

**AZ Ed-Fi Suite v7.1, Data Standard v5.0: Course Offerings
(SY 24-25)**

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Summary

This entity represents an entry in the course catalog of available courses offered by the school during a session.

Object Triggering Logic

Action	Business Rule(s)
Post	<p>Reports a record when a Section that is scheduled into a term/period has and the associated Course has a State Code entered.</p> <ul style="list-style-type: none"> • A record is only reported for Courses in the same School Year as the Ed-Fi Connection sending the record. <ul style="list-style-type: none"> ◦ School Year dates are defined in School Year Setup. <ul style="list-style-type: none"> ▪ If Start Date is NULL, 07/01/StartYear will be used. ▪ If End Date is NULL, 06/30/EndYear will be used. • Do not report a record if the any of the following exclusions are present: <ul style="list-style-type: none"> ◦ Course is inactive (Active is unchecked) ◦ Course State Exclude ◦ Course State Code is NULL ◦ Calendar Exclude ◦ School Exclude • One record will report for each unique Course State Code and Term Type combination.

Delete /Post	A DELETE / POST will be performed if the data element being altered is part of the resource's natural key. A PUT will be performed otherwise.
Put	<ul style="list-style-type: none"> • When the following information is changed on Course: <ul style="list-style-type: none"> ◦ Course ID (New Course) ◦ State Code ◦ Course Name ◦ Course Number • Changes to Resource Preferences mappings do NOT trigger. A manual resync must be performed on the resource if mappings are changed.
Delete	<ul style="list-style-type: none"> • When the terms the section is offered in are changed or removed. • When the section is deleted. • When a record is in the Ed-Fi Identity Mapping Report but cannot be found on the Campus site.

Required Resources (Upstream)

The following resources must be sent prior to this resource:

- Schools (Pre-populated)
- Courses (Pre-populated)
- Sessions

Dependent Resources (Downstream)

The following resources are dependent on this resource (must be sent after this resource):

- Sections

Error Log

The following are potential Tier 1 (Ed-Fi API generated) or custom (Campus generated) errors you may receive when posting, updating, or deleting this resource. Please keep in mind that the "Error Message" below may not match your exact error message.

Error Message	Possible Causes / How to Fix
400: Validation of ' RESOURCE ' failed. FIELD is required.	An element of the JSON that is required is missing and needs to be added. <ul style="list-style-type: none"> • Double check that all bolded data elements below are reporting a valid value and no data elements below are reporting an invalid value.
400: ' RESOURCE ' failed. RESOURCE reference could not be resolved.	A resource that was referenced from a difference resource does not yet exist. <ul style="list-style-type: none"> • Resync the resource being mentioned in the error, then resync the errored resource. Alternatively, the resource being referenced may be incorrect. This can happen with Schools and the Ed-Fi School ID being used as an example. Double check the referenced values being sent are valid.
403: Authorization denied. The claim does not have any established relationships with the requested resource.	The key/secret being used does not have permission to send a record for the resource / referenced resource. <ul style="list-style-type: none"> • Double check your API credentials (key/secret). Sometimes specific keys/secrets cannot report specific resources. • The referenced person (student, staff, parent, contact, etc.) has not yet been associated to the key /secret. Resync their "linking" resource (Students Student School Associations, Staffs Staff Education Organization Assignment Associations, etc.) then resync the errored resource. • The referenced person (student, staff, parent, contact, etc.) may not exist in the ODS yet. Resync the "person" resource and the "linking" resource (Students Student School Associations, Staffs Staff Education Organization Assignment Associations, etc.) then resync the errored resource.

