Consider the following set of requirements for a  
UNIVERSITY database that is used to keep track of students’ transcripts.

The university keeps track of each student’s name,  
student number, Social Security number, current address and phone number,  
permanent address and phone number, birth date, sex, class (freshman,  
sophomore, ..., graduate**), major department, minor department** (if any), and  
degree program (B.A., B.S., ..., Ph.D.). Some user applications need to refer  
to the city, state, and ZIP Code of the student’s permanent address and to the  
student’s last name. Both Social Security number and student number have unique  
values for each student.  
  
  
Each department is described by a name, department  
code, office number, office phone number, and college. Both name and code have  
unique values for each department.  
  
  
Each course has a course name, description, course  
number, number of semester hours, level, **and offering department.** The value of  
the course number is unique for each course.  
  
Note:Courses have sections (weak entity type )mentioned  
Each section has an instructor, semester, year,  
course, and section number. The section number distinguishes sections of the  
same course that are taught during the same semester/year; its values are 1, 2,  
3, ..., up to the number of sections taught during each semester.  
  
  
A grade report has a student, section, letter grade,  
and numeric grade (0,1, 2, 3, or 4).  
  
  
Design an ER schema for this application, and draw  
an ER diagram for the schema. Specify key attributes of each entity type, and  
structural constraints on each relationship type. Note any unspecified  
requirements, and make appropriate assumptions to make the specification  
complete.