

Sheet 4

7.16 a) Student \rightarrow name, number, social security number, current address, phone number
Permanent address, Phonnumber
 date of birth, sex, class, major, minor, degree program
 Some applications refer \rightarrow state & ZIP Code of permanent address, and last name
 Unique \rightarrow social security & student number

b) Department \rightarrow name, code, office number, office phone number, college
 unique \rightarrow name, code

c) Course \rightarrow name, description, course number, number of semester hours, level, offering department.
 unique \rightarrow course number

d) Section \rightarrow Instructor, semester, year, course, section number (unique section number) \rightarrow course

e) Grade report has a student, section, letter grade, numeric grade

entities: student, Department, Course, Section, Grade report \rightarrow weak

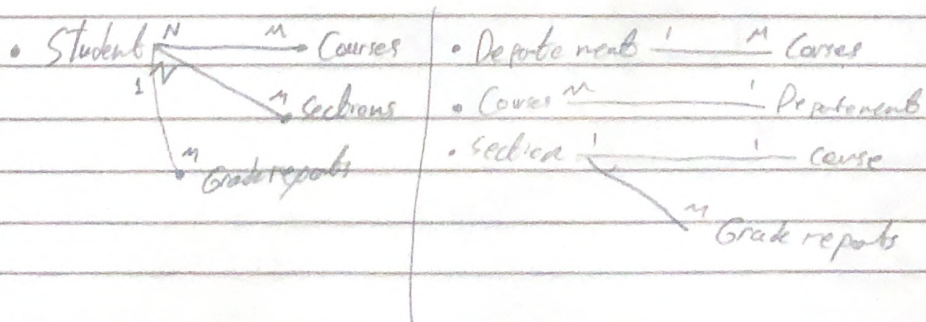
Relations: student \rightarrow (course, section, Grade report)

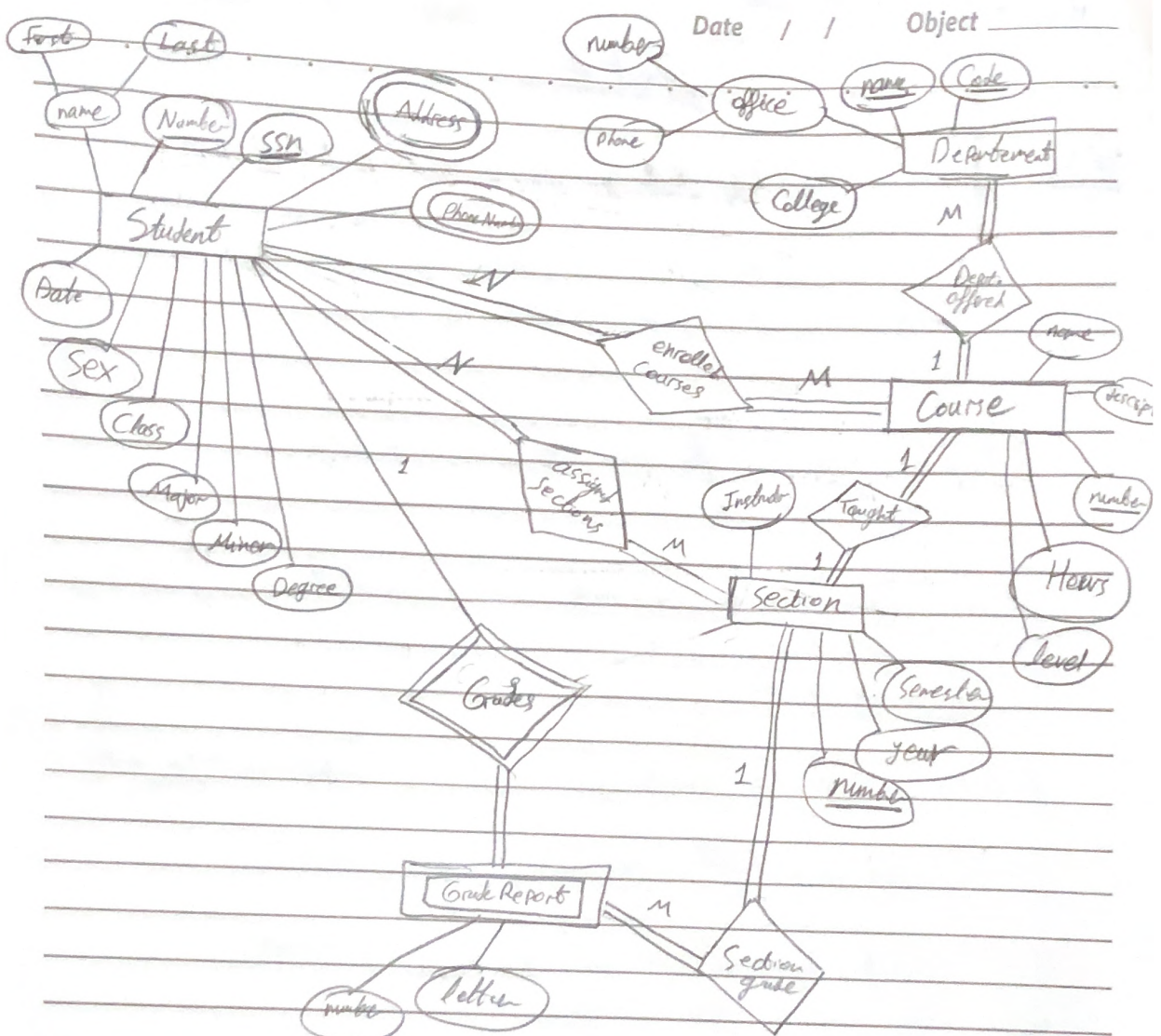
Department \rightarrow (course)

