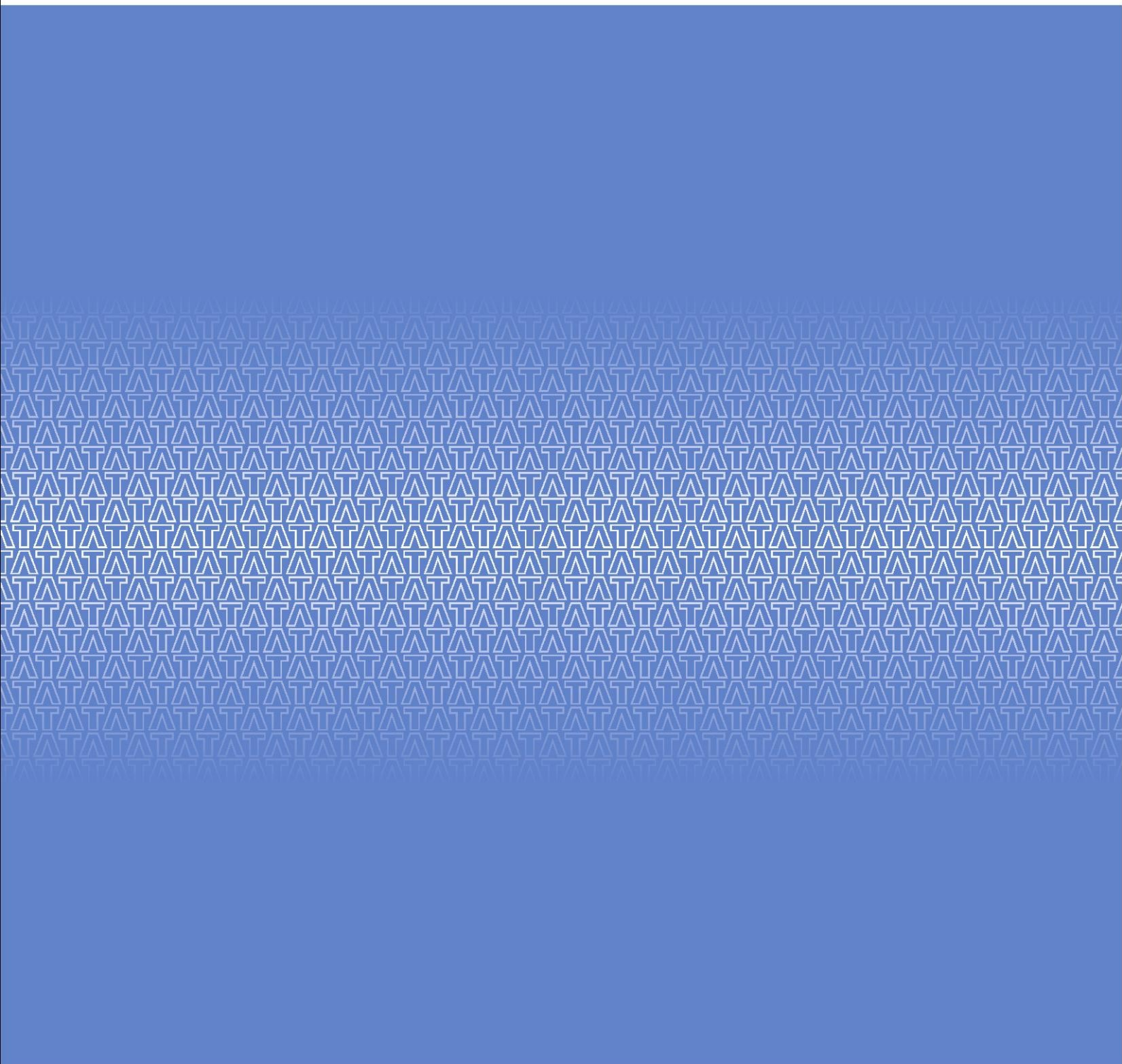


Pre-Initial Learning Program

Version 1.1

Course Plan, July, 2009

Phase I



1 Pre-ILP Schedule and Curriculum

The Pre-ILP phase enables the participants to learn about the basics of Computers, Programming, Software Engineering, Web Technologies and Relational Database Management Systems.

Table 1: Pre-ILP Schedule

		Week1	Week2- Week6	Week7- Week 8	Week9 – Week 11	Week12
Pre-ILP						
	Basics of Computers					
	Basics of Programming					
	Software Engineering and Database Concepts					
	Web Technologies Exercises					
	Databases – SQL and Exercises					

Towards the end of Pre-ILP, the participants should be able to

- Find solutions for any given problem using programming concepts.
- Solve computational logic and record processing problems in C.
- Write simple queries to access data from multiple tables in a database
- Design web pages and build websites with images, text content, forms and basic validations using CSS, Java script , HTML and XML
- Understand Software Engineering, Operating Systems and Data Structures

Participants are expected to follow the timelines as per the phases mentioned in the following sections.

