Global Learning Semesters
Course Syllabus
Course: COMP-357 Logical Construction & Testing of Programs
Department: Computer Science
Host Institution: University of Nicosia, Nicosia, Cyprus

Course Summary		
Course Code	**Course Title**	**Recommended Credit Hours**
COMP-357	Logical Construction & Testing of Programs	3
Semester Offered	**Contact Hours**	**Prerequisites**
Please contact us	42-45	One Procedural Language
Department	**Level of Course**	**Language of Instruction**
Computer Science	Upper Division	English

Course Description

Comprehensive study of construction of methods of finding and correcting programming errors associated with system development. Emphasis will be on the modular design concept and its impact in logical programming and debugging. Such debugging techniques as proper testing procedures and test data construction, plus logical and technical testing, will be studied. Computer-generated diagnostics, diagnostic programs, and other debugging aids will be used extensively for systems development.

Prerequisites

One Procedural Language

Topic Areas

1. Program Errors: Syntax, Diagnostics, Logic Errors.
2. Validation Inputs.
3. Data Validation Techniques: Reasonableness, Limits.
4. Other Techniques: Control Lists, Verification.
5. Desk-Top Debugging. Run-time Debugging.
6. Monitoring Intermediate Values. Missing Values.
7. Not Detected Errors.
8. Computer-generated diagnostics. Diagnostic programs.

Readings and Resources

Required Textbook
- The main course textbook has not been selected.