**CSC430/530 – Database Management Systems**



**COURSE**

**ENROLL**

SSN Course# Quarter Grade

**BOOK\_ADOPTION**

Course# Quarter Book\_ISBN

**TEXT**

Dept

Cname

Course#

Hands-on activity – Foreign Keys & Referential Integrity Constraints

Consider following relations for a database that keeps track of student enrollment in courses and the books adopted for each course:

STUDENT(SSN, Name, Major, Bdate) COURSE(Course#, Cname, Dept) ENROLL(SSN, Course#, Quarter, Grade)

BOOK\_ADOPTION(Course#, Quarter, Book\_ISBN) TEXT(Book\_ISBN, Book\_Title, Publisher, Author)

**Specify foreign keys and referential integrity constraints in the provided relational schema diagram.**

STUDENT

|  |  |  |  |
| --- | --- | --- | --- |
| SSN | Name | Major | Bdate |

|  |  |  |  |
| --- | --- | --- | --- |
| Book\_ISBN | Book\_Title | Publisher | Author |

SOLUTION

The schema has the following four foreign keys:

* The attribute SSN of relation ENROLL that references relation STUDENT.
* The attribute Course# in relation ENROLL that references relation COURSE.
* The attribute Course# in relation BOOK\_ADOPTION that references relation COURSE.
* The attribute Book\_ISBN of relation BOOK\_ADOPTION that references relation TEXT.