**Unit 14 Assignment**

**Directions:**

Please complete the following assignment to signify your completion of Unit 14. All programming projects need to be completed and submitted electronically, following the Electronic Submission Guidelines discussed in class.

**Background:**

The purpose of this assignment is to construct a Rails web application that supports search functionality and validation rules. This homework will reuse the Course Application we made in prior homeworks and fold in the various issues we learned about in the content of this unit.

**Project 1:** **Course Application Finders and Validation**

Update the Course Application to provide a search form that allows the user to search by teacher name or title for a particular course in the database. Place the search logic into the layout template for your application so that the form appears on all your application's course pages but is coded just once. Create a.find( ... ) method in your controller and build a route the connects the find operation to an .html.erb file in your application that displays the results of this query.

Update the Course Application data model to enforce various validation rules. Specifically, when entering a new course, make sure all the fields are not empty and that the hours entered is a positive quantity but is no more than 7 hours and that the size entered is a positive quantity but is no more than 45 students.  Create a seed database with course records that meet these validation constraints so that the commands:  rake db:reset db:seed   properly build your seed database without any runtime errors.  **Before issuing a db:seed command, please be sure that your web server has been shutdown.**