

Assignment 2 COSC 3336 Spring 2022

Using Figure 1 as your guide, work Problems 1–3 The Tiny College relational diagram shows the initial entities and attributes for Tiny College.

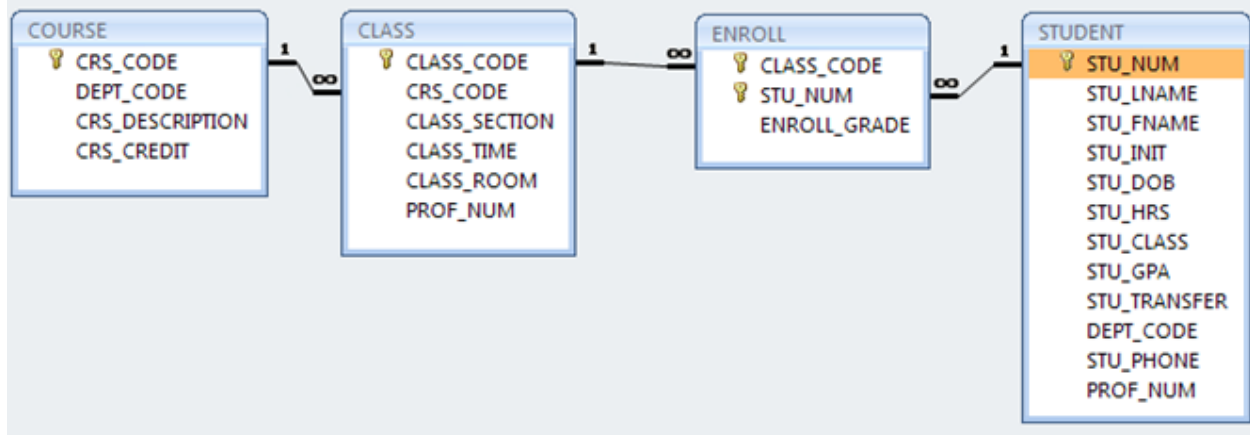


Figure 1. The Tiny College relational diagram

1. Identify each relationship type and write all of the business rules.

Course Relationship: For Each Course there can be many Classes, for example; There can be 3 offerings of COSC 3336 During The Spring 2022 Semester

Class Relationship: For Each Class There can be many Spots for a student to enroll, for example; In COSC 3336 There are 30 spots to enroll in each class

Student Relationship: Each Student can enroll in many classes, for example; I am in-rolled in COSC 3336. As well as HIST 1301 and two other classes.

Table 1. Sample Contents of an ENROLL Table

STU_NUM	CLASS_CODE	ENROLL SEMESTER	ENROLL GRADE
11324	MATH345-04	SPRING-14	NA
11324	ENG322-11	SPRING-14	NA
11892	CHEM218-05	SPRING-14	NA
11892	ENG322-11	SPRING-14	NA
11892	CIS431-01	SPRING-14	NA
10345	ENG322-07	SPRING-14	NA

All of the relationships are 1:M. The relationships may be written as follows:

COURSE generates **CLASS**. One course can generate many classes. Each class is generated by one course.

CLASS is referenced in **ENROLL**. One class can be referenced in enrollment many times. Each individual enrollment references one class. Note that the **ENROLL** entity is also related to **STUDENT**. Each entry in the **ENROLL** entity references one student and the class for which that student has enrolled. A student cannot enroll in the same class more than once. If a student enrolls in four classes, that student will appear in the **ENROLL** entity four times, each time for a different class.

STUDENT is shown in **ENROLL**. One student can be shown in enrollment many times. (In database design terms, “many” simply means “more than once.”) Each individual enrollment entry shows one student.

Assignment 2

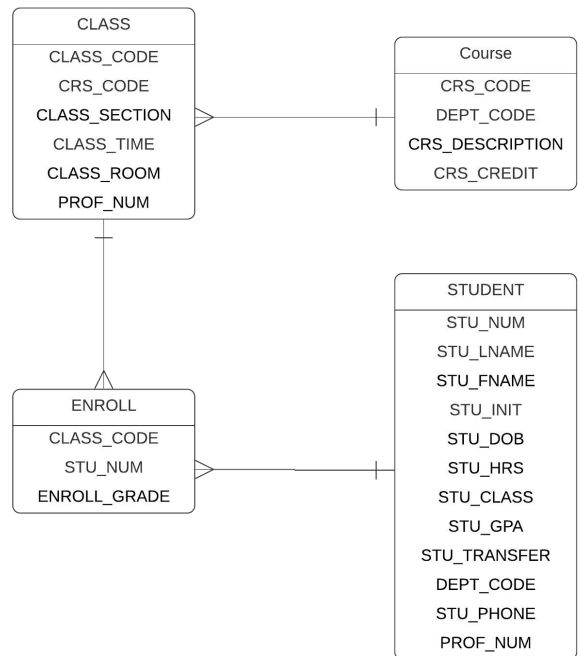
COSC 3336

Spring 2022

Crow's Foot Diagram Assignment 2

Kevin White | February 1, 2022

2. Create the basic Crow's Foot ERD for Tiny College.
Link To App Used To Make Chart



3. Create the UML class diagram that reflects the entities and relationships you identified in the relational diagram.
Link To App Used To Make Chart

UML Diagram Assignment 2

Kevin White | February 1, 2022

