

Scheduler API Documentation

Authentication

FAQ:

What is the Authentication scheme?

- Basic HTTP.

How can a new user be registered to use the API?

- **POST: /auth/user** can be used to create a new user where the username and password are passed in as JSON body parameters.

Does the API limit what a user can do?

- It does not. Any registered user can do whatever the API allows at will.

Create User

POST: /auth/user

Description

Create a new User to Authenticate into the API

Body Parameters

Field Name	Required	Type	Description
name	true	string	Unique username for a User.
password	true	string	Password for a User.

Body Example

```
{
  "name": "LazyPandas",
  "password": "LazyPandasSecurePassword"
}
```

Responses

201 CREATED

```
{
  "code": "200",
  "message": "user successfully created"
}
```

400 BAD REQUEST

404 NOT FOUND

409 CONFLICT

422 UNPROCESSABLE ENTITY

Student

List Student(s)

GET: /scheduler/students

Description

Return a collection of Students

Responses

200 OK

```
[
  {
    "id": 1,
    "firstName": "Adam",
    "lastName": "Toth",
    "dateOfBirth": "07-24-1996",
    "address": "4645 Wolf Pen Road Burlingame, CA 94010",
    "email": "atoth@oswego.edu",
    "numberOfCourses": 5
  }
]
```

401 UNAUTHORIZED

404 NOT FOUND

List a Student by ID

GET: /scheduler/student/{id}

Description

Return one Student

Path Parameters

Field Name	Required	Type	Description
id	true	integer	Unique identifier for a student.

Responses

200 OK

```
{
  "id": 3,
  "firstName": "Charles",
  "lastName": "Smelley",
  "dateOfBirth": "12-07-1993",
  "address": "4168 My Drive New York, NY 10013",
  "email": "csmelley@oswego.edu",
  "numberOfCourses": 3
}
```

400 BAD REQUEST

401 UNAUTHORIZED

404 NOT FOUND

422 UNPROCESSABLE ENTITY

List Students by last name

GET: /scheduler/student/search/

Description

Return a collection of Student(s) associated to that last name

Query Parameters

Field Name	Required	Type	Description
last_name	true	string	Last name for a student.

Responses

200 OK

```
[
  {
    "id": 5,
    "firstName": "Sandra",
    "lastName": "Garcia",
    "dateOfBirth": "09-28-2000",
    "address": "4286 Bryan Avenue Minneapolis, MN 55415",
    "email": "sgarcia@oswego.edu",
    "numberOfCourses": 6
  },
  {
    "id": 6,
    "firstName": "Charlie",
    "lastName": "Garcia",
    "dateOfBirth": "07-15-1999",
    "address": "4286 Bryan Avenue Minneapolis, MN 55415",
    "email": "chgarcia@oswego.edu",
    "numberOfCourses": 4
  }
]
```

400 BAD REQUEST

401 UNAUTHORIZED

404 NOT FOUND

422 UNPROCESSABLE ENTITY

Create Student

POST: /scheduler/student

Description

Create a new Student

Body Parameters

Field Name	Required	Type	Description
first_name	true	string	First name for a student.
last_name	true	string	Last name for a student.
date_of_birth	true	string	DOB for a student.
address	true	string	Address for a student.
email	true	string	Email address for a student.

Body Example

```
{
  "first_name": "David",
  "last_name": "Smelley",
  "date_of_birth": "09-15-1990",
  "address": "21 Roselina Drive New York, NY 10022",
  "email": "dsmelley@oswego.edu"
}
```

Responses

201 CREATED

```
{
  "id": 15,
  "first_name": "David",
  "last_name": "Smelley",
  "date_of_birth": "09-15-1990",
  "address": "21 Roselina Drive New York, NY 10022",
  "email": "dsmelley@oswego.edu",
  "number_of_courses": 0
}
```

400 BAD REQUEST

401 UNAUTHORIZED

409 CONFLICT

422 UNPROCESSABLE ENTITY

Update Student

PUT: /scheduler/student/{id}

Description

Update the specified Student

Path Parameters

Field Name	Required	Type	Description
id	true	integer	Unique identifier for a student.

Body Parameters

Field Name	Required	Type	Description
first_name	true	string	First name for a student.
last_name	true	string	Last name for a student.
date_of_birth	true	string	DOB for a student.
address	true	string	Address for a student.
email	true	string	Email address for a student.

Body Example

```
{
  "first_name": "David",
  "last_name": "Smelley",
  "date_of_birth": "09-15-1986",
  "address": "21 Roselina Drive New York, NY 10022",
  "email": "dsmelley@oswego.edu"
}
```

Responses

200 OK

```
{
  "id": 15,
  "first_name": "David",
  "last_name": "Smelley",
  "date_of_birth": "09-15-1986",
  "address": "21 Roselina Drive New York, NY 10022",
  "email": "dsmelley@oswego.edu",
  "number_of_courses": 0
}
```

400 BAD REQUEST

401 UNAUTHORIZED

404 NOT FOUND

422 UNPROCESSABLE ENTITY

Delete Student

DELETE: /scheduler/student/{id}

Description

Delete the specified Student

Path Parameters

Field Name	Required	Type	Description
id	true	integer	Unique identifier for a student.

Responses

200 OK

```
{
  "id": 15,
  "first_name": "David",
  "last_name": "Smelley",
  "date_of_birth": "09-15-1986",
  "address": "21 Roselina Drive New York, NY 10022",
  "email": "dsmelley@oswego.edu",
  "number_of_courses": 0
}
```

400 BAD REQUEST

401 UNAUTHORIZED

404 NOT FOUND

422 UNPROCESSABLE ENTITY

Course

List Courses(s)

GET: /scheduler/courses

Description

Return a collection of all courses

Responses

200 OK

```
[
  {
    "course_id": 100,
    "credit_hours": 4,
    "department": "NaturalSciences",
    "course_name": "General-Physics-I"
  }
]
```

401 UNAUTHORIZED

404 NOT FOUND

List a Course by ID

GET: /scheduler/course/{course-id}

Description

Return one Course

Path Parameters

Field Name	Required	Type	Description
course_id	true	integer	Unique identifier for a course.

Responses

200 OK

```
{
  "course_id": 300,
  "credit_hours": 3,
  "department": "ComputerScience",
  "course_name": "Intro-to-JAVA-I"
}
```

400 BAD REQUEST

401 UNAUTHORIZED

404 NOT FOUND

422 UNPROCESSABLE ENTITY

List Courses by department

GET: /scheduler/course/search/

Description

Return a collection of Course(s) associated to that department

Query Parameters

Field Name	Required	Type	Description
department	true	string	Department name for a course.

Responses

200 OK

```
[
  {
    "course_id": 200,
    "credit_hours": 2,
    "department": "Mathematics",
    "course_name": "Algebra-I"
  },
  {
    "course_id": 201,
    "credit_hours": 3,
    "department": "Mathematics",
    "course_name": "Algebra-II"
  }
]
```

400 BAD REQUEST

401 UNAUTHORIZED

404 NOT FOUND

422 UNPROCESSABLE ENTITY

Create Course

POST: /scheduler/course/{course_id}

Description

Create a new Course

Path Parameters

Field Name	Required	Type	Description
course_id	true	integer	Unique identifier for a course.

Body Parameters

Field Name	Required	Type	Description
credit_hours	true	integer	Credit hours for a course.
department	true	string	Department a course belongs to.
course_name	true	string	Name for a course.

Body Example

```
{
  "credit_hours": 3,
  "department": "Mathematics",
  "course_name": "Calculus-I"
}
```

Responses

201 CREATED

```
{
  "course_id": 205,
  "credit_hours": 3,
  "department": "Mathematics",
  "course_name": "Calculus-I"
}
```

400 BAD REQUEST

401 UNAUTHORIZED

409 CONFLICT

422 UNPROCESSABLE ENTITY

Update Course

PUT: /scheduler/coourse/{course_id}

Description

Update the specified Course

Path Parameters

Field Name	Required	Type	Description
course_id	true	integer	Unique identifier for a course.

Body Parameters

Field Name	Required	Type	Description
credit_hours	true	integer	Credit hours for a course.
department	true	string	Department a course belongs to.
course_name	true	string	Name for a course.

Body Example

```
{
  "credit_hours": 4,
  "department": "Mathematics",
  "course_name": "Calculus-I"
}
```

Responses

200 OK

```
{
  "course_id": 405,
  "credit_hours": 4,
  "department": "Mathematics",
  "course_name": "Calculus-I"
}
```

400 BAD REQUEST

401 UNAUTHORIZED

404 NOT FOUND

422 UNPROCESSABLE ENTITY

Delete Course

DELETE: /scheduler/course/{course_id}

Description

Delete the specified Course

Path Parameters

Field Name	Required	Type	Description
course_id	true	integer	Unique identifier for a course.

Responses

200 OK

```
{
  "course_id": 405,
  "credit_hours": 4,
  "department": "Mathematics",
  "course_name": "Calculus-I"
}
```

400 BAD REQUEST

401 UNAUTHORIZED

404 NOT FOUND

422 UNPROCESSABLE ENTITY

Enrolled

List Enrollment(s)

GET: /scheduler/student/{id}/courses

Description

Return a collection of Courses a Student is enrolled in.

Path Parameters

Field Name	Required	Type	Description
id	true	integer	Unique identifier for a student.

Responses

200 OK

```
{
  "402": {
    "course_id": 402,
    "credit_hours": 3,
    "department": "PhilosophicalStudies",
    "course_name": "Foundations-of-Ethics"
  },
  "100": {
    "course_id": 100,
    "credit_hours": 4,
    "department": "NaturalSciences",
    "course_name": "General-Physics-I"
  }
}
```

400 BAD REQUEST

401 UNAUTHORIZED

404 NOT FOUND

422 UNPROCESSABLE ENTITY

Create Enrollment

POST: /scheduler/student/{id}/course/{course_id}

Description

Create a new Course Enrollment associated with a Student id

Path Parameters

Field Name	Required	Type	Description
id	true	integer	Unique identifier for a student.
course_id	true	integer	Unique identifier for a course.

Responses

201 CREATED

```
{
  "studentId": 1,
  "courseId": 400
}
```

400 BAD REQUEST

401 UNAUTHORIZED

422 UNPROCESSABLE ENTITY

Delete Enrollment

DELETE: /scheduler/student/{id}/course/{course_id}

Description

Delete a Course Enrollment associated with a Student id

Path Parameters

Field Name	Required	Type	Description
id	true	integer	Unique identifier for a student.
course_id	true	integer	Unique identifier for a course.

Responses

200 OK

```
{
  "studentId": 1,
  "courseId": 400
}
```

400 BAD REQUEST

401 UNAUTHORIZED

404 NOT FOUND

422 UNPROCESSABLE ENTITY