

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: FOURTH GENERATION LANGUAGES

Code No.: CET 320

Program: COMPUTER ENGINEERING TECHNOLOGY

Semester: SIXTH

Date: WINTER 1990

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New: X Revision:

Approved:

F. Turco
Chairperson

Date:

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FOURTH GENERATION LANGUAGESGENERAL OBJECTIVES

By the 1980's, fourth generation languages were gaining popularity and were an integral part of the changes in software development methodologies. The ever increasing backlog and demand for improved and quicker software development caused developers to search for ways to be more productive. Fourth Generation Languages (4GL's for short) are some of the development tools that allow for a shorter development life cycle. Many organizations use 4GL's to shift the burden of software development from the programmers to the end users themselves. These organizations allow end users to develop their own systems. This is commonly referred to as "End User Computing".

The objective of this course is to provide students with an opportunity to understand what 4GL's are and investigate Powerhouse as a representative 4GL.

TEXTBOOKS:

1. "Introduction to Powerhouse" - Notes available in the Bookstore.

ASSESSMENT:

Tests and Quizzes	50%
Assignments	40%
* Seminar (Oral and Written)	10%

- * - Seminar must be completed, presented and submitted to pass the course.

Some minor modifications to the above percentages may be necessary. The instructor reserves the right to adjust the mark up or down 5% based on attendance, participation and whether there is an improving trend.

- * - All Assignments must be completed satisfactorily to complete this 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.

SPECIFIC OBJECTIVESBLOCK 1 BACKGROUND ON 4 GL'S

At the end of this block the student shall be able to:

1. Understand the nature and purpose of Fourth Generation Languages.
2. Know how 4 GL's relate to "End User Computing" and what impact they have made to Information Services Departments.
3. Appreciate the advantages and disadvantages to 4 GL's.
5. Differentiate the 4 GL's System Development Life Cycle (SDLC) versus the traditional SDLC.

BLOCK 2 STUDY OF 4 GL's through the use of POWERHOUSE

At the end of this block the student shall be able to:

1. Understand what Powerhouse is and what it is not.
2. Create and Maintain a Powerhouse Dictionary.
3. Access the major components of Powerhouse.
4. Generate Screens using Quick.
5. Produce Reports using Quiz.
6. Analyzing a Powerhouse System.
7. Design and Develop a Computer System with Powerhouse.

TESTS**GRADING SCHEME**

Written tests will be conducted as deemed necessary; generally at the end of each block of work. They will be announced about one week in advance. Practical on-line tests will be conducted in which time to complete the assigned problems will be a factor in the evaluation. Quizzes may be conducted without advance warning.

2. ASSIGNMENTS

Assignments not completed by the assigned due-date will be penalized by 5% per day late. All assignments must be completed satisfactorily to complete the course.

3. GRADING SCHEME

A+	90	-	100%	Outstanding achievement
A	80	-	89%	Excellent achievement
B	70	-	79%	Average Achievement
C	55	-	69%	Satisfactory Achievement

U Incomplete: Course work not complete at Mid-term. Only used at mid-term.

R Repeat

X A temporary grade that is limited to instances where special circumstances have prevented the student from completing objectives by the end of the semester. An X grade must be authorized by the Chairperson. It reverts to an R if not upgraded in an agreed-upon time, less than 120 days.

4. UPGRADING OF INCOMPLETE

When a student's course work is incomplete or final grade is below 55%, there is the possibility of upgrading to a pass when the student's performance warrants it. Attendance and assignment completion will have a bearing on whether upgrading will be allowed. A failing grade on all tests will remove the option of any upgrading and an R grade will result. The highest grade on re-written tests or assignments will be 56%.

Where a student's overall performance has been consistently unsatisfactory, an R grade may be assigned without the option of make-up work.

The method of upgrading is at the discretion of the teacher and may consist of one or more of the following options: assigned make-up work, re-doing assignments, re-writing of tests, or writing a comprehensive supplemental examination.