3. The Training Database

You are asked to design a database for your company's training program. There are in total <u>8 instructors teaching in 5 different</u> courses. Because of classroom capacity and different schedule needs, <u>each course may have several class sections</u>.

<u>Each instructor is responsible for up to five classes</u>, and <u>each class is taught by only one instructor</u>. If an instructor does administrator works, s/he will not have teaching load.

A class can handle up to 25 trainees per class. A trainee may register up to 5 classes at the same time. A class will be canceled if it has fewer than 5 trainees.

An ID is needed for each entity. Other data needed in the database includes (separate the attributes into smaller attributes when appropriate): instructor name, instructor e-mail, course name, course description, class name, class schedule, class capacity, trainee name, and trainee e-mail.

Also, a grade for each trainee on each class should be recorded in the database.

Note:

- There is **no** relationship with instructor and course; an <u>instructor teaches classes</u> **not course**
- If already placed an associative entity, no need to connect another line (like class and trainee)
- The line that connects the associative entity has two options:
 - Non-identifying (dashed): if only have a PK and FK(s) separately
 - o Identifying (solid): if the attribute(s) is both PK/FK in one

Paste Your Answer Diagram Here: PK InstructorID PK CourseID FK CourseID CourseName InstructorName CourseDescription InstructorEmail Made By: Riyan Rattan PK ClassID PK TraineelD FK TraineeID FK ClassID K CourselD TraineeName FK InstructorID TraineeEmail PK EnrollID ClassName TraineeGrade K ClassID ClassSchedule K TraineelD ClassCapacity

Note:

The associative entity ENROLL can be made like above, or you can have ClassID (PK/FK) and TraineeID (PK/FK) and connect both sides of lines as identifying (solid) (no EnrollID)

