# DAT204x: Introduction to R for Data Science

## Course Prerequisites

None, but previous experience in basic mathematics is helpful.

## Course Schedule

This course is available in self-paced format. Deadlines associated with the graded quizzes and labs are set to the end date of the course, which is displayed on the course **Home** page. You can listen to the lecture, attempt the quizzes, and work on the labs exercises at any time prior to the deadline. You should complete the quizzes/labs on your own to fully learn the material before you start the next module.

## Course Topics

Module 1: Introduction to Basics
Take your first steps with R. Discover the basic data types in R and assign your first variable.

Module 2: Vectors
Analyze gambling behavior using vectors. Create, name and select elements from vectors.

Module 3: Matrices
Learn how to work with matrices in R. Do basic computations with them and demonstrate your knowledge by analyzing the Star Wars box office figures.

Module 4: Factors
R stores categorical data in factors. Learn how to create, subset and compare categorical data.

Module 5: Lists
Lists allow you to store components of different types. Learn how to work with lists.

Module 6: Data Frames
When working R, you'll probably deal with Data Frames all the time. Therefore, you need to know how to create one, select the most interesting parts of it, and order them.

Module 7: Basic Graphics
Discover R's packages to do graphics and create your own data visualizations

## Expected Effort

Each module, you should expect to spend 2-4 hours on the course, including:

- Viewing the lecture videos and demonstrations
- Completing the quizzes
- Completing the lab exercises
- Further reading

## Coursework and Grading

This course includes coursework, some of which is graded. Each module in the course includes lecture videos, graded short quizzes, and graded lab exercises. The quizzes account for 30% of the total grade, the lab exercises accounts for 30% of the total grade, and the final exam accounts for the remaining 40%. You must achieve an overall score of 70% to pass the course. For the quizzes/labs questions, you have between one to four maximum attempts at each question, depending on the type of the question.

## Discussion

We encourage all students to submit questions, observations, and comments in the Discussion section. If you have any issues while working on the course, check there first – your fellow students may have already found a resolution!

Please remember that the discussion forum is open to all students and staff, and while we love to see passionate engagement, abusive or inflammatory behavior will not be tolerated.

Due to the volume of students attending this course, it will not be possible for the course staff to answer every question individually. You should still post questions however, because in many cases, your fellow students may be able to help.