<u>Syