CISC 310
Introduction to Computer Science
Software and Languages

This document outlines the relationships between three important software concepts: Structured Programming, Structured Program, and Software Development Life Cycle(SDLC).

Structure Programming S/W Development Methodology

1) Problem Statement
2) Do Analysis --> Blueprint(Flowchart)
3) Code via flowchart
4) Test Code
   Module Testing - does the program work?
   System Testing - does the program meet requirements?
5) Document Solution

Structure Program

a program is "structured" iff its logic may be expressed as combinations of the three basic logic flow forms:
Sequence - stepwise execution
Iteration - looping or repetition
Selection - branching or choose one of multiple

Software Development Life Cycle(SDLC)

defines the phases of software from concept to retirement.

1) Problem Statement
2) Do Analysis --> Software Requirements
   Systems Analyst will
      1) Interview
      2) Observe
      3) Role Play

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3) Software Design Phase
   Preliminary Design(logical design -"what does S/W do"?)
   Detailed Design(physical design - "how is it done?")

4) Test Code
   Module Testing - does the program work?

5) Acceptance Testing (performed by ITG)
   ITG - Independent Test Group

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6) Environment Integration
   Training Issues *****Important****
   Installation
      1) Abrupt
      2) Gradual
      3) Parallel ($$$$expensive$$$)
7) Maintenance (ongoing, continuous)