**ITEC 3335 Database Development  
Fall 2017**

**Last Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ First Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Student Id: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Suggested Solution for HW #5**

This is a sample design. Other reasonable designs are acceptable.

The relation schema:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | | Student(Sid, FName, LName, AdvisorFacId (Rule R1) | | |
| Candidate Keys | | | | (1) Sid (KC1) |
| Foreign Keys | | | | (1) AdvisorFacId references Faculty(FacId) (Rule R1) |
| Nullable Attributes | | | | AdvisorFacId |
| Notes | | | |  |
| 2 | | Faculty(FName, LName, Rank, FacId | | |
| Candidate Keys | | | | (1) FacId (Rule KC2) |
| Foreign Keys | | | | (1) Ex2\_E\_Id references Example1(E\_Id), (2) P references R(P) |
| Nullable Attributes | | | |  |
| Notes | | | | (1) FacId is added as a surrogate key to be the primary key. |
| 3 | Class(ClassNumber, Rank, | | | |
| Candidate Keys | | | | (1) ClassNumber (Rule KC1) |
| Foreign Keys | | | |  |
| Nullable Attributes | | | |  |
| Notes | | | |  |
| 3 | | | Enroll(Sid, ClassNumber) (Rule R2) | |
| Candidate Keys | | | | (1) Sid, ClassNumber |
| Foreign Keys | | | | (1) Sid references Student(Sid), (2) ClassNumber references Class(ClassNumber) |
| Nullable Attributes | | | |  |
| Notes | | | |  |