



Davao del Sur State College
Brgy. Matti, Digos City, Davao del Sur

IT 633

SYSTEM ANALYSIS

AND DESIGN

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PREFACE

This course pack for Systems Analysis and Design is created to help students gain both fundamental knowledge and practical insight into the methodologies, tools, and techniques used in planning, analyzing, and designing modern information systems. As business environments and technological landscapes continue to evolve rapidly, it is important for future IT professionals to understand how to design systems that are not only efficient and scalable, but also closely aligned with organizational goals and user needs.

The course materials introduce important concepts such as the Systems Development Life Cycle (SDLC), requirement elicitation, process and data modeling, object-oriented analysis using UML, and system architecture. Each module includes lessons, learning activities, and assessments designed to help students understand how systematic analysis and structured design principles shape successful software and enterprise solutions.

In addition, this course pack highlights the importance of collaborative design, user-centered methodologies, and feasibility evaluation. It discusses key topics such as agile development practices, data flow diagramming, database design, and user interface prototyping. Through guided discussions, hands-on modeling exercises, and real-world case studies, students are encouraged to critically examine how theoretical models translate into practical, high-quality technical systems.

Overall, this course pack aims to serve as a helpful learning resource that supports students in strengthening their analytical and technical capabilities while also developing a structured, problem-solving mindset as future systems analysts, developers, and IT leaders.

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