course \rightarrow (Department)

Section \rightarrow (course, Grade report)

Grade report (section)





7.19

a) Airport has a code, city, state, and a name, and a list of Airplane types that can land in it, and departure times of flights & Arrival times of flights, with each of the flights having flight legs.

b) Airplanes have an Id, Total no. of seats & the assigned flight instances and each Airplane has a type and a list of airports it can land in.

c) Reservation has a seat no & customer name & phone with it's flight instance

d) Flights have legs, Fares, number, Arrive & week days where it works

e) Fare have restrictions, Amount, code

Log instance have date and available seats & the plane assigned to it

7.22

Team → number of plays

game → result

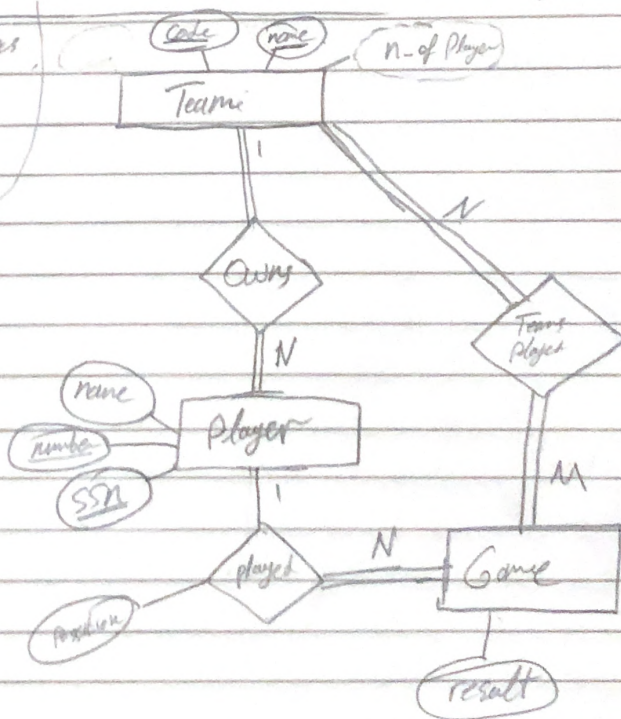
Player → position

entities in game

Team

Player

Soccer



9.4

