

Course Outcomes Matrix

Course Title: Introduction to Computer Information Systems

Prefix: MISY

Number: 1013

Description (from the catalog): An introduction to the role, concepts, and terminology of microcomputers. Experience using current word processing, spreadsheet, and database management software packages under Windows environment. Use of Internet tools to search and access information related to business applications.

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/integ rated
Have a strong and broad knowledge in information systems.	T		
Be able to publish documents and reports professionally using Microsoft Word.		R	I
Be able to perform calculations and to create business graphs using Microsoft Excel.		R	I
Be able to produce and design business presentations using Microsoft PowerPoint.		R	I
Develop their proficiency in Microsoft Office applications.	T	R	I
Be able to create databases using Microsoft Access.		R	I

Course Outcomes Matrix

Course Title: Fundamentals of Management Information Systems

Prefix: MISY

Number: 2013

Description (from the catalog): The course provides a solid foundation in MIS concepts and theory and gives exposure to current technologies being used in business today. The emphasis is on understanding how information systems are used by managers and professionals to improve organizational performance, teamwork, and productivity. Topics covered include telecommunications, networking, enterprise systems, IT security, and emerging technologies.
Prerequisites: MISY 1013 or equivalent.

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/integ rated
Establish fundamental understanding of IS functions such as software and hardware issues.			I
Articulate major concepts of IT knowledge such as database management and data communications and networking.		R	
Develop basic technical skills of IT operations such as systems analysis and design.	T		
Prepare foundational managerial and organizational knowledge of IT.	T		

Course Outcomes Matrix

Course Title: Computer Information Systems Applications

Prefix: MISY

Course Number: 2123

Description (from the catalog): An extension of MISY 1013. Includes case-based problems and management decision making drills with alternative computer-based solution structures. Extensive applications of contemporary microcomputer software packages to solve problems in functional areas of business. Recommended as an elective course non-MISY majors. **Prerequisites:** MISY 1013 or equivalent.

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/integ rated
Extend basic knowledge of Microsoft Office 2003 Advanced Concepts and Techniques of Words, Excel, Access and PowerPoint.	T	R	
demonstrate proficiency in the Microsoft Office applications and pass the Core-Level Microsoft Office User Specialist Exam [MOUS].	T	R	
Create more advanced documents, workbooks, databases and presentations suitable for course work, professional purposes and personal use.	T		I
Use word processing technology to efficiently produce written material.	T	R	
Understand how to create, sort and query worksheet database.	T		
Understand creative templates while working with multiple worksheets and workbooks.	T		I
Understand to create reports, forms and combo boxes.	T	R	
Enhanced forms with OLE fields, hyperlinks and subforms.	T		
Link excel worksheet to word documents and web discussions.	T		
Master switchboard, pivot tables and pivot charts.	T		

Course Outcomes Matrix

Course Title: VB .NET in Business

Prefix: MISY

Number: 2153

Description (from the catalog): Covers the fundamental concepts of programming using Visual Basic (VB) language as they apply to real world business problems. Exposes students to the VB.Net programming environment and emphasizes hands-on practice. **Prerequisite:** MISY 2013

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/integ rated
Understand the importance of programming to the development of information systems.	T	R	
Develop the logical steps to solve a business problem.	T	R	I
Establish a firm foundation of structured programming and VB concepts such as VB .Net applications and programming.	I	R	
Use controls, events, procedures, input/output, operators, blocks, loops, arrays, classes/objects, etc.	T	R	I
Be able to write simple VB .Net applications.	T	R	I
Develop sufficient programming logics that could enable future learning of other programming languages.	T	R	I

Course Outcomes Matrix

Course Title: Data Communications and Networking

Prefix: MISY

Course Number: 3323

Description (from the catalog): Covers topics and issues including data communication, transmission facilities and devices, encoding and processing, transmission errors, multiplexing, and line control procedures, communication circuits, network architecture and design, and communication protocols.
Prerequisites: MISY 2013 and junior/senior classification.

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/ integrated
Be familiar with core network concepts.	T	R	I
Articulate various network standards and physical network layers.	T	R	I
Understand the applications of LAN and WAN technologies in organization.	T	R	I
Obtain managerial perspectives of networking security.	T		
Develop sufficient knowledge of emerging networking issues.	T		

Course Outcomes Matrix

Course Title: Business Database Applications

Prefix: MISY

Number: 3413

Description (from the catalog): The course provides a solid foundation in database concepts and design as they apply in business. It covers principles of conceptual as well as relational designs and includes translation of business requirements into entity relationship diagrams, normalization of tables and advanced SQL to address specific business problems. **Prerequisites:** MISY 2013 and junior/senior classification.

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/integ rated
Understand the basic concepts of relational databases and the role of database development within the systems development life cycle.	T	R	
Be able to represent real-world business requirements using Entity Relationship Diagrams (ERDs) and convert ERD into database structure.	T	R	I
Be able to normalize database tables in the database design process.	I	R	I
Be able to query and modify data using Structured Query Language (SQL).	T	R	I
Become a knowledgeable and skilled user of relational database systems such as MS SQL Server.	T	R	I

Course Outcomes Matrix

Course Title: Information Systems Analysis and Design

Prefix: MISY

Number: 3423

Description (from the catalog): Focuses on project management methods, project scheduling and control techniques, formal presentations and group dynamics. Emphasizes the development of a computer application through the life cycle methodology. *Prerequisites:* MISY 2013 and junior/senior classification.

