Exercise 1:

A university registrar's office maintains data about the following entities: (a) courses, including number, title, credits, syllabus, and prerequisites; (b) course offerings, including course number, year, semester, section number, instructor(s), timings, and classroom; (c) students, including student-id, name, and program; and (d) instructors, including identification number, name, department, and title. Further, the enrollment of students in courses and grades awarded to students in each course they are enrolled for must be appropriately modeled.

(1) Construct an E-R diagram for the registrar's office. Document all assumptions that you make about the mapping constraints.

(2) Translate the E-R diagram in exercise 1 into a Relational model.

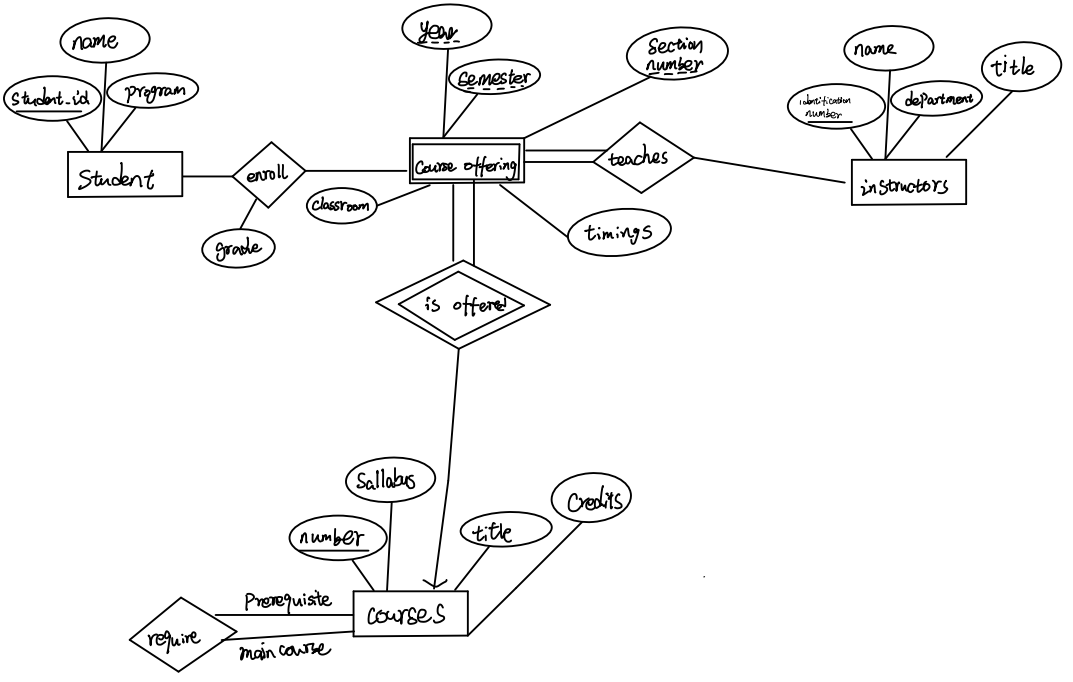
Notes:

Deadline: May 16th, 2023.

Sending email to xmwang@scut.edu.cn, by Monitor or 学委.

File name: 班级-姓名-学号-作业x.doc (Chinese students), or StudentID-name-exercise1. doc (International students).

(1)



(2)

Course

number	syllabus	title	Credits

Student

Student_id	name	Program

instructor

identification number	name	department

Course offering

number	year	Semester	section_number	classroom	timings

enroll

Student id	number	year	Semester	Section number	grade

teaches

identification number	number	year	Semester	Section number

require

maincourse	prerequisite