R PROGRAMMING SYLLABUS

OMICSS 2021

Module description:

The OMICSS R Programming module covers the fundamental concepts of R Programming required to conduct research in the field of Bioinformatics. Paired with the other modules in the OMICSS course, students will have a solid foundation not only in the field of R Programming, but Bioinformatics as a whole.

Module duration:

4 weeks, average 2 hours per week

Module Outline:

Week 1	Topics Covered	1. Getting Started 2. The Basics 3. Data Types
	Learning Activities	• Online lecture videos • swirl Lesson Exercises
	Estimated duration	1.5 hours
Week 2	Topics Covered	1. Data Types (continuation) 2. Reading Data 3. Subsetting 4. Control Structures 5. Functions 6. Scoping Rules
	Learning Activities	• Online lecture videos • swirl Lesson Exercises
	Estimated duration	4 hours
Week 3	Topics Covered	1. Loop Functions 2. Base Graphics 3. Statistics and R
	Learning Activities	• Online lecture videos • swirl Lesson Exercises
	Estimated duration	2.5 hours

Week 4	Topics Covered	1. Practice 2 2. Practice 3
	Learning Activities	• Online Practice sheets
	Estimated duration	40 minutes