OOP244 Lesson Outline: Week 3 Dr. Peter Liu

A. Concepts **(the object diagram)**

1**. encapsulation**

a) private **data members**

b) public **member functions** (queries/accessors/getters, modifiers/mutators/setters)

c) constructors

d) the client program: **the current object and invocation of a member function**

2. a safe empty state

3. a const member function

4. a const pointer

5. the class resolution operator

B. Video Clips

Part 1: C++ Class Declaration [ 7 minutes]

Part 2: The Client [11 minutes]

Part 3: C++ Class Implementation,

Constructors [15 minutes]

<https://ict.senecacollege.ca//~peter.liu/onlineF2020/oop244/OOP244Week3_1.mp4>

<https://ict.senecacollege.ca//~peter.liu/onlineF2020/oop244/OOP244Week3_2.mp4>

<https://ict.senecacollege.ca//~peter.liu/onlineF2020/oop244/OOP244Week3_3.mp4>

C. Code Examples (Blackboard)

student.h, student.cpp, student\_client.cpp

D. Video Recording of the Lecture Hours (available on BigBlueButton)

E. Course Notes

<https://ict.senecacollege.ca/~oop244/pages/content/cppst.html>

<https://ict.senecacollege.ca/~oop244/pages/content/ctors.html>

<https://ict.senecacollege.ca/~oop244/pages/content/membe.html>