

Subject and Subject Requirements Tables

[Subjects](#) | [Subject Requirements](#)

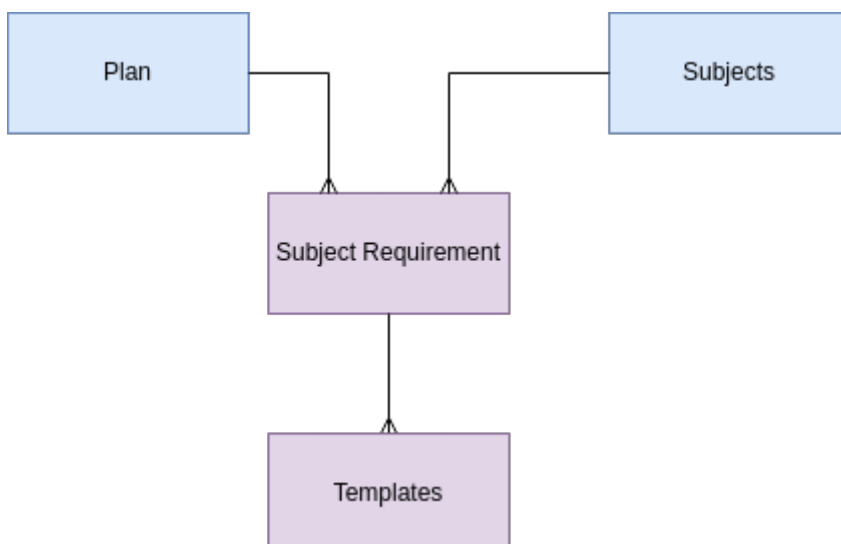
Relevant Definitions

Subjects are families of classes. For example, Algebra I, Geometry, and Algebra II are all in the subject of Math. Schools can define any subjects they need, and identify any class as belonging to that subject area. Subjects are mainly used to assist the administration in checking the student is meeting requirements when creating a plan .

Subject requirements are the number of units in total required in a subject area by a regulatory organization. For example, the NCAA may require 4 years of English and 3 years of math. The University of California may require 4 years of English and 4 years of math. The NCAA subject requirement for math is 3 years, the University of California subject requirement for math is 4 years. For University of California, the subject requirement is 4 years, the subject is math. *Note: sometimes requirements are described in 'years' of study, sometimes in credits, and sometimes in units.*

Templates are records that specify the sequence of classes to be taken under the plan. One plan will have multiple templates associated to that plan, each representing a class that must be taken to meet the plan's requirements. A template is a model of a student enrollment record. A template record specifies the class name, the corresponding curriculum, and the term the course should be taken in. PEMS copies all the template records associated with the student's plan to create the enrollment records for that plan. Enrollment records are copies of the template records that are associated with a specific student term (who and when).

Data Relationships



Note that subjects are not associated directly with plans. The subject requirement is the table that links the various subject to the plan and also specifies the number of units in that subject the plan requires.

The template records are linked to the subject requirements when the subject requirement is selected in the template record. The number of units in the template's associated class record contributes to the total required in the subject requirement record. It will take multiple templates to complete a subject requirement.

Subjects Table

The subjects table has only the name field. The administrator can enter unlimited subjects. However, a class record may only be linked to one subject record. Curriculum records are not linked to subject records. A curriculum may be used to fulfill different subjects depending on the plan.

Use Case | Environmental Science - one class may fulfill two different subject requirements

For example, Environmental Science may be frequently used to meet the Biological Science requirement or the Physical Science requirement, but not both. There would be two class records. One called Environmental Science that is linked to the subject of biology and another that is linked to the subject of physical science. However there is just one Moodle course, so there is just one curriculum record. The curriculum therefore does not specify a subject, and is not related to subject records.

Subject Requirements Table

The subjects requirement table specifies how many units must be completed under the plan in a particular subject area. Subject requirements are related to only one plan. A Template record fulfills a subject requirement, so it may be related to only one plan.

Note: The use case where a template was able to fulfill multiple subject requirements has been deprecated as it is marginal and there are other ways to address this situation.

See [Templates Table](#):

A student may take an elective course to satisfy both science requirements and elective total units. For example, programming is not required, this course may be used to satisfy science requirements, but also be used to fulfill general electives. In this case the template for Programming would fulfill 5 units of science AND 5 units of general elective. The alternative is to simply reduce the number of electives required under the plan.

Units required - the number of units required for the associated subject under the associated plan.

Name - concatenation of subject, plan, and unit information.

Units Planned - the number of units in the plan that meet this subject requirement.

Transcript name - the subject requirements are listed in the transcript to create the block of information discussed in the [Programs of Study Function](#). The transcript name is how the subject requirement should appear on the document, as the concatenation name is not convenient for printing.

Action Items JAN 2024

1-MVP | TRANSCRIPT| Victoria to manually update transcript names in all data. (Add automation that upon new record, auto-enter data for transcript names from subject name, allow user to manually update - low priority).

1-MVP | TRANSCRIPT | REDUNDANT | The Subject Requirement CURRENTLY allows multi-select from the template table. ONLY ONE template should be linked to ONLY ONE subject requirement. REMOVE multi-select and allow only one record to be selected.

1-MVP | TRANSCRIPT| After updating the data relationship to single select, for each subject requirement record, find all related template records. Sum the Units field from the related class record in the template records and enter into the subject requirement Units planned field. (Note, this will not directly affect the transcript since the transcript uses only the units required field from the subject requirement, but this in includes as part of the module.)

MEANS TEMPLATE UNIT = SUBJECT REQ. UNIT PLAN? DONE, WHEN SUBJECT REQ IS SELECT IT WILL FETCH THAT UNIT TO UNIT PLAN(if not null) OF TEMPLATE.