XML Schema

You are to build a schema which will be used for many applications in the university Registrar's Office.

Carefully consider the following information for designing XML schema:

1. A course is identified by a **department** prefix (2 or 3 letter code such as 'CS') and a course number. These are reasonably stable.

2. Each **course** also has a **title**, up to 40 characters long. These are less stable, and, although they appear on schedules and transcripts, they are not the identifiers for the course.

3. Each course is offered for a certain number of **credits**, with 4 the default value.

4. The Registrar refers to an actual offering of a course in a particular semester as a '**course offering**'. That is, a course offering is a particular semester and section number offered in a particular semester. In that case, an **instructor** is also assigned to the course offering.

5. If you feel good you may add a Boolean attribute consent, defaulting to no.

6. A **student** has a **name** and a **student ID** number and lots of other information which can be considered by you.

7. A student also has an IDREF to her **transcript**.

8. A **transcript** has an IDREF to a **student** , a **CGCP** decimal, a list of **0-3 majors**, and a list of up to **4 semester** records. (You may simplify your life by making the majors be same as the department prefixes.)

9. A **semester** record has a list of **0-6 enrollment records**.

10. An **enrollment** record tabulates the information for each course a student has enrolled in --- the course number etc, the grading option, and (for courses in previous semesters) the grade received.

11. A **class list** has the course offering info and also the same, **id and grading option for each student in the course**.