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### **Relationships:**

#### **Dean Relationship:**

A college can have 1 dean

An instructor can be a dean at most for 1 college.

#### **Department - Student Relationship:**

A department can have 0 to many students , a student may have at most 1 department.

#### **Dept - Instructor: → Chair**

A department can chair 1 Instructor.

An Instructor can chair at most one department.

#### **College - Dep: → Admins**

~~A college can admin 0 to many departments, A department can admin 1 college.~~

A department is administered by exactly one college, and a college can administer 0 departments.

#### **Instructor - Section: → Teaches**

~~An Instructor can teach many sections.~~

~~A section can be taught by only one instructor.~~

An Instructor can teach 0 to many Sections. A section is taught by exactly one instructor.

#### **Course - Section : → Secs**

~~A course can have many sections.~~

~~A section may belong to 1 course.~~

A course can be sectioned in (can have) 0 to many sections. A section belongs to exactly one course.

#### **Depart. To Course:**

~~A department offers 1 course~~

~~A course offers many departments~~

A department offers 0 to many courses, a course is offered by exactly one department.

#### **Dept - Instructor → Employs**

~~A dept employs many instructors~~

~~An instructor can be employed by only one department.~~

A department can employ 0 to many instructors

An instructor can be employed by exactly one department.

## **Entities:**

**College Entity has the following Attributes:**

C Name → **key**

C office

C Phone

**Instructors Entity has the following Attributes:**

Id → **key**

Rank

IName

ioFFICE

iPhone

**Department Entity has the following Attributes:**

D Name

DCode

DOffice

Dphone

—DName, DCode → both keys → ~~Composite keys~~ → **Primary keys**

**Course Entity has the following Attributes:**

CCode

Credits

CoName

Level

CDesc

—CoName, CCode → both keys → ~~Composite keys~~ → **Primary keys**

**Student Entity has the following Attributes:**

SId → **key**

FName

MName

Sname → **Composite attribute because of (Fname, Mname and Lname)**

LName

ADDr

Phone

Major

DOB \

**Section Entity has the following Attributes:**

SecId → **key**

SecNo

Sem

Year

Croom → **Composite attribute (Bldg,RoomNo)**

RoomNo

Bldg

CRoom

DaysTime

**Keys:**

CName-> College attribute

Id → Instructor Attribute

DName, DCode → Dept Attribute

CoName, CCode → Course Attribute

SId→Student Attribute

SecId→Section Attribute