

API Documentation: Class Management

This document provides the technical specification for the API endpoints related to creating and managing classes, as defined in class_route.py. The endpoints are segregated by user roles.

General Features (Learning Advisor & Manager)

1. Search for Class

Retrieves a single class by its unique ID.

- **Endpoint:** GET /class/search
- **Authentication:** Learning Advisor or Manager Role Required.
- **Query Parameters:**

Parameter	Type	Required	Description
id	String	Yes	The unique ID of the class to search for.

Responses:

- **200 OK (Success)**
 - **Description:** Returned when the class is found successfully.
 - **Body:**

```
{
  "course_id": "C001",
  "course_date": "2025-07-04",
  "term": 1,
  "teacher_id": "EM001",
  "room_id": "R001",
  "class_date": "2025-08-08T00:00:00"
}
```

- **400 Bad Request (Missing Parameter)**
 - **Description:** Returned if the id query parameter is not included.

- **Body:**

```
{  
  "message": "Missing class ID in query params"  
}
```

- **404 Not Found**

- **Description:** Returned if no class with the specified ID exists.

- **Body:**

```
{  
  "message": "Class not found"  
}
```

2. Get All Classes in a Course (Learning Advisor)

Retrieves all classes for a course managed by the logged-in Learning Advisor.

- **Endpoint:** GET /class/learningadvisor/
- **Authentication:** Learning Advisor Role Required.
- **Query Parameters:**

Parameter	Type	Required	Description
course_id	String	Yes	The ID of the course.
course_date	Date	Yes	The creation date of the course instance

Responses:

- **200 OK (Success)**

- **Description:** Returned with a list of all class objects for the specified course.

- **Body:**

```
[
  {
    "course_id": "C002",
    "course_date": "2025-07-04",
    "term": 1,
    "teacher_id": "EM004",
    "room_id": "R002",
    "class_date": "2025-08-08T00:00:00"
  },
  {
    .
    .
    .
  }
]
```

- **400 Bad Request:** Returned if course_id or course_date is missing.

- **Body:**

```
{
  "message": "Course not found"
}
```

3. Add Class

Creates a new class and automatically generates attendance records for all enrolled students.

- **Endpoint:** POST /class/learningadvisor/add
- **Authentication:** Learning Advisor Role Required.
- **Request Body:**

Field	Type	Required	Description
course_id	String	Yes	The ID of the course for this class.
course_date	Date	Yes	The creation date of the course instance.
term	Integer	Yes	The term number for the class (e.g., 1 or 2).
teacher_id	String	Yes	The ID of the assigned teacher.
room_id	String	Yes	The ID of the assigned room.
class_date	DateTime	Yes	The specific date and time of the class (YYYY-MM-DD HH:MM:SS).

Responses:

- **201 Created (Success)**
 - **Description:** Returned when the class is created successfully.
 - **Body:** The newly created class object.
- **400 Bad Request:** Returned for invalid input, or if class_date does not match the course's schedule.
- **404 Not Found:** Returned if the course, teacher, or room does not exist.

- **409 Conflict:** Returned if the teacher is unavailable or the room is occupied.

4. Update Class

Updates the details of an existing class.

- **Endpoint:** PUT /class/learningadvisor/update
- **Authentication:** Learning Advisor Role Required.
- **Query Parameters:**

Parameter	Type	Required	Description
id	String	Yes	The unique ID of the class to update.

- **Request Body:** A JSON object containing the fields to be updated.

Responses:

- **200 OK (Success)**
 - **Body:**

```
{  
  "message": "Class updated successfully"  
}
```

5. Delete Class

Deletes a class and frees the associated room.

- **Endpoint:** DELETE /class/learningadvisor/delete
- **Authentication:** Learning Advisor Role Required.
- **Query Parameters:**

Parameter	Type	Required	Description
id	String	Yes	The unique ID of the class to delete.

Responses:

- **200 OK (Success)**

- **Body:**

```
{
  "message": "Class deleted successfully"
}
```

- **403 Forbidden:** Returned if the user is not the Learning Advisor for the class's course.

- **Body:**

```
{
  "message": "Permission denied"
}
```

6. Get All Classes in a Course (Manager)

Retrieves all classes for any course in the system.

- **Endpoint:** GET /class/manager/
- **Authentication:** Manager Role Required.
- **Query Parameters:**

Parameter	Type	Required	Description
course_id	String	Yes	The ID of the course.
course_date	Date	Yes	The creation date of the course instance

Responses:

- **200 OK (Success)**
 - **Description:** Returned with a list of all class objects for the specified course.
 - **Body:** (Same format as the Learning Advisor's GET endpoint)

7. Get Assigned Classes

Retrieves all classes assigned to the logged-in teacher.

- **Endpoint:** GET /class/teacher/
- **Authentication:** Teacher Role Required.
- **Responses:**
 - **200 OK (Success)**
 - **Description:** Returned with a JSON array of the teacher's assigned classes.
 - **Body:**

```
[
  {
    "course_id": "C001",
    "course_date": "2025-07-04",
    "term": 1,
    "teacher_id": "EM001",
    "room_id": "R001",
    "class_date": "2025-08-08T00:00:00"
  },
  {
    .
    .
    .
  }
]
```

--