<p>404: Failed to delete 'RESOURCE'. Record does not exist.</p>	<p>The attempt to delete a specific Ed-Fi record ID in the ODS failed because it did not exist.</p> <ul style="list-style-type: none"> • This error can be ignored. The ID was cleared from the Ed-Fi Identity Mapping Report and will not attempt to delete again.
<p>409: A natural key conflict occurred when attempting to create a new resource 'RESOURCE' with a duplicate key.</p>	<p>The Ed-Fi API has a natural key system alongside a standard REST ID system. This error is often protecting against the erroneous creation of a duplicate record in the API. However, it may also indicate that the natural key requirements of the Ed-Fi API have not been satisfied, and the key needs to be modified.</p> <ul style="list-style-type: none"> • Check for duplicate data in your Campus site. If no duplicate data can be found, report the issue to Campus Support. <ul style="list-style-type: none"> ◦ This can be caused by numerous issues. Our code may be attempting to send duplicate records when it should not. The natural key (bolded fields below) may not be unique enough to satisfy Ed-Fi requirements in all cases. Most times this error will require a code change to fix.
<p>409: The resource (or a subordinate entity of the resource) cannot be deleted because it is a dependency of the 'RESOURCE' entity.</p>	<p>The resource that the application is attempting to delete is referenced from another entity.</p> <ul style="list-style-type: none"> • Use the Delete Tool to delete the referenced resource in the error message. Then retry the delete on the original resource that errored.
<p>500: Internal Server Error.</p>	<p>Something unexpected happened and no specific error message could be returned.</p> <ul style="list-style-type: none"> • This issue usually occurs when the ODS is having issues. Confirm that there are no issues with the ODS the data is being sent to and then attempt to retry the errored record. • Contact Campus Support if 500 errors continue to occur, can be replicated consistently, and the ODS the data is being sent to has no ongoing issues. <ul style="list-style-type: none"> ◦ There is a chance that Campus Ed-Fi code is sending an invalid JSON request resulting in the 500 error. ◦ There is a chance that an Ed-Fi Data Standard / API bug is causing the issue. ◦ Investigation is needed in these cases as there are many different potential causes.

Object Data Elements Logic

Data element labels below in **BOLD** are part of the natural key of this resource and are required data elements for the record to send through Ed-Fi.

- The Mandatory / Conditional / Optional column indicates what the state requires for each data element.

	Data Element Label	Business Rule(s)	Mandatory (M) Conditional (C) Optional (O)	Data Source GUI Path	Database Field	Uses Template Logic (✓ / ✗ / EXT)
1	localCourseCode (string)	<p>The local code assigned by the School that identifies the course offering provided for the instruction of students.</p> <hr/> <p>Reports the Course Number.</p>	M	Course	Course . number	✓
2	courseReference (reference)	<p>A reference to the Courses resource associated with the Course Offering being reported.</p> <hr/> <p>Reports the fields that are part of the Natural Key for the Course resource.</p> <ul style="list-style-type: none"> courseCode <ul style="list-style-type: none"> Reports the State Code educationOrganizationId <ul style="list-style-type: none"> Reports 79275 (Hard-Coded) <ul style="list-style-type: none"> This is AZ DOE's educationOrganizationId. AZ DOE owns all courses. 	M	N/A	N/A	✗

3	schoolReference (<i>reference</i>)	<p><i>A reference to the Schools resource associated with the Course Offering being reported.</i></p> <hr/> <p>Reports the fields that are part of the Natural Key for the Schools resource.</p> <ul style="list-style-type: none"> educationOrganizationId = Ed-Fi School ID 	M	School Information	School . entityID	✓
4	sessionReference (<i>reference</i>)	<p><i>A reference to the Sessions resource associated with the Course Offering being reported.</i></p> <hr/> <p>Reports the fields that are part of the Natural Key for the Sessions resource.</p>	M	N/A	N/A	✓
5	localCourseTitle (<i>string</i>)	<p><i>The descriptive name given to a course of study offered in the school, if different from the course title.</i></p> <hr/> <p>Reports the Course Name.</p>	M	Course	Course . name	✓

6	courseSchedules (array)	<p>An unordered collection of courseOfferingCourseSchedules. CourseSchedule for given course</p> <hr/> <p>Reports the following data elements in an array for each instructional day the class is offered:</p> <ul style="list-style-type: none"> • scheduleDate <ul style="list-style-type: none"> ◦ Reports the Date. • instructionalMinutesPlanned <ul style="list-style-type: none"> ◦ Reports the Total Number of Instructional Minutes across all periods the course is offered for in the term that is reporting. 	M	N/A	N/A	EXT
7	courseLevelCharacteristics	This is optional, does not report.	O	N/A	N/A	N/A
8	curriculumUses	This is optional, does not report.	O	N/A	N/A	N/A
9	instructionalTimePlanned	This is optional, does not report.	O	N/A	N/A	N/A
10	offeredGradeLevels	This is optional, does not report.	O	N/A	N/A	N/A
11	endOfCourseAssessmentCodeDescriptor	This is optional, does not report.	O	N/A	N/A	N/A

Appendix