

## -----Design a Course Registration Platform-----

### Objects and Behaviors:

#### Student

Data: name, studentID, emailAddress, password, subject, grade

Behaviors: login, logout, search, add, drop, browse

#### Teacher

Data: name, teacherID, emailAddress, password, subject

Behaviors: login, logout, count, confirm, post

#### Course

Data: name, courseID, credit, time, location, status(full or available)

Behavior: N/A

#### RegistrationSystem

Data: course, userAccount

Behaviors: search, sort, display, authorize

### Sequence of Invoking Behaviors with Behaviors

Student joe,

Teacher sam,

Course math,

RegistrationSystem neusystem,

if neusystem.isAvailable

if joe.hasAnAccount

joe.loginSystem -> neusystem: authorize

else

joe.signUpForSystem -> username, studentID, password, emailAddress,

neusystem: authorize

joe.createAccount

joe.loginSystem -> neusystem: authorize

end

if authorize.isTrue

joe.searchForCourses -> name, courseID, credit, status: Collection of

Courses

while(joe.choose() == null)

neusystem.displayNextPage

math = joe.wantToChoose

if math.isNotSuitableForJoe

neusystem.rejectRegistration

else

if math.registerSpace != null && math.registerSpace < max

joe.addCourse -> name, studentID

neusystem.authorize

else

joe.requestSignUpWaitingList -> neusystem

```
        neusystem.sendRequestToTeacher -> sam
    end
    if sam.acceptRegistration
        sam.confirmRegistration
        neusystem.confirmRegistration
    else
        neusystem.rejectRegistration
        joe.chooseAnotherCourse
    end
end
else
    joe.cantLoginSystem
end
else
    joe.accessSystemLater
end
```