

CSC 174 Fall 2020 Assignment 1

Draw an EER diagram according to the following requirements. You can draw the diagram using tools that you prefer, such as Microsoft Visio. Hand-drawn diagram will NOT be accepted. Do NOT use min-max notation.

The university registrar's office maintains data about each course, including course number (unique), course name, and instructor. Instructor has an instructor ID (unique), a name, and a title (e.g. "Lecture", "Assistant Professor"). Each course is either an online course or a traditional course with face to face instruction (but not both). If it is a web-based course then its URL is maintained. If a course is a web-based course then it will not be taught in a classroom. If it is a traditional course, then the class room in which it is taking place is noted and the class time is noted. The registrar's office maintains each classroom's room number, building, and capacity in which the class takes place. For a course a Teaching Assistant (TA) may be appointed, if a TA is appointed then he should have a salary. The office maintains each student's SSN (unique), name, address and email.

Constraints:

- A Teaching Assistant (TA) is a student.
- Each student must enroll in at least one course.
- A course can be taken by many students and a student can take many courses. For each student-course pair, a grade is recorded. A course must have at least one student enrolled.
- For each course, the application keeps track of number of students enrolled.
- A course will be graded by one TA if the course has a TA.
- A TA can grade many courses. A TA must grade at least one course.
- A course is taught by just one instructor and one instructor can teach many courses, at least one.
- A traditional course must take place in one and only one class room and a class room can have many traditional courses. Some classroom may not hold any courses (for example, empty classroom in the pandemic).

Although both specialization and categorization can be used to represent some of the business logic in this requirements, please only use specialization in your submission (do not use categorization).