

# Software Methods and Tools

Fall 2014

## Assignment 2

Due on 11:59PM, Tuesday, September 16, 2014

### **Description:**

Use IBM Rational Software Modeler to draw a class diagram for a course registration system that is similar to our UMKC Pathway. With this system,

- Students can search courses, review the information (e.g. schedule, classroom) of a course, and add/drop a course.
- Each course can only have a certain number of students enrolled, and will become closed if it reaches its capacity.
- The instructor of a course can review the current roster of the course, and edit the syllabus of the course. The instructor will also be notified once the course status is changed (e.g. from open to closed).
- The system administrator can add a new course into the system, edit the information of a course, and remove an existing course from the system.

Your class diagram must at least have the following classes.

- Student
- Instructor
- Administrator
- Course
- Course Catalog
- Syllabus

Add all the attributes and operations (include constructors) for each class. For attributes, you must include visibility, name, and type. For operations, you must include visibility, name, parameter list, and return type.

Make sure that your diagram will show the complete signature of attributes and methods. Include generalizations, realizations, associations, and multiplicities where they apply.

Submit screenshot(s) showing your class diagram, put them in a single document (pdf).