28/05/2005

Second Hour Exam
Student Name   Student ID:

Read the following case study and answer all the questions that follow:

The on-line university registration system should enable the staff of each academic department to examine the courses offered by their department, add and remove courses, and change the information about them (e.g., the maximum number of students permitted). It should permit students to examine currently available courses, add and drop courses to and from their schedules, and examine the courses for which they are enrolled. Department staff should be able to print a variety of reports about the courses and the students enrolled in them. The system should ensure that no student takes too many courses and that students who have any unpaid fees are not permitted to register (assume that a fees file is maintained by the university's financial office which the registration system accesses but does not change).

1. Draw a use-case diagram for the above on-line university registration system.
2. Create a detail use-case description for *add student to a course*
3. Draw a class diagram for the above on-line university registration system.
4. Develop a sequence diagram for the *add student to a course* use case.
5. Develop the state chart diagram for the course object.

Note: state clearly any assumptions you make.