



Republic of the Philippines
SULTAN KUDARAT STATE UNIVERSITY
Isulan, Sultan Kudarat
College of Computer Studies
S.Y. 2024-2025



UNIVERSITY VISION

A trailblazer in arts, science and technology in the region.

UNIVERSITY MISSION

The University shall primarily provide advance instruction and professional training in science and technology, agriculture, fisheries, education and other related field of study. It shall undertake research and extension services, and provide progressive leadership in its area of specialization.

UNIVERSITY GOAL

To produce graduates with excellence and dignity in arts, science and technology.

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)	OBJECTIVES						
	a	B	c	d	e	f	G
A graduate of BS in Information System can:							
a. Design and implement business information system;	/	/			/		/
b. Perform theoretical and practical skills in innovating latest technology in computing;	/	/	/	/	/	/	/
c. Design industry based services and technology that will promote advancement and development to the community;	/	/	/	/	/	/	/
d. Demonstrate the code of conduct as well as social and legal aspects of Information System.	/	/	/	/	/	/	/

1. Course Code

: IS412

2. Course Title

: Capstone Project 2

3. Prerequisite

: IS 322

4. Credits

: 3 UNITS

This course continues from Capstone Project 1, focusing on the growth and development of projects related to or dependent on the subject areas covered in the first semester. Students will apply research techniques, design and implement systems, and prepare for the final defense of their capstone projects

6. Course Learning Outcomes and Relationships to Program Educational Objectives

Course Learning Outcomes		Program Objectives			
At the end of Semester the student can:		a	b	c	d
a.	Analyze and interpret the data collected during their capstone project using appropriate statistical, analytical, and visualization tools to derive meaningful insights and conclusions.	/	/	/	
b.	Present and discuss their research findings in a clear, structured, and insightful manner, highlighting the implications of their results on the research question and the broader field of information systems.	/	/		/
c.	Discuss and draw clear and actionable conclusions, provide evidence-based recommendations for stakeholders, and reflect on the broader implications of their research for future work.			/	/
d.	Evaluate their research methodology, analyze challenges faced, and reflect on lessons learned, while assessing the impact of their capstone project on the community, industry, or field of information systems and demonstrate professionalism, adhere to ethical standards in computing and information systems development, and deliver a well-structured, persuasive, and professional final defense presentation.	/	/	/	/

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. Data Analysis and Interpretation						
2.1. Discuss and apply techniques for analyzing quantitative and qualitative data collected during the capstone project. 2.2. Discuss and demonstrate Interpreting results using statistical tools, data visualization, and analytical frameworks. 2.3. Discuss how to ensure the validity and reliability of findings.	2.1. Student can discuss apply techniques for analyzing quantitative and qualitative data collected during the capstone project. 2.2. Students can discuss and demonstrate Interpreting results using statistical tools, data visualization, and analytical frameworks. 2.3. Students can	Individual participation in class discussion and group presentation Lectures Interactive Sessions Case Analysis	Group and individual discussions Interactive Sessions Case Analysis rubrics	a, c	a, b	Value of appreciation

	discuss and ensure the validity and reliability of findings.					
3. Results and Discussion						
3.1. Discuss writing a Structured Results and discussion chapter. 3.2. Discuss the presentation of key findings in a clear and concise manner. 3.3. Discuss and understanding the implications of the findings in the context of the research question and the broader field of information systems.	3.1. Students can Discuss and write a structured results and discussion chapter. 3.2. Students can discuss and present the key findings in a clear and concise manner. 3.3. Students can discuss the implications of the findings in the context of the research question and the broader field of information systems.	Individual participation in class discussion and group presentation Lectures Interactive Sessions Case Analysis	Group and individual discussions Interactive Sessions Case Analysis rubrics	b, c	a, c	Value of appreciation
4. Drawing Conclusions and Making Recommendations						
4.1. Empower students to synthesize the key findings and their significance. 4.2. Facilitate students' understanding of how to frame conclusions that	4.1. Students can synthesize key findings and articulate their significance in academic discussions and written reports. 4.2. Students can	Individual participation in class discussion and group presentation Lectures Interactive	Group and individual discussions Interactive Sessions Case Analysis rubrics	c, d	c, d	Unity and teamwork Value of appreciation

<p>reinforce research significance.</p> <p>4.3. Develop students' capacity to provide evidence-based recommendations that drive informed decision-making.</p>	<p>demonstrate the ability to construct well-supported conclusions that effectively reinforce research significance.</p> <p>4.3. Students can apply critical thinking skills to develop evidence-based recommendations that support informed decision-making for stakeholders.</p>	<p>Sessions Case Analysis</p>				
<p>5. Reflection on the Research Process</p>						
<p>5.1. Enhance students' ability to critically reflect on the research methodology, challenges faced, and key lessons learned.</p> <p>5.2. Develop students' capacity to analyze the limitations of a study and identify potential directions for future research.</p>	<p>5.1. - Students can demonstrate the ability to critically assess their research methodology, identifying challenges and lessons learned throughout the process.</p> <p>5.2. Students can articulate study limitations and propose meaningful recommendations for</p>	<p>Individual participation in class discussion and group presentation</p> <p>Lectures Situational Analysis Case Analysis Interactive Sessions</p>	<p>Group and individual discussions</p> <p>Interactive Sessions, Situational and Case Analysis rubrics</p>	<p>c, d</p>	<p>c, d</p>	<p>Value of participation, teamwork, Hard work, Resourcefulness, accomplishments and appreciation</p>

