

Student Database Schema

Table and Column Descriptions

COURSE: Information for a course

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|---------------|----------|--------------|---|
| COURSE_NO | NOT NULL | NUMBER(8,0) | The unique course number |
| DESCRIPTION | NULL | VARCHAR2(50) | The full name of this course |
| COST | NULL | NUMBER(9,2) | The dollar amount charged for enrollment in this course |
| PREREQUISITE | NULL | NUMBER(8,0) | The ID number of the course that must be taken as a prerequisite to this course |
| CREATED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who inserted data |
| CREATED_DATE | NOT NULL | DATE | Audit column—indicates the date of insertion |
| MODIFIED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who made the last update |
| MODIFIED_DATE | NOT NULL | DATE | Audit column—date of the last update |

SECTION: Information for an individual section (class) of a particular course

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|-----------------|----------|--------------|--|
| SECTION_ID | NOT NULL | NUMBER(8,0) | The unique ID for a section |
| COURSE_NO | NOT NULL | NUMBER(8,0) | The course number for which this is a section |
| SECTION_NO | NOT NULL | NUMBER(3) | The individual section number within this course |
| START_DATE_TIME | NULL | DATE | The date and time when this section meets |
| LOCATION | NULL | VARCHAR2(50) | The meeting room for the section |
| INSTRUCTOR_ID | NOT NULL | NUMBER(8,0) | The ID number of the instructor who teaches this section |

SECTION: Information for an individual section (class) of a particular course (continued)

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|---------------|----------|--------------|--|
| CAPACITY | NULL | NUMBER(3,0) | The maximum number of students allowed in this section |
| CREATED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who inserted data |
| CREATED_DATE | NOT NULL | DATE | Audit column—indicates the date of insertion |
| MODIFIED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who made the last update |
| MODIFIED_DATE | NOT NULL | DATE | Audit column—date of the last update |

STUDENT: Profile information for a student

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|-------------------|----------|--------------|--|
| STUDENT_ID | NOT NULL | NUMBER(8,0) | A unique ID for the student |
| SALUTATION | NULL | VARCHAR2(5) | This student's title (Ms., Mr., Dr.) |
| FIRST_NAME | NULL | VARCHAR2(25) | This student's first name |
| LAST_NAME | NOT NULL | VARCHAR2(25) | This student's last name |
| STREET_ADDRESS | NULL | VARCHAR2(50) | This student's street address |
| ZIP | NOT NULL | VARCHAR2(5) | This student's zip code |
| PHONE | NULL | VARCHAR2(15) | This student's phone number, including area code |
| EMPLOYER | NULL | VARCHAR2(50) | The name of the company where this student is employed |
| REGISTRATION_DATE | NOT NULL | DATE | The date this student registered in the program |
| CREATED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who inserted data |
| CREATED_DATE | NOT NULL | DATE | Audit column—indicates the date of insertion |
| MODIFIED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who made the last update |
| MODIFIED_DATE | NOT NULL | DATE | Audit column—date of the last update |

ENROLLMENT: Information for a student registered for a particular section of a particular course (class)

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|-------------|----------|-------------|---|
| STUDENT_ID | NOT NULL | NUMBER(8,0) | The ID for a student |
| SECTION_ID | NOT NULL | NUMBER(8,0) | The ID for a section |
| ENROLL_DATE | NOT NULL | DATE | The date this student registered for this section |

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|--------------------|-------------|--------------|--|
| FINAL_GRADE | NULL | NUMBER(3,0) | The final grade given to this student for all the work in this section (class) |
| CREATED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who inserted data |
| CREATED_DATE | NOT NULL | DATE | Audit column—indicates the date of insertion |
| MODIFIED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who made the last update |
| MODIFIED_DATE | NOT NULL | DATE | Audit column—date of the last update |

INSTRUCTOR: Profile information for an instructor

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|--------------------|-------------|--------------|---|
| INSTRUCTOR_ID | NOT NULL | NUMBER(8) | The unique ID for an instructor |
| SALUTATION | NULL | VARCHAR2(5) | This instructor's title (Mr., Ms., Dr., Rev.) |
| FIRST_NAME | NULL | VARCHAR2(25) | This instructor's first name |
| LAST_NAME | NULL | VARCHAR2(25) | This instructor's last name |
| STREET_ADDRESS | NULL | VARCHAR2(50) | This instructor's street address |
| ZIP | NULL | VARCHAR2(5) | This instructor's zip code |
| PHONE | NULL | VARCHAR2(15) | This instructor's phone number, including area code |
| CREATED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who inserted data |
| CREATED_DATE | NOT NULL | DATE | Audit column—indicates the date of insertion |
| MODIFIED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who made the last update |
| MODIFIED_DATE | NOT NULL | DATE | Audit column—date of the last update |

