create table classroom

(building varchar(15),

room\_number varchar(7),

capacity numeric(4,0),

primary key (building, room\_number)

);

create table department

(dept\_name varchar(20),

building varchar(15),

budget numeric(12,2) check (budget > 0),

primary key (dept\_name)

);

create table course

(course\_id varchar(8),

title varchar(50),

dept\_name varchar(20),

credits numeric(2,0) check (credits > 0),

primary key (course\_id),

foreign key (dept\_name) references department

on delete set null

);

create table instructor

(ID varchar(5),

name varchar(20) not null,

dept\_name varchar(20),

salary numeric(8,2) check (salary > 29000),

primary key (ID),

foreign key (dept\_name) references department

on delete set null

);

create table section

(course\_id varchar(8),

sec\_id varchar(8),

semester varchar(6)

check (semester in ('Fall', 'Winter', 'Spring', 'Summer')),

year numeric(4,0) check (year > 1701 and year < 2100),

building varchar(15),

room\_number varchar(7),

time\_slot\_id varchar(4),

primary key (course\_id, sec\_id, semester, year),

foreign key (course\_id) references course

on delete cascade,

foreign key (building, room\_number) references classroom

on delete set null

);

create table teaches

(ID varchar(5),

course\_id varchar(8),

sec\_id varchar(8),

semester varchar(6),

year numeric(4,0),

primary key (ID, course\_id, sec\_id, semester, year),

foreign key (course\_id,sec\_id, semester, year) references section

on delete cascade,

foreign key (ID) references instructor

on delete cascade

);

create table student

(ID varchar(5),

name varchar(20) not null,

dept\_name varchar(20),

tot\_cred numeric(3,0) check (tot\_cred >= 0),

primary key (ID),

foreign key (dept\_name) references department

on delete set null

);

create table takes

(ID varchar(5),

course\_id varchar(8),

sec\_id varchar(8),

semester varchar(6),

year numeric(4,0),

grade varchar(2),

primary key (ID, course\_id, sec\_id, semester, year),

foreign key (course\_id,sec\_id, semester, year) references section

on delete cascade,

foreign key (ID) references student

on delete cascade

);

create table advisor

(s\_ID varchar(5),

i\_ID varchar(5),

primary key (s\_ID),

foreign key (i\_ID) references instructor (ID)

on delete set null,

foreign key (s\_ID) references student (ID)

on delete cascade

);

create table time\_slot

(time\_slot\_id varchar(4),

day varchar(1),

start\_hr numeric(2) check (start\_hr >= 0 and start\_hr < 24),

start\_min numeric(2) check (start\_min >= 0 and start\_min < 60),

end\_hr numeric(2) check (end\_hr >= 0 and end\_hr < 24),

end\_min numeric(2) check (end\_min >= 0 and end\_min < 60),

primary key (time\_slot\_id, day, start\_hr, start\_min)

);

create table prereq

(course\_id varchar(8),

prereq\_id varchar(8),

primary key (course\_id, prereq\_id),

foreign key (course\_id) references course

on delete cascade,

foreign key (prereq\_id) references course

);