5.3. Enable students to evaluate the impact of their capstone project on the community or industry, considering both short-term and long-term effects.	<p>future research based on their findings.</p> <p>5.3. Students can evaluate the societal or industry impact of their capstone project and communicate its significance effectively.</p>				
6. Preparing for the Final Defense					
<p>6.1. Develop students' ability to craft compelling presentations for their final defense, ensuring clarity and effectiveness.</p> <p>6.2. Enhance students' public speaking and presentation skills to build confidence in delivering their research.</p> <p>6.3. Prepare students to anticipate and effectively respond to questions from the defense panel.</p> <p>6.4. Ensure students understand how to maintain consistency between their written</p>	<p>6.1 Students can create well-structured presentations that effectively communicate their research findings and conclusions.</p> <p>6.2. Students can demonstrate strong public speaking skills and professional presentation techniques during their final defense.</p> <p>- Students can critically analyze potential questions and formulate well-reasoned responses</p>	<p>Individual participation in class discussion and hands on</p> <p>Lectures</p> <p>Situational Analysis</p> <p>Case Analysis</p> <p>Group</p> <p>Demonstration</p> <p>Interactive Sessions</p>	<p>Group and individual discussions</p> <p>Interactive Sessions</p> <p>,Situational Analysis,</p> <p>Case Analysis, and demonstration rubrics</p>	<p>b, d</p>	<p>d</p> <p>Value of participation, Hard work, Resourcefulness, accomplishments, teamwork and communication</p>

capstone project and oral defense.	for defense panel discussions. Students can align their written capstone project with their oral defense to ensure coherence and consistency in presentation.					
Total Hours	Lecture: 54 Exam: 4 Total : 58 hours					

Course Evaluation

Course Requirements: Passed final defense.

Grading System:

MIDTERM

Exam	-50%
Class Work	-30%
Attendance	- 10%
Quizzes	-10%

MTG+FTG/2=FG

FINAL TERM

Exam	-50%
Class Work	- 30%
Attendance	- 10%
Quizzes	-10%

Schedule of Examination

Midterm	-
Final Term	-
Classes End	-

References:

Online Resources

<https://www.khanacademy.org/math/statistics-probability>
<https://www.coursera.org/learn/data-analysis-with-python>
<https://www.youtube.com/user/joshstarmer>
<https://towardsdatascience.com/>
<https://scientific-publishing.webshop.elsevier.com/manuscript-preparation/how-to-write-the-results-section-of-a-research-paper/>
<https://www.coursera.org/learn/sciwrite>
<https://academichelp.net/general-writing-tips/writing-process/how-to-write-a-conclusion.html#:~:text=The%20last%20sentence%20of%20the,and%20edit%20it%2C%20if%20necessary.>
<https://www.youtube.com/watch?v=D2QnK8eDvsk>
https://www.youtube.com/results?search_query=thesis+defense+tips

Textbook:

- Field, A. (2017). Discovering Statistics Using IBM SPSS Statistics. Sage.
- Creswell, J. W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage.
- Pallant, J. (2020). SPSS Survival Manual. Open University Press.
- Tabachnick, B. G., & Fidell, L. S. (2018). Using Multivariate Statistics. Pearson.
- Trochim, W. M. K., & Donnelly, J. P. (2006). Research Methods Knowledge Base. Cengage.
- Swales, J. M., & Feak, C. B. (2012). Academic Writing for Graduate Students. University of Michigan Press.
- Silvia, P. J. (2015). How to Write a Lot: A Practical Guide to Productive Academic Writing. APA.
- Weiss, C. H. (1998). Evaluation: Methods for Studying Programs and Policies. Prentice Hall.
- Locke, L. F., Spirduso, W. W., & Silverman, S. J. (2013). Proposals That Work. Sage.
- Krathwohl, D. R. (2009). Methods of Educational and Social Science Research. Waveland Press.
- Booth, W. C., Colomb, G. G., & Williams, J. M. (2016). The Craft of Research. University of Chicago Press.
- Punch, K. F. (2006). Developing Effective Research Proposals. Sage.
- Galvan, J. L., & Galvan, M. C. (2017). Writing Literature Reviews. Routledge.
- Moon, J. A. (2006). Learning Journals: A Handbook for Reflective Practice and Professional Development. Routledge.
- Schön, D. A. (1983). The Reflective Practitioner. Basic Books.
- Boud, D., Keogh, R., & Walker, D. (2013). Reflection: Turning Experience into Learning. Routledge.
- Peters, R. L. (1997). Getting What You Came For: The Smart Student's Guide to Earning a Master's or Ph.D.. Farrar, Straus and Giroux.
- Nygaard, L. P. (2017). Writing Your Master's Thesis. Sage.

Cone, J. D., & Foster, S. L. (2006). *Dissertations and Theses from Start to Finish*. APA.

Supplemental:

IBM – SPSS Documentation
Python Docs – Pandas Library
R Project – CRAN R Manuals
StatSoft – Electronic Statistics Textbook
DataCamp – Courses on Data Interpretation
Springer – Writing the Discussion
Nature – 10 Tips for Writing the Results
Journal of Clinical Epidemiology – Author Guidelines
APA Style – Formatting and Discussion
Wiley Author Services – Results & Discussion Tips
Springer Author Tutorials – Conclusion and Implication Writing
LinkedIn Learning – Research Writing Tips
Research Methodology.net – Drawing Conclusions
Elsevier Author Academy – How to End a Paper
Reflective Writing Toolkit – Monash University
Routledge Companion Sites – Reflective Research Tools
Academic Practice Guides – Reflective Logs
PowerPoint Templates for Defense – SlidesGo, Canva
Thesis Whisperer Blog – Final Defense Tips
UCL – Presentation and Q&A Strategies

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