CPT 341-101 Visual BASIC.NET - NJIT **Spring Semester 2023, Face-to-Face**

Instructor: William Tereshkovich, Ph.D., CISSP, CCSP, CISM, CSSLP, AWS CCP

Face-to-Face Course:

Delivery of instruction is structured around in-person classroom meeting times. Instruction is delivered in person and students are expected to attend class (sometimes referred to as traditional classroom courses).

Meeting Times and Location

Thursday, 6:00 PM - 10:05 PM GITC 2302

Instructor E-Mail

wxt1955@njit.edu

Office/Consultation Hours

By appointment

Class Text

"Starting Out with Visual Basic, Eighth Edition" by Tony Gaddis and Kip Irvine. Pearson Publications 2019 ISBN: 9780135204658

VISUAL BASIC—

Starting Out with Visual Basic

Edition: 8th

ISBN: 9780135204658

Author: Gaddis

Publisher: Pearson Education

Copyright Year: 2019

Required Integrated Development Environment

Microsoft Visual Studio

Grading

Projects	80%
Mid-Term	10%
Final	10%

Lab Assignments

There will be approximately 5 projects for the semester. Projects are to be submitted using Canvas.

Note: Projects submitted after the due date will be marked with a reduction in score per day.

Statement on academic integrity:

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu

Service Desk Support

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On-line: Report your issue online - servicedesk.njit.edu/ **By Phone:** Call 973-596-2900 or 877-889-7685 (toll free)

Semester Topics

- VB.NET syntax and general programming practices
- VB.NET IDE navigation, control objects/presentation design
- Object Oriented Programming (OOP)
- Data analysis
- Information security
- GDI+ for graphics programming
- ADO/Database

Introduction to Programming and Visual Basic	Creating Applications with Visual Basic	Variables and Data Types	Conditional Statements (If- Then-Else)
Select Case Statement	Exception/Error Handling	GroupBox Control	ToolTip Control
Radio Button Control	Button Control	Checkbox Control	Message Box Control
PictureBox Control	InputBox()	Arrays	Looping (Do While, For Next)
Operators	Accept Button	Error Provider	Help Provider
Visible Property	Clear Method	Close Method	Generating Random Numbers
SubString() Method	IndexOf()	Find() Method	Split() Method
Trim() Method	Length Property	RichTextBox Control	MenuStrip Control
Opening a File	StreamReader & ReadLine	StreamWriter & WriteLine	EndOfStream
OpenFileDialog Control Object	SaveFileDialog Control	Asc() Method	Chr() Method
ANSI Character Codes	Adding Forms to your project (multiple Forms)	Showing a Form	Hiding a Form
Timer Control	Classes, Collections, and	Object Orientated	Creating Classes
	Inheritance	Programming (OOP)	
Member Variables	Properties	Methods	Passing Objects by Value and by Reference
Creating an Instance of a Class (Objects)	Destruction and Garbage Collection	Constructor/Destructor	Structures
Clipboard	Graphics Class	Pen Class	Brush Class
Font Class	Color Class	Antialiasing support (Graphics quality/smoothing)	Curves
Transformation and Matrices	Scaling	Working with Databases	DataGridView Control
Basic SQL (Structured Query Language)	ADO.NET	Data Providers	Data Tables and Data Adapter