ZIPCODE: City, state, and zip code information

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|--------------------|-------------|--------------|---|
| ZIP | NOT NULL | VARCHAR2(5) | The zip code, unique for a city and state |
| CITY | NULL | VARCHAR2(25) | The city name for this zip code |
| STATE | NULL | VARCHAR2(2) | The postal abbreviation for the U.S. state |
| CREATED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who inserted data |
| CREATED_DATE | NOT NULL | DATE | Audit column—indicates the date of insertion |
| MODIFIED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who made the last update |
| MODIFIED_DATE | NOT NULL | DATE | Audit column—date of the last update |

GRADE_TYPE: Lookup table of a grade type (code) and its description

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|-----------------|----------|--------------|--|
| GRADE_TYPE_CODE | NOT NULL | CHAR(2) | The unique code that identifies a category of grade (such as MT or HW) |
| DESCRIPTION | NOT NULL | VARCHAR2(50) | The description for this code (such as Midterm or Homework) |
| CREATED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who inserted data |
| CREATED_DATE | NOT NULL | DATE | Audit column—indicates the date of insertion |
| MODIFIED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who made the last update |
| MODIFIED_DATE | NOT NULL | DATE | Audit column—date of the last update |

GRADE_TYPE_WEIGHT: Information on how the final grade for a particular section is computed; for example, the midterm constitutes 50%, the quiz 10%, and the final examination 40% of the final grade

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|------------------------|----------|--------------|---|
| SECTION_ID | NOT NULL | NUMBER(8) | The ID for a section |
| GRADE_TYPE_CODE | NOT NULL | CHAR(2) | The code that identifies a category of grade |
| NUMBER_PER_SECTION | NOT NULL | NUMBER(3) | How many of these grade types can be used in this section (for example, there may be three quizzes) |
| PERCENT_OF_FINAL_GRADE | NOT NULL | NUMBER(3) | The percentage that this category of grade contributes to the final grade |
| DROP_LOWEST | NOT NULL | CHAR(1) | Is the lowest grade in this type removed when determining the final grade? (Y/N) |
| CREATED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who inserted data |
| CREATED_DATE | NOT NULL | DATE | Audit column—indicates the date of insertion |
| MODIFIED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who made the last update |
| MODIFIED_DATE | NOT NULL | DATE | Audit column—date of the last update |

GRADE: The individual grades a student received for a particular section (class)

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|-----------------------|----------|----------------|--|
| STUDENT_ID | NOT NULL | NUMBER(8) | The ID for a student |
| SECTION_ID | NOT NULL | NUMBER(8) | The ID for a section |
| GRADE_TYPE_CODE | NOT NULL | CHAR(2) | The code that identifies a category of grade |
| GRADE_CODE_OCCURRENCE | NOT NULL | NUMBER(38) | The sequence number of one grade type for one section. For example, there could be multiple assignments numbered 1, 2, 3, and so on. |
| NUMERIC_GRADE | NOT NULL | NUMBER(3) | Numeric grade value (such as 70 or 75) |
| COMMENTS | NULL | VARCHAR2(2000) | Instructor's comments on this grade |
| CREATED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who inserted data |
| CREATED_DATE | NOT NULL | DATE | Audit column—indicates the date of insertion |
| MODIFIED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who made the last update |
| MODIFIED_DATE | NOT NULL | DATE | Audit column—date of the last update |

GRADE_CONVERSION: Converts a number grade to a letter grade

| COLUMN NAME | NULL | TYPE | DESCRIPTION |
|---------------|----------|--------------|--|
| LETTER_GRADE | NOT NULL | VARCHAR(2) | The unique grade as a letter (A, A-, B+, B, and so on) |
| GRADE_POINT | NOT NULL | NUMBER(3,2) | The number grade on a scale from 0 (F) to 4 (A) |
| MAX_GRADE | NOT NULL | NUMBER(3) | The highest grade number that corresponds to this letter grade |
| MIN_GRADE | NOT NULL | NUMBER(3) | The lowest grade number that corresponds to this letter grade |
| CREATED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who inserted data |
| CREATED_DATE | NOT NULL | DATE | Audit column—indicates the date of insertion |
| MODIFIED_BY | NOT NULL | VARCHAR2(30) | Audit column—indicates who made the last update |
| MODIFIED_DATE | NOT NULL | DATE | Audit column—date of the last update |