. describe the value EA brings to an organization.	/	/	/	/
c. discuss, compare and understand the contemporary EA frameworks, EA concepts and practices.	/	/		/
d. articulate how enterprise architecture supports the strategic objectives of the organization.	/	/	/	/
e. understand the fundamentals of enterprise architecture development and maintenance.	/	/		
f. understand the importance of effective governance for successful enterprise architecture development and adoption.	/	/	/	/
g. learn the tools, techniques, and methods of optimal use and protection of Information Assets, Architecture and Processes, methods of Governance and Management of Information Systems within the Enterprise Architecture.	/	/	/	/

7. Course Content

Course Objectives, Topics, Time Allotment	Desired Student Learning Outcomes	Outcomes-Based Assessment (OBA) Activities	Evidence of Outcomes	Course Objectives	Program Outcomes	Values Integration
Topic: SKSU VMGO, Classroom Policies, Course Overview, Course Requirements, Grading System (2 hours)						
1.1 Discuss the VMGO of the university, classroom policies, scope of the course, course requirements and grading system	1.1 Student can be aware of and appreciate of the university's VMGO, classroom policies, course overview, requirements and grading system.	Individual participation in class discussion and group presentation	Group and individual discussions			Value of appreciation
2. Introduction to Enterprise Architecture (4 hours)						
2.1 Discuss the evolution of government and business system architecture 2.2 Define Enterprise 2.3 Define Architecture	2.1 Students can understand the evolution of government and business system architecture 2.2 Students can understand and define the term *Enterprise* 2.3 Students can understand and define the term *Architecture*	Individual participation in class discussion and group presentation Lectures Interactive Sessions Case Analysis	Group and individual discussions Interactive Sessions Case Analysis rubrics	a, b, c	a, b, d	Unity and teamwork Value of participation Communication Challenge Achievement Creativity Value of Hard work

2.4 Define Enterprise Architecture 2.5 Understand the evolution of Enterprise Architecture	2.4 Students can understand and define Enterprise Architecture 2.5 Students can discuss and understand the evolution of Enterprise Architecture					Resourcefulness Value of Appreciations
3. Enterprise Architecture Governance and Other Governance Instruments (6 hours)						
3.1 Discuss the EA Governance 3.2 Explain the EA Governance Context 3.3 Discuss and demonstrate the EA Governance Framework	3.1 Students can understand and discuss the Enterprise Architecture Governance 3.2 Students can understand and explain the Enterprise Architecture Governance Context 3.3 Students can understand and demonstrate the Enterprise Architecture	Individual participation in class discussion and group presentation Lectures Interactive Sessions Case Analysis	Group and individual discussions Interactive Sessions Case Analysis rubrics	a, b, c, d	a, b, c, d	Unity and teamwork Value of participation Communication Challenge Achievement Creativity Value of Hard work Resourcefulness

	Governance Framework					Value of Appreciations
3.4 Explain the Guiding Principles of EA Governance	3.4 Students can understand and explain the Guiding Principles of EA Governance					
3.5 Discuss the Organizational Structure, EA Governance Roles and Responsibilities	3.5 Students can understand and explain the OS and EA Governance Roles and Responsibilities					
3.6 Discuss the EA Governance Processes	3.6 Students can understand and discuss the EA Governance Processes					
4. Exploring various Enterprise Architecture (EA) Frameworks (6 hours)						
4.1 Discuss the Enterprise Architecture Framework	4.1 Students can understand, discuss and apply the Enterprise Architecture Framework	Individual participation in class discussion and group presentation	Group and individual discussions	a, b, d	a, b, d	
4.2 Explain how to implement an EA Framework	4.2 Students can understand, explain and demonstrate how	Lectures Interactive Sessions Case Analysis	Interactive Sessions, Situational and Case Analysis rubrics			

	to implement an EA Framework					
4.3 Identify and discuss the types of Enterprise Architecture Frameworks	4.3 Students can categorize and explain the types of Enterprise Architecture Frameworks					
4.4 Explain how to choose the right Enterprise Architecture Framework	4.4 Students can explain and apply the right Enterprise Architecture Framework					
5. Initiating Enterprise Architecture Layers (6 hours)						
5.1 Discuss and demonstrate how to design business, application/system, data/information and technology architecture	5.1 Students can explain, apply and demonstrate how to design business, application/system, data/information and technology architecture	Individual participation in class discussion and group presentation	Group and individual discussions	a, b, c, d	a, b, c, d, e	
5.2 Explain what is software architecture design	5.2 Students can explain the software architecture design	Lectures Interactive Sessions Case Analysis	Interactive Sessions, Situational and Case Analysis rubrics			

