

I. COURSE DESCRIPTION:

The course is designed to have the students examine the .NET technology that allows almost any type of application to run in a common environment known as the .NET Framework. Students will look at the rich set of classes and methods while develop applications. All learning styles will be addressed by having the students learn by using manuals; lectures; small group work; online referencing, step-by-step exercises, as well as the development of a real life computer system. Students should be able to create small to medium size business applications involving databases that run on desktops and on the Web.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Review Classes

Upon successful completion of this course, the student will demonstrate the ability to:

Potential Elements of the Performance:

- Value types and reference types
- Namespaces
- Object-Oriented design
- Namespaces
- Creating Classes
- Methods
- Public and Private Member access
- Properties
- Constructors and Destructors
- Using UML to describe Classes

2. Exceptions and User Interfaces

Upon successful completion of this course, the student will demonstrate the ability to:

Potential Elements of the Performance:

- User Interface Design
- Input validation

- ListView Control
- TreeView Control
- Structured Exception Handling

3. ADO.NET Databases

Upon successful completion of this course, the student will demonstrate the ability to:

Potential Elements of the Performance:

- Data Sources and Connections
- DataSets
- Using Data-Bound Controls
- Navigating, Adding, and Removing Rows
- Writing Code for DataTables
- Use the Query Builder
- Filling Lists and Combo Boxes
- Adding Expressions to Datasets
- Parameterized Queries

4. DataGrid, DataView, and ListView

Upon successful completion of this course, the student will demonstrate the ability to:

Potential Elements of the Performance:

- DataGrid Control
- Table Styles and Column Styles
- DataGrid Events
- Updating a DataGrid
- DataViews and ListViews
- Using a DataView Control
- Filling a ListView Control
- Command Objects
- Inserting Table Rows
- Updating Table Rows
- Deleting Table Rows

5. Databases with Related Tables

Upon successful completion of this course, the student will demonstrate the ability to:

Potential Elements of the Performance:

- Connecting to SQL Server Databases
- Installing SQL Server Desktop Engine (MSDE)
- Cascading Deletes and Updates

- Creating SQL Queries that Join Tables
- Database Constraints
- Primary Key Constraints
- Referential Integrity Constraints
- Column Check Constraints
- DataGrid Control with Related Tables
- Displaying Parent and Child Tables in the same DataGrid
- GetChildRows Method
- GetParentRow Method
- Using Query Builder to Join Tables

6. Web Forms (ASP.NET)

Upon successful completion of this course, the student will demonstrate the ability to:

Potential Elements of the Performance:

- Types of Internet Applications
- How Web Applications work
- HTML Designer
- Browser support
- Files in Web projects
- Creating ASP.NET programs
- ASP.NET Objects and Namespaces
- Standard Web Form Controls, ImageButton, LinkButton, RadioButton and CheckBox, ListBox, DropDownList
- Custom Error Handling
- Calendar Control
- Uploading Files
- Sending Mail
- Data Validation Controls
- State Management

7. ASP.NET Databases

Upon successful completion of this course, the student will demonstrate the ability to:

Potential Elements of the Performance:

- Using a DataReader
- CheckBoxList and RadioButtonList Controls
- Repeater Control
- DataList Control
- DataGrid Control
- Adding Buttons to DataGrids

8. Crystal Reports

Upon successful completion of this course, the student will demonstrate the ability to:

Potential Elements of the Performance:

- Creating a Report
- Using the Report Expert
- Formatting Report Fields
- Selecting Records
- Sorting Records
- Parameter Fields
- Connecting a Report to a Dataset

III. TOPICS:

1. Review Classes
2. Exceptions and User Interfaces
3. ADO.NET Databases
4. DataGrid, DataView, and ListView
5. Databases with Related Tables
6. Web Forms (ASP.NET)
7. ASP.NET Databases
8. Crystal Reports

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Instructor Handouts and notes
Google Searches
Previous course books as resource material

V. EVALUATION PROCESS/GRADING SYSTEM:

The following semester grades will be assigned to students:

Project	@ 80%
Work Ethic/Participation	@ 10%
Presentation	@ 10%
	100%

Grade	Definition	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

The professor reserves the right to adjust the final mark based on attendance, participation, leadership, creativity and whether there is an improving trend.

A minimum of **80% attendance** required in the labs and lectures.

- Students must complete and pass both the test and assignment portion of the course in order to pass the entire course.
- All Assignments must be completed satisfactorily to complete the course.
- Late hand in penalties will be 5% per day. Assignments will not be accepted past one week late unless there are extenuating and legitimate circumstances.
- Makeup Tests are at the discretion of the instructor and will be assigned a maximum grade of 50%.
- The professor reserves the right to adjust the number of tests, practical tests and quizzes based on unforeseen circumstances. The students will be given sufficient notice to any changes and the reasons thereof.
- A student who is absent for 3 or more times without any valid reason or effort to resolve the problem will result in action taken.

NOTE: If action is to be taken, it will range from marks being deducted to a maximum of removal from the course.

VI. SPECIAL NOTES:

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.