**Status** Approved 08/20/2018 **Effective Date** 

Overview

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First Available 08/01/1957 Last Available 08/01/2023

**Broward College Online Allowed Locations** 

Central Campus

Coral Springs Academic Center Miramar Town Center Miramar West Center North Campus Pines Center South Campus Weston Center

Willis Holcombe Center

Associate

Academic Level

**Typical Periods Offered** 

**Hide Course** No

#### Course Owner

Academic Unit	Course Inventory Owner	Allowed to Offer	Default Offering Percent
Information Technology	Yes	Yes	100

## Course Equivalencies

|--|

Units 3 Units **Contact Hours** 48 Other Unit Values No Eligibility Co-Requisite Courses

## Course

Course

Listings COP 1000C - Intro Cmp Prg

Title Ir

Introduction To Computer Programming

Abbreviated Title Intro Cmp Prg

Course Tags

Course Tags :: A.A. Elective

**CIP Code** 

Educational Taxonomy Codes 12601 - Industrial

Section Overrides Allowed No Location Not Required No

## **Course Components**

Instructional Format	Required Format	Allowed Delivery Modes	Contact Hours	Controls Grading	Default Instructor Load Percentage
Combination	Yes	In-Person Online	48	Yes	0.00

#### **Combination Instructional Formats**

Instructional Format	Contact Hours
Lecture	32
Laboratory	16

#### Course Materials

Course Material	Required	Author	Edition	Publisher	Copyright Date	ISBN	Retail Price	Currency

## Description

This course provides the beginning programming student with the techniques necessary to write well-documented, structured computer programs. The course is intended to emphasize the planning process using examples involving sequence, selection, and iteration. The course is designed to promote good programming practices for further study of other programming languages.

Learning Outcome Competencies

Auto Generate Course Section Numbers Yes

# **Section Defaults**

## **Section Defaults**

Unlimited Capacity No
Default Section Capacity 25
Default Projected Enrollment 25
Default Wait List Capacity 5

Manually Manage Waitlist Promotion

No

**Public Notes** 

This course does not have any required pre-requisites or co-requisites.

Repeatable for Additional Credit

No

Allowed Grading Bases

Audit Graded

Pass/Fail

Graded Anonymously
Private Notes

No

**UNITS** 

Unit 1: Program Design

#### **General Outcome**

1.0 Be able to describe the steps in the program development process, explain structured programming, and introduce algorithms using pseudo-code, flowcharts, or other graphical representations.

#### Specific Learning Outcomes

- 1.1 Define the steps in program development.
- 1.2 Define structured programming.
- 1.3 Explain simple algorithms written in pseudo-code, flowcharts, or other graphical representations.

Unit 2: Pseudo-code, Flowcharts, and Other Graphical Representations

#### **General Outcome**

2.0 Be able to demonstrate an understanding of the common words and keywords used when writing pseudo-code; the Structure Theorem and the three basic control structures.

#### Specific Learning Outcomes

- 2.1 Write algorithms using pseudo-code, flowcharts, or other graphical representations.
- 2.2 Define the Structure Theorem

Unit 3: Developing an Algorithm

#### General Outcome

3.0 Be able to develop an understanding of the methods of analyzing a problem and developing a solution.

#### Specific Learning Outcomes

- 3.1 Define the problem.
- 3.2 Design a solution algorithm using the sequence control structure.
- 3.3 Check the solution algorithm.

Unit 4: Selection Control Structures

#### **General Outcome**

4.0 Be able to explain the selection control structure by introducing simple and multiple selection, nested selection, and case construct.

## Specific Learning Outcomes

- 4.1 Define the selection control structures
- 4.2 Write algorithms using selection
- 4.3 Use the case structure

Unit 5: Repetition Control Structures

#### **General Outcome**

5.0 Be able to develop algorithms which use the repetition control structure in the form of DOWHILE, REPEATUNTIL, and counted repetition loops.

#### Specific Learning Outcomes

- 5.1 Employ repetition in simple programs using the DOWHILE construct.
- 5.2 Employ repetition in simple programs using the REPEATUNTIL construct.
- 5.3 Employ count-controlled repetition constructs in simple programs.

Unit 6: Algorithms Using Sequence, Selection, and Repetition

#### **General Outcome**

6.0 Be able to develop algorithms to several programming problems using combinations of sequence, selection, and repetition constructs.

#### Specific Learning Outcomes

- 6.1 Define complex problems.
- 6.2 Develop algorithms to solve complex problems.

Unit 7: Modularization

#### General Outcome

7.0 Be able to develop an understanding of modularization as a means of dividing a problem into subtasks.

#### Specific Learning Outcomes

- 7.1 Define modularization.
- 7.2 Create hierarchy charts or structure charts.
- 7.3 Define the steps in modularization.

Unit 8 : Communication Between Modules

#### **General Outcome**

8.0 Be able to define elementary data items, data structures, the concepts of inter-module communication, local and global data, and the passing of parameters between modules.

#### Specific Learning Outcomes

- 8.1 Use program data.
- 8.2 Define communication between modules.
- 8.3 Use parameters in program design.
- 8.4 Define object-oriented design.

Unit 9: Cohesion and Coupling

#### **General Outcome**

9.0 Be able to develop an understanding of the concepts of module cohesion and coupling

#### Specific Learning Outcomes

- 9.1 Define module cohesion.
- 9.2 Define module coupling.

Unit 10: Primitive Data Structures

#### General Outcome

10.0 Be able to develop an understanding of the concepts of arrays, multi-dimensional arrays, records, arrays of records, and the algorithms that manipulate these data structures.

#### Specific Learning Outcomes

- 10.1 Define an array
- 10.2 Define a multi-dimensional array
- 10.3 Define a record

# 10.4 Define an array of records

# **Course Fees**

# **Course Fees**

Course Fees

Course Fee Amount / Calculation	Currency	Course Fee Charge Item

Additional Fees

Additional Fee Amount / Calculation	Currency	Additional Fee Charge Item

# **Version History**

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Version	
COP 1000C - Intro Cmp Prg - Intro Cmp Prg (Effective 08/20/2018)	
COP 1000C - Intro Cmp Prg - Intro Cmp Prg (Effective 08/01/2018)	
COP 1000C - Intro Cmp Prg - Intro Cmp Prg (Effective 08/22/2016)	
COP 1000C - Intro Cmp Prg - Intro Cmp Prg (Effective 08/24/2015)	
COP 1000C - Intro Cmp Prg - Intro Cmp Prg (Effective 01/05/2012)	
COP 1000C - Intro Cmp Prg - Intro Cmp Prg (Effective 08/18/2011)	
COP 1000C - Intro Cmp Prg - Intro Cmp Prg (Effective 08/23/2004)	
COP 1000C - Intro Cmp Prg - Intro Cmp Prg (Effective 08/23/1999)	
COP 1000C - Intro Cmp Prg - Intro To C++ (Effective 01/07/1999)	
COP 1000C - Intro Cmp Prg - Intro To C++ (Effective 08/24/1998)	
COP 1000C - Intro Cmp Prg - Intro To C++ (Effective 08/01/1957)	