5.3 Explain and demonstrate how to design software architecture in 5 steps 5.4 Explain and demonstrate the best practices for software architecture design	5.3 Students can explain and demonstrate how to design software architecture in 5 steps 5.4 Students can explain and demonstrate the best practices for software architecture design					
6. Enterprise Architecture Modelling (6 hours)						
6.1. Discuss and demonstrate the EA Modelling tools and techniques 6.2. Demonstrate on how to design Enterprise/Software Architecture using a Modelling Tools 6.3. Demonstrate how to implement designed	6.1 Student can explain and demonstrate how to use a modelling tools for EA 6.2 Student can apply and demonstrate how to design Enterprise/Software Architecture using a specified Modelling Tools 6.3 Student can explain and demonstrate how to implement designed	Individual participation in class discussion and group presentation Lectures Interactive Sessions Case Analysis	Group and individual discussions Interactive Sessions Case Analysis rubrics	a, b, d	a, b, c, d, e	Unity and teamwork Value of participation Communication Challenge Achievement Creativity Value of Hard work Resourcefulness

Enterprise/Software Architecture	Enterprise/Software Architecture					Value of Appreciations
7. Enterprise Architecture Management, Implementation and Evaluation (6 hours)						
7.1 Discuss and demonstrate how to manage Enterprise Architecture in the Business Setup 7.2 Discuss and demonstrate how to implement Enterprise Architecture in the Business Setup 7.3 Discuss and demonstrate how to evaluate Enterprise Architecture of the Business	7.1 Student can understand and demonstrate how to manage Enterprise Architecture in the Business Setup 7.2 Student can understand the demonstrate how to implement Enterprise Architecture in the Business Setup 7.3 Student can understand and demonstrate how to evaluate Enterprise Architecture of the Business	Individual participation in class discussion and group presentation Lectures Interactive Sessions Case Analysis	Group and individual discussions Interactive Sessions, Situational and Case Analysis rubrics	a, b, c, d	a, b, c, d, e	Unity and teamwork Value of participation Communication Challenge Achievement Creativity Value of Hard work Resourcefulness Value of Appreciations
Examination 4 hours Lecture (36 hours) Laboratory (54 hours) **Total no. of hours: 94 hours**						

8. Course Evaluation:

Course Requirements: Design an Enterprise and System Architecture for chosen Business/Organization

- Group/Individual Requirement (The student is required to plan, analyze, design, and develop an enterprise or a software architecture for their proposed information systems for their chosen end-users).

9. Grading System:

MIDTERM		**FINAL TERM**	
Exam	- 40%	Exam	- 40%
Course Requirements	- 20%	Course Requirements	- 20%
Laboratory/Class Work/Quizzes	- 20%	Laboratory/Class Work/Quizzes	- 20%
Attendance	- 20%	Quizzes	- 20%
	100%		100%

MTG+FTG/2=FG

CONSULTATION HOURS:

- Friday (9:00-10:00AM) Only
- Set an online appointment schedule at Facebook Messenger Group Chat.
- Any concerns or inquiries beyond office hours will not be entertained.
- To set a consultation session at a different schedule, e-mail at jaymarkarendain@sksu.edu.ph

SCHEDULE OF EXAMINATION

Midterm	**-**	October 16, 2024
Final Term	**-**	December 11-13, 2024
Classes End	**-**	December 13, 2024

REFERENCES:

Textbooks:

- *Rachel Harrison (2018). "The Open Group Architecture Framework - TOGAF 9 Foundation Study Guide, 4th Edition"*
- *Marc Lankhorst (2013). "Enterprise Architectures at Work - Modeling, Communication and Analysis, 2nd Edition"*

E-Books:

- *Jörg Ziemann (2022). "Fundamentals of Enterprise Architecture Management*
- *Foundations for Steering the Enterprise-Wide Digital System, 4th Edition"*
- *Frederik Ahlemann, Eric Stettiner, Marcus Messerschmidt, Christine Legner (2018). "Strategic Enterprise Architecture Management"*
- *Rachel Harrison (2018). "The Open Group Architecture Framework - TOGAF 9 Foundation Study Guide, 4th Edition"*
- *Marc Lankhorst (2013). "Enterprise Architectures at Work - Modeling, Communication and Analysis, 2nd Edition"*

Other Online References/Resources

- https://www.tutorialspoint.com/software_architecture_design/introduction.htm
- https://en.wikipedia.org/wiki/enterprise_architecture
- https://www.techtarget.com/searchcustomerexperience/definition/enterprise_architecture

Supplementals:

- https://www.youtube.com/watch?v=9TVc32M_gIY

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