1.1 Pre-ILP Phase I

The objective of this course is to introduce the basics of computers and operating systems to all the participants. This includes details on hardware, types of computers, components of a computer, modems and software.

1.1.1 Basics of Computers

Participants are expected to read and understand the chapters mentioned in the following books and sites:

- **Structured Computer Organisation (2nd Edition) - A. S. Tannenbaum**
 - Chapter 1 - Introduction
 - Chapter 2 - Computer Systems Organisation
 - Chapter 3 - The Digital Logic Level
 - Chapter 4 - The Micro architecture Level
 - Chapter 5 - The Instruction Set Architecture Level
 - Chapter 6 - The Operating System Machine Level

The content available at the following sites provides an overview of the basics of computers”

- <http://www.clevelandstatecc.edu/Courses/dyates/cis1110/concepts.ppt>
- <http://www.grassrootsdesign.com/intro/hardware.php>

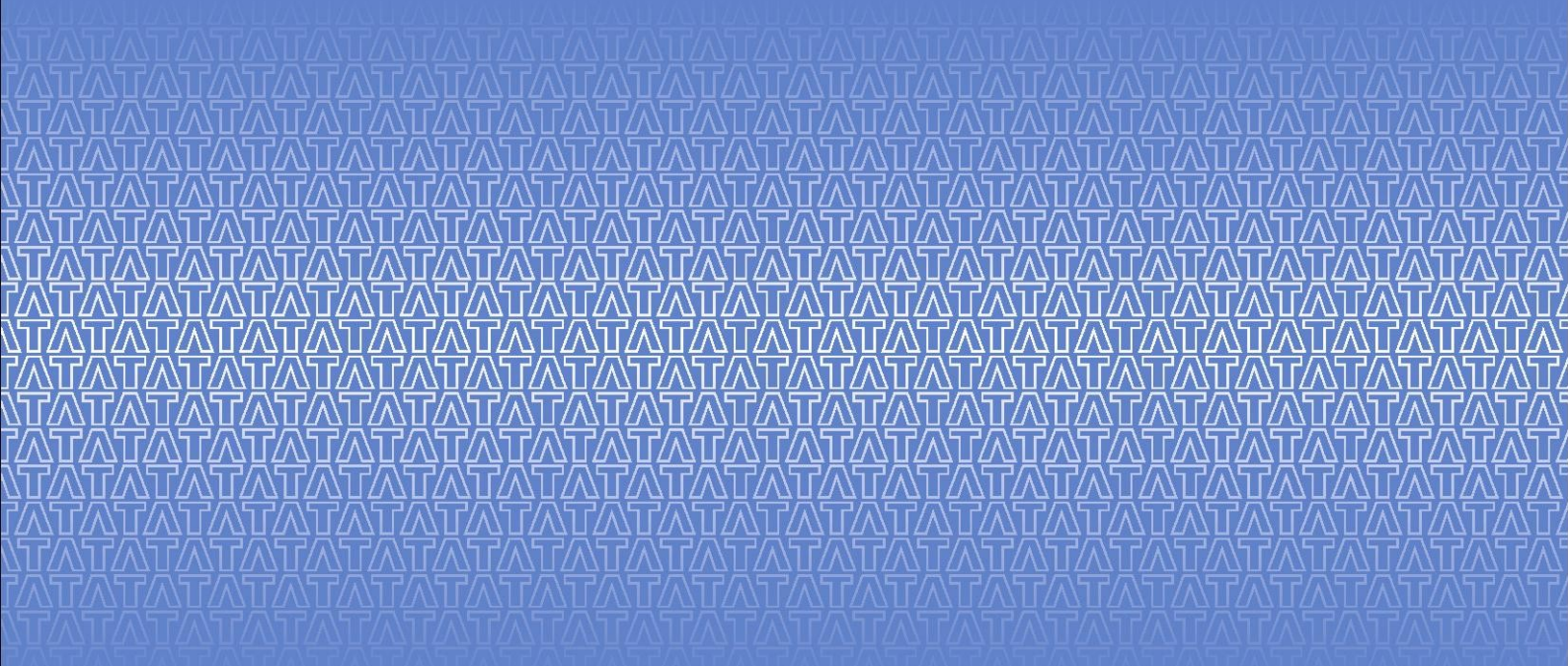
1.1.2 Operating Systems

Participants are expected to gain an understanding of Operating Systems.

- Operating Systems - Seventh Edition Avi Silberschatz Peter Baer Galvin Greg Gagne
- o Part One - Overview
 - o Chapter 1 - Introduction
 - o Chapter 2 – Operating System Structures
- o Part Two - Process Management
 - o Chapter 3 - Processes
 - o Chapter 4 - Threads

1.1.3 Phase 1 Learning Schedule

Participants are expected to complete the above during the Week 1 of the Pre-ILP phase.



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