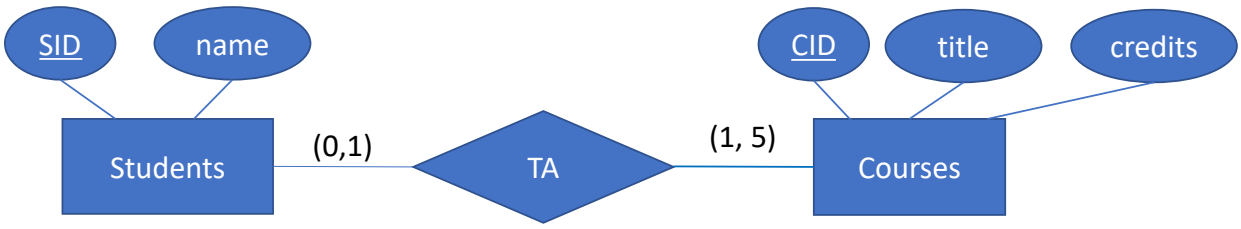
CS 432/532 Homework 2
ER to Relation Transform

1. [70%] Transform the provided ER diagram for the Student Registration System to relations using the techniques discussed in class. For composite attributes, use Method 1 (i.e., use the more specific attributes only) to perform the transformation. For each relation obtained, do the following:
   - underscore the key
   - specify other candidate keys (if any) and foreign keys (if any)
   - specify the constraints associated with this relation, including all the constraints that are described in the Requirements Document.

2. [15%] Let A, B, and C be the only attributes of a relation R. Assume that A, B, or C isn't a key of R. Given that, answer the questions below.
   (a) Does the combination of these three attributes, (A, B, C), form a superkey of R? Say yes or no [1%], and briefly explain your answer [6%].
   (b) Suppose the combination of two attributes, (B, C), is a key of R. Can either B or C be a superkey of R? Say yes or no [1%], and briefly explain your answer [7%]?

3. [15%]



Convert the ER diagram above to relations, introducing no null values. Don't create any foreign key in Courses because it will introduce a lot of redundancies.