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/integ rated
Be able to demonstrate knowledge of the importance and scope of the analysis and design of business information systems.			I
Be able to outline the processes and techniques involved in the sequenced approach to conducting a system project.			I
Be able to identify the various types and scopes of information systems and propose how those systems can be used.	T		
Be able to apply the principles of analysis to initiate the design of an information system to solve a specific sample of a problem that might arise in business.			I

Course Outcomes Matrix

Course Title: Java Applications in Business

Prefix: MISY

Number: 3433

Description (from the catalog): This course covers the fundamental concepts of object-oriented (OO) programming using the Java language and emphasizes basic programming skills using hands-on practices. Intensive exploration of Java programming environment ***Prerequisites:*** MISY 2153 and junior/senior classification.

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/integ rated
Identify and use fundamental data types in programs.	T	R	I
Illustrate the concepts of classes and objects and their representation.	T	R	
Create an algorithmic solution to simple problems and be able to represent it with appropriate program and data objects.	I	R	
Illustrate and use object implementation concepts such as instance fields, constructors, parameters, and methods.	T	R	I
Discuss modular design, cohesion, and coupling concepts of design of classes.	T	R	
Describe and use fundamental structures that are building blocks for the development of programs and IS applications such as sequence, decisions and iterations.	T	R	I
Explain and use arrays and array lists in classes.	T		I
Design, test, and debug some IS related programs of some complexity.	T	R	I

Course Outcomes Matrix

Course Title: Electronic-Commerce Technology

Prefix: MISY

Course Number: MISY4413

Description (from the catalog): This course provides technological as well as strategic and managerial aspects of electronic commerce systems. Topics covered include the use of hardware, software, architecture, payment mechanism, data security and client and server side scripting in electronic commerce systems. ***Prerequisites:*** MISY 3323, 3413, and 3423 and junior/senior classification.

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/ integrated
Understand electronic payment system.	T	R	I
Understand the concept “Your check is in the e-mail”	T	R	I
Understand using e-mail as a marketing tool and handling money on-line.	T	R	I
Understand the encryption and decrypting messages.	T		
Understand the secrets behind symmetric secret key.	T		
Understand the public key cryptography.	T		
Understand authentication with a public-key algorithm.	T	R	I
Understand Web design strategies, hosting and publishing of sites.	T	R	I
Understand the digital envelop concept.	T		

Course Outcomes Matrix

Course Title: Special Topic in MIS: Mobile Commerce

Prefix: MISY

Course Number: 4453

Description (from the catalog): The course is designed to provide in-depth understanding of technological and business aspects of mobile commerce. Particular emphasis will be placed upon wireless communication—technological issues—and strategic perspective of mobile commerce. **Prerequisites:** MISY 3323, 3413, and 3423 and junior/senior classification.

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/ integrated
Differentiate wireless WWW from traditional Internet model.	T	R	I
Identify technological and business aspects of M-Commerce strategy.	T		
Understand the role that M-Commerce plays in the global economy.	T	R	I
Design basic managerial plans for mobile location services.	T		I
Analyze future development of M-Commerce and wireless communication.	T	R	I
Appreciate various emerging mobile technologies that enable M-Commerce.		R	

Course Outcomes Matrix

Course Title: Strategic IT Management

Prefix: MISY

Course Number: 4523

Description (from the catalog): The course provides strategic management concepts underlying the implementation of information technology (IT) in business. It covers pertinent IT issues such as the analysis of the strategic impact of IT, management of IT security and outsourcing, and development of connectivity infrastructure in the networked organization. The course integrates important issues covered in other MIS courses.
Prerequisites: MISY 3323, 3413, and 3423.

Course Learning Outcomes	Competencies (T, R, I)		
	T competency is taught	R Competency is reinforced	I Competency is utilized/ integrated
Establish a clear understanding of challenges faced by organizations in a network economy.	T	R	I
Understand various business models and IT strategies in the contemporary economy.	T	R	I
Be able to analyze the strategic impact of information technology in organizations.	T	R	I
Comprehend technical aspects of IT infrastructures & operations, and ultimately.		R	I
Develop managerial skills to lead an IT organization in the near future.		R	I

Degree Program Outcomes Matrix

(a) Program Title Management Information Systems

(b)	(c)	(d) Program Learning Outcomes							
		1. Understand information systems fundamentals including a broad introduction to the field of Information Systems and Information Technology	2. Improve personal productivity in an organization through effective and efficient use of information technology	3. Develop breadth and depth in understanding the technical aspects of the discipline such as programming logics and applications, computing system architectures and infrastructure, and interconnection of information resources through networking	4. Gain adequate knowledge of logical designs to implement information systems in both database management systems and emerging networking environments	5. Apply a variety of system development approaches to analyze problems of business processes and in turn design and implement information systems accordingly	6. Identify strategic purposes of IS in organizational functions, systems integration, and project management	7. Integrate technical and implementation aspects of IS knowledge into strategic management of emerging business and IT environments	
Course Prefix, Number	Course Title	(f)							
MISY 1013	Introduction to CIS	T	I						
MISY 2013	Fundamentals of MIS	I	I	R	R	T	T	T	
MISY 2123	IS Applications	T	T, R	T, R	T, I	I	T, R, I	I	
MISY 2153	VB.NET Applications in Business	I	R	T		R			
MISY 3323	Data Communications and Networking	R	R	T	T				I
MISY 3413	Business Database Applications	R	R	I	T	R			
MISY 3423	Systems Analysis and Design	T	T	T	I	I	I	T	
MISY 3433	Java Applications in Business			T		R			
MISY 4413	Electronic Commerce Technology	T, R, I	R	T,	I	I	T, R, I	T, I	
MISY 4453	Special Topic in MIS	I	R	R	I	I	T	T	
MISY 4523	Strategic IT Management	I	I	I	R	R	T	T	
MISY 5513	Management Information Systems	I	I	T	R	T	T	I	

T – Competency is taught

R – Competency is reinforced

I – Competency is utilized/integrated