

CS-305
Computer Application Techniques III
(Advanced Database Programming + Business Application Areas)
COURSE DESCRIPTION

Department, Number	CS-305 (Part A)	Course Title	Advanced Database Programming
Semester Hours	3	Course Coordinator	Daw Wai Wai Lwin + Daw Khin Mya Mya Zin

Current Catalog Description

The .NET Framework is designed to provide a consistent object-oriented programming environment whether object code is stored and executed locally, executed locally but Internet-distributed, or executed remotely. And also to build all communication on industry standards to ensure that code based on the .NET Framework can integrate with any other code.

C# is designed and developed by Microsoft, they made it for Windows. C# is best for Windows GUI application.

ADO.NET is a data access technology from the Microsoft.NET Framework that provides communication between relational and non-relational systems through a common set of components. ADO.NET is a set of computer software components that programmers can use to access data and data services from the database.

Textbook: None

References:

1. C# 5.0 Programmer's reference by Rod Stephens
2. Programmer's Heaven by FarazRasheed
3. A Programmer's Guide to ADO.NET in C# by Mahesh Chand

Course Outcomes

The Learning of .NET Framework, C# programming and ADO.Net is designed to fulfill the following:

- To be acquainted how to design, code, compile, and execute business-oriented programs using the C# programming language commands.
- To be perceived to develop user-interfaces that generates user-friendly interfaces and use debugging techniques to find and resolve programming errors.
- To have knowledge to use Window forms for building rich GUI applications and to

create rich database applications using ADO.NET.

- To understand the development of applications on the Microsoft platform by using C# general-purpose language was originally designed by Microsoft for being pleasant and well-designed.
- To get the developer experience for building, deploying, and running applications and services that use .NET technologies, such as Windows-based applications.

Major Topics Covered in the Course

1. Fundamental construct (types and variables)
2. Expressions and Operators
3. Flow of controls statements
4. Classes and methods
5. Arrays and Collection objects
6. Delegates and lambda expression
7. Query by LINQ
8. SQL Server Database
9. Data Access using ADO.Net objects

Department, Number	CS-305 (Part B)	Course Title	Business Application Areas
Semester Hours		Course Coordinator	

Current Catalog Description

This subject covers the concepts of budget and budgetary control, variance analysis, financial information systems, marketing information systems, manufacturing and production information systems and human resource information system concerned with business application areas.

Textbook: None

References:

1. Management Information System Kenneth C. Laudon, Jone P. Laudon

Course Outcomes

The Learning of this course to fulfill the following:

- To apply the methods and procedures of management accounting, with particular

reference to cost analysis, budgeting, process management, reporting and analytics.

- Introduce students to time value of money and its relationship to the objectives of financial management, rationale for using the time value of money, and simple and compound interest and how to calculate it, and also to understand the present value of the future payments.
- Ability to develop marketing strategies based on product, price, place and promotion objectives.
- Ability to communicate the unique marketing mixes.
- Make management level decisions within a manufacturing environment including operations management, supply chain management and lean manufacturing.
- Analyze planning, professional and engineering decisions within a manufacturing environment.
- Contribute to the development, implementation, and evaluation of employee recruitment, selection, and retention plans and processes.
- Administer and contribute to the design and evaluation of the performance management program.

Major Topics Covered in the Course

The student should study this course, which explains-

1. Cash Budget, Variance Analysis and Capital Budgeting
2. Basic business functional areas (Financial , Marketing , Manufacturing and Production , and Human Resource Management);
3. How a business works in operational , tactical , and strategic levels of each functional area;
4. How information systems fit into business operations and how they are related.

Grading Procedures: (First Semester)

Your performance in this class will be evaluated using your scores for attendance, assessments, assignments and lab examination or Project and Examination.

Assessment Plan for the Course (First Semester)

	Advanced Database Programming	Business Application Area
Attendance	10%	5%
Assessment (Class Participation)	10%	5%
Assignment	10%	-
Tutorial /Assignment	-	10%
Lab Examination	20%	

Exam		30%
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Grading Procedures: (Second Semester)

Your performance in this class will be evaluated using your scores for attendance, assessments, assignments and lab examination or Project and Examination.

