



**COMPUTER SCIENCE
AND SOFTWARE ENGINEERING**

**AUBURN UNIVERSITY
SAMUEL GINN COLLEGE OF ENGINEERING**

**COMP 3700
Homework 1
Due: January 26, 2013 by 11:59PM
(Please submit using Canvas)**

This assignment is worth 100 points. You are required to use either **VISIO, **open source UML development tool ARGOUML** (<http://argouml.tigris.org/>), or another UML tool of your choice to develop the solutions that require modeling class diagrams. Please export UML diagrams as picture files and insert into your submission document. Please make your submission as a single file.**

Each question below is worth 20 points.

- (1) Prepare a conceptual domain model (class diagram) for a graphical document editor. Assume that a document consists of several sheets. Each sheet contains drawing objects, including text, geometrical objects, and groups. A group is simply a set of drawing objects, possibly including other groups. A group must contain at least two drawing objects. A drawing object can be a direct member of at most one group. Geometrical objects include circles, ellipses, rectangles, lines, and squares.
- (2) Question 3.13 from your textbook
- (3) Questions 3.20 and 3.23 from your textbook
- (4) Question 4.3 from your textbook
- (5) Question 4.15 from your textbook.