Grade

|  |  |
| --- | --- |
| **Table:** | Grade |
| **ER Origin** | Grade entity |
| **Primary Keys** | LetterGrade |
| **Foreign Keys** |  |
| **Uniqueness Constraints** | LetterGrade |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Type** | **Range** | **Required/Optional** | **Derived/Stored** | **Origin Entity** | **Origin Relation** | **Origin Attribute** |
| LetterGrade | Varchar(2) |  | Required | Stored | Grade |  | LetterGrade |
| GPA | NUMERIC(4, 3) |  | Required | Stored | Grade |  | GPA |

GradeTier

|  |  |
| --- | --- |
| **Table:** | GradeTier |
| **ER Origin** | GradeTier associative entity |
| **Primary Keys** | LetterGrade, Section |
| **Foreign Keys** | LetterGrade -> Grade.Letter,  Section-> Section.ID |
| **Uniqueness Constraints** | LetterGrade, Section |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Type** | **Range** | **Required/Optional** | **Derived/Stored** | **Origin Entity** | **Origin Relation** | **Origin Attribute** |
| LetterGrade | Varchar(2) |  | Required | Stored | Grade |  | LetterGrade |
| Section | INTEGER |  | Required | Stored | Section |  | Section |
| LowPercent | Numeric(5,2) |  | Required | Stored | Section\_GradeTier |  | LowPercent |
| HighPercent | Numeric(5,2) |  | Required | Stored | Section\_GradeTier |  | HighPercent |

AssessmentComponent

|  |  |
| --- | --- |
| **Table:** | AssessmentComponent |
| **ER Origin** | AssessmentComponent entity |
| **Primary Keys** | ID |
| **Foreign Keys** | Section->Section.ID |
| **Uniqueness Constraints** | ID |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Type** | **Range** | **Required/Optional** | **Derived/Stored** | **Origin Entity** | **Origin Relation** | **Origin Attribute** |
| ID | INTEGER |  | Required | Stored | AssessmentComponent |  | ID |
| Section | INTEGER |  | Required | Stored | Section |  | Section |
| Type | VARCHAR |  | Required | Stored | AssessmentComponent |  | Type |
| Weight | Numeric(5,2) |  | Required | Stored | AssessmentComponent |  | Weight |
| Description | VARCHAR |  | Optional | Stored | AssessmentComponent |  | Description |
| PlannedNumberOfAssignments | INT |  | Required | Stored | AssessmentComponent |  | PlannedNumberOfAssignments |

AssessmentItem

|  |  |
| --- | --- |
| **Table:** | AssessmentItem |
| **ER Origin** | AssessmentItem weak entity |
| **Primary Keys** | AssessmentNumber, Component |
| **Foreign Keys** | Component->Component.ID |
| **Uniqueness Constraints** | (AssessmentNumber, Component) |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Type** | **Range** | **Required/Optional** | **Derived/Stored** | **Origin Entity** | **Origin Relation** | **Origin Attribute** |
| AssessmentNumber | INT |  | Required | Stored | AssessmentItem |  | AssessmentNumber |
| Component | INT |  | Required | Stored | AssessmentComponent |  | Component |
| BasePoints | Numeric(1000,2) |  | Required | Stored | AssessmentItem |  | BasePointsPossible |
| ExtraCreditPoints | Numeric(1000,2) |  | Optinal | Stored | AssessmentItem |  | ExtraCreditPoints |
| AssignedDate | DATE |  | Optional | Stored | AssessmentItem |  | AssignedDate |
| DueDate | DATE |  | Optional | Stored | AssessmentItem |  | DueDate |
| Curve | Numeric(5,2) |  | Required | Stored | AssessmentItem |  | Curve |

Submission

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table:** | Submission |  |  |  |  |
| **ER Origin** | Submission relationship |  |  |  |  |
| **Primary Keys** | Student, Section, Component, SequenceInComponent |  |  |  |  |
| **Foreign Keys** | Student -> Student.ID  Section->Section.ID  Component->Component.ID  SequenceInComponent -> AssessmentItem.SequenceInComponent |  |  |  |  |
| **Uniqueness Constraints** | (Student, Section, Component, SequenceInComponent) |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Type** | **Range** | **Required/**  **Optional** | **Derived/**  **Stored** | **Origin**  **Entity** | **Origin**  **Relation** | **Origin Attribute** |
| ID | Integer |  | Required | Stored | Student |  | ID |
| CRN | Numeric(5,0) |  | Required | Stored | Section |  | CRN |
| Name | Varchar(50) |  | Required | Stored | Assessment\_Component |  | Name |
| BasePointsEarned | Numeric(5,2) |  | Required | Stored | Submission |  | BasePointsEarned |
| ExtraCreditEarned | Numeric(5,2) |  | Required | Stored | Submission |  | ExtraCreditEarned |
| HandoutDate | DATE |  | Required | Stored | Submission |  | HandoutDate |
| SubmissionDate | DATE |  | Required | Stored | Submission |  | SubmissionDate |
| Penalty | Numeric(5,2) |  | Optional | Stored | Submission |  | Penalty |