Assessment Plan for the Course (Second Semester)

	Advanced Database Programming	Business Application Area
Attendance	10%	5%
Assessment (Class Participation)	10%	5%
Assignment	10%	-
Tutorial /Assignment	-	10%
Project	20%	
Exam		30%

University of Computer Studies
B.C.Sc. (Third Year)
Computer Application Technique III

CS-305 : Part A- Advanced Database Programming

First Semester

Periods: (50 minutes) 45 periods for 15 Weeks

No.	Content	Page No.	Period	Detail Lecture Plan
1.	Introduction to C# and Console Application			
2.	C# Data Types, Variables, and Constants C# Operators			
3.	C# Methods and Program Controls Statements			Assignment 1
4.	C# LINQ			Assignment 2
5.	C# OOP Concepts and Classes			Assignment 3
6.	C# Collection Classes			Assignment 4
7.	C# Generics Classes			Assignment 5
8.	Window Form Application Project			
9.	Window Form Application Project			Assignment 6
10.	Mini Project			

University of Computer Studies
B.C.Sc. (Third Year)
Computer Application Technique III

CS-305 : Part A- Advanced Database Programming
Periods: (50 minutes) 15 periods for 15 Weeks

First Semester

No.	Content	Page No.	Period	Detail Lecture Plan
1.	Budget & Budgetary Control (Cash budget)		1	
2.	Budget & Budgetary Control (Cash budget)		1	
3.	Budget & Budgetary Control (Cash budget)		1	Assignment 1
4.	Variance Analysis		1	
5.	Variance Analysis		1	Assignment 2
6.	Financial Information System		1	
7.	Financial Information System		1	
8.	Capital budgeting methods -Discounted Cash flow methods		1	
9.	Capital budgeting methods -Discounted Cash flow methods		1	
10.	Capital budgeting methods -Discounted Cash flow methods		1	
11.	Capital budgeting methods -Discounted Cash flow methods		1	
12.	Capital budgeting methods -Non-Discounted Cash flow methods		1	
13.	Capital budgeting methods -Non-Discounted Cash flow methods		1	
14.	Capital budgeting methods -Non-Discounted Cash flow methods		1	Assignment 3
15.	Review Exercises			

University of Computer Studies
B.C.Sc. (Third Year)
Computer Application Technique III

CS-305 : Part A- Advanced Database Programming

Second Semester

Periods: (55 minutes) 52.5 periods for 15 Weeks

No.	Content	Page No.	Period	Detail Lecture Plan
1.	Chapter I: Introducing ADO NET		3	
2.	Chapter I: Introducing ADO NET		3	
3.	Chapter II: ADO.NET Objects 2.1 The SqlCommand Object		3	
4.	2.2 The SqlConnection Object		3	Assignment 1
5.	2.3 The SqlDataReader Object		3	
6.	2.4 Working with Disconnected Data - The DataSet and SqlDataAdapter 2.5 Adding Parameters to Commands		3	
7.	2.6 The SqlParameter Object 2.7 The CommandBuilder Object		3	
8.	2.8 To populate DataGridView, GridView with SQL statement		3	Assignment 2
9.	Exercises with ADO.NET Objects		3	
10.	Exercises with ADO.NET Objects		3	Assignment 3
11.	ASP.NET with C# (Sample Project)		3	
12.	ASP.NET with C# (Sample Project)		3	
13.	ASP.NET with C# (Sample Project)		3	
14.	Mini Project Assignment (ASP.Net)		3	
15.	Project Presentation		3	

University of Computer Studies
B.C.Sc. (Third Year)
Computer Application Technique III

CS- 305 : Part B- Business Application Areas

Second Semester

Periods: (50 minutes) 15 periods for 15 Weeks

No.	Content	Page No.	Period	Detail Lecture Plan
1.	Marketing Information System		1	
2.	Marketing Information System		1	
3.	Marketing Information System		1	
4.	Marketing Information System		1	
5.	Marketing Information System		1	
6.	Marketing Information System		1	Assignment 1
7.	Manufacturing and Production Information System		1	
8.	Manufacturing and Production Information System		1	
9.	Manufacturing and Production Information System		1	
10.	Manufacturing and Production Information System		1	
11.	Manufacturing and Production Information System		1	
12.	Manufacturing and Production Information System		1	Assignment 2
13.	Human Resource Information System		1	
14.	Human Resource Information System		1	
15.	Human Resource Information System		1	Assignment 3