

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE MARIE, ON



COURSE OUTLINE

Course Title: Advanced PowerBuilder

Code No.: CSD311

Semester: Six

Program: Computer Programmer/Analyst

Author: Willem de Bruyne

Date: January 2002 Previous Outline Date: January 2001

Approved: _____
Dean Date

Total Credits: Five Prerequisite(s): CSD310

Length of Course: 16 wks Total Credit Hours: 64

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For additional information, please contact Kitty DeRosario, Dean, School of Trades & Technology, (705) 759-2554, Ext. 642.

I. COURSE DESCRIPTION:

PowerBuilder is an enormous product. The students have already taken the prerequisite course CSD310, Introduction to PowerBuilder. PowerBuilder is probably the most feature-rich software that you will come across. Every dialog box is loaded the options, and there are always several ways to accomplish a task. This course will give a comprehensive look at the more advanced popular features of PowerBuilder. It is impossible to cover every feature in the language in two courses, the PowerBuilder documentation set is over 7000 pages. This course will focus on those features that you will need to know to become a good intermediate PowerBuilder developer.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course the student will demonstrate the ability to:

1) Work with Data (Review)

Potential Elements of the Performance:

- Database terminology
- PowerBuilder database connections
- Defining and connecting to databases in the painter
- What happens when you connect to a database
- The data manipulation painter
- The table painter
- Displaying formats, edit styles, and validation rules
- Where the extended definitions live
- Repository
- Keys and indexes
- Views
- The transaction object
- Embedded SQL commands
- Dealing with nulls
- Transactions: commit and rollback
- Dynamic SQL

2) Use DataWindows

Potential Elements of the Performance:

- Step by Step exercise
- Polish the window

3) Use Data Entry Programming

Potential Elements of the Performance:

- Work through a sample Order Form

4) Use User-defined Objects

Potential Elements of the Performance:

- How to create a user-defined object
- Standard Visual User Objects
- Making objects smarter

5) More About Windows

Potential Elements of the Performance:

- The six types of Windows
- Parents and Children
- Modal windows
- When to use the six types of windows
- The Open Function and Its Variations
- MDI app's
- Menus and ToolBars
- Cooperating Sheets
- Dialog Boxes
- The Close Function
- Printing the Report

6) Menus and Toolbars

Potential Elements of the Performance:

- Menu Basics
- Assigning a Menu to a Window
- Menus for frames and sheets
- Popping Up a Menu
- The Menu as an Object
- The Toolbar

7) PowerBuilder Foundation Class Library

Potential Elements of the Performance

- PFC overview
- How PFC uses object-orientation
- The message router
- PFC components
- Work through Tutorial using PFC library.

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- **PowerBuilder 5.0 Programming, by Brian Smith and Grodand Schaad**
- **Instructor Handouts**

V. EVALUATION PROCESS/GRADING SYSTEM

The mark for this course will be arrived at as follows:

Test 1	30%
Test 2	30%
<u>Assignments</u>	<u>40%</u>
	100%

Grading Scheme:

A+ 90–100% (Outstanding)
A 80–89% (Excellent)
B 70–79% (Average)
C 60–69% (Satisfactory)
R (Repeat)

VI. SPECIAL NOTES:

- Students will receive a grade of zero for late assignments or missed tests unless prior permission is granted from the instructor.
- Students are expected to attend classes on a regular basis and treat their peers and instructors in a business like manner.
- Students are expected to inform the instructor via phone or e-mail if they are unable to attend class, 2% penalty for each infraction.