Lab 2 Solution File

STUDENT DATA
1021, Charles Griffen, 32nd e lane ave.
1045, Lisa Draper, 29 w Larkin
1033, Douglass Fred, 55 Liberty Lane

STUDENT

PK	student_id
	student_name
	student_address

SEAT

PK	seat_no
	seat_position
FK	seat_student_id

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add

SCHEDULE DATA
1021, Database Systems
1021, Intro. Web Dev.
1045, Database Systems
1045, Intro. to Programming
1021, Intro. to Programming

SCHEDULE

PK,FK1	sch_student_id
PK,FK2	sch_course_name

add

COURSE LIST DATA
Database Systems, 700N
Database Systems, 1100
Database Systems, 2000
Intro. Web Dev.,700N
Into. to Programming, 700N
Intro. Web Dev., 1100

INSTRUCTOR

PK	instructor_no
	instructor_name
	instructor_faculty

COURSE

PK	course_name
	course_number
FK	course_instructor_num

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COURSE_LIST

PK,FK1	cl_course_name
PK,FK2	cl_section_name

INSTRUCTOR DATA
2233, Shawn Carter, yes
2011, Marshall Mathers, yes
3000, Aubrey Graham, no
2014, Jacques Webster II, yes

COURSE DATA
Database Systems, COMP 251, 2233
Intro. Web Dev. CPST 342, 3000
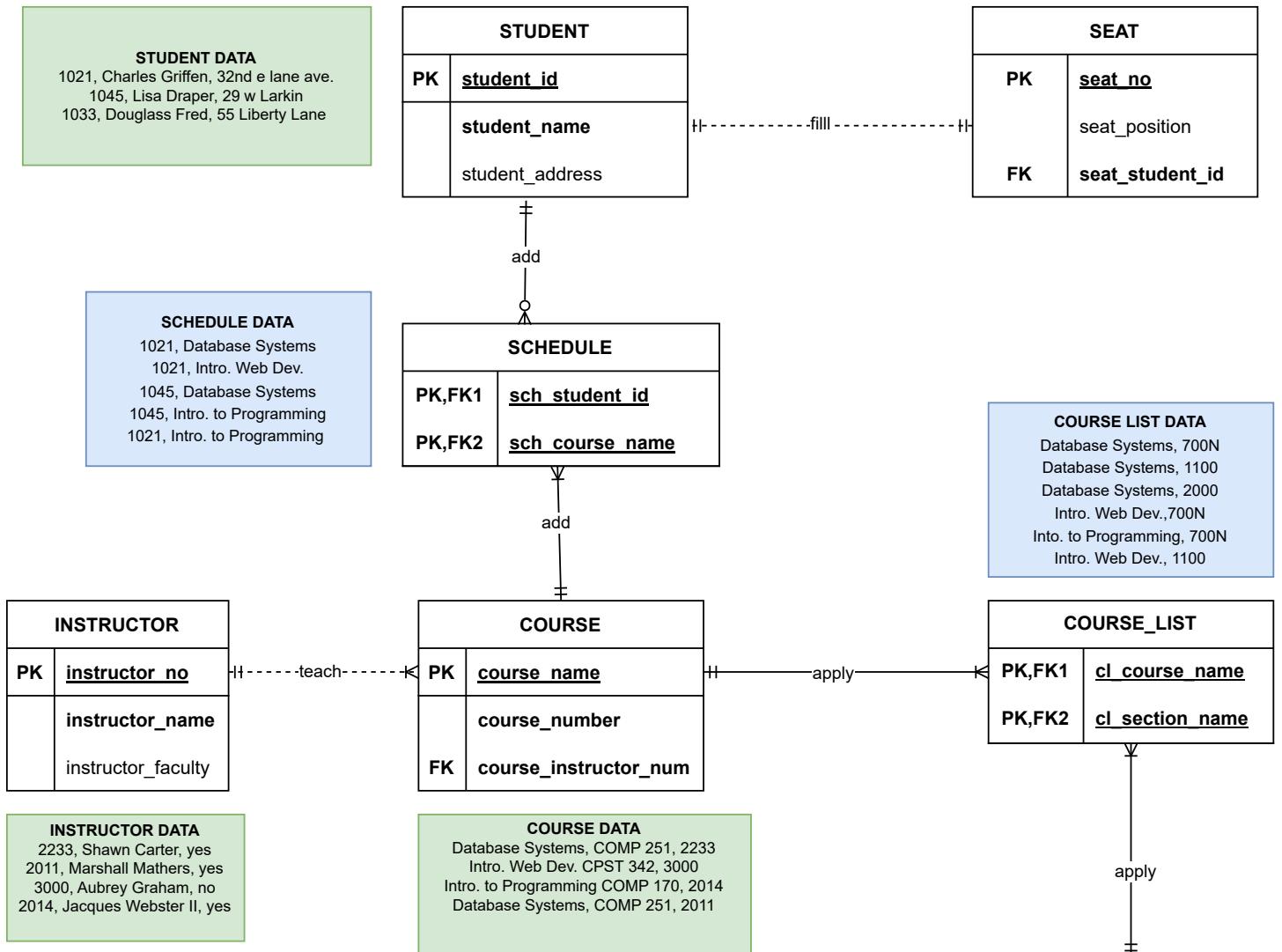Intro. to Programming COMP 170, 2014
Database Systems, COMP 251, 2011

apply

Relationships

An **INSTRUCTOR** teaches one or more **COURSE**, each **COURSE** is taught by one and only one **INSTRUCTOR**.

A **COURSE** is added to one or more **SCHEDULE**, each **SCHEDULE** can add one and only one **COURSE**.

A **STUDENT** is added to zero or more courses to **SCHEDULE**, each **SCHEDULE** can add one and only one **STUDENT**

A **STUDENT** can fill one and only one **SEAT**, each **SEAT** can be filled by one and only one **STUDENT**

A **COURSE** can apply one or more sections to **COURSE_LIST**, each **COURSE_LIST** can apply one **COURSE**

A **SECTION** can be applied to one or more **COURSE_LIST**, each **COURSE_LIST** applies one and only one **SECTION**

A **PROFESSOR** can teach zero or more **SECTIONS**, each **SECTION** can be taught by one and only one **PROFESSOR**

SECTION DATA
700N, 5099
1100, 5001
2000, 4044

SECTION

PK	section_number
FK	section_prof_id

teach

PROFESSOR DATA
4023, Curtis Jackson, yes
4044, Calvin Broadus, yes
5001, Onika Maraj, no
5099, O'Shea Jackson, yes

PROFESSOR

PK	professor_id
	professor_name
	professor_faculty

A few assumptions...

Can a **PROFESSOR** exist in the database without being assigned a **SECTION**? **YES**

Does an **INSTRUCTOR** have to be assigned an **COURSE** when created? **YES**

Does a **SCHEDULE** need to display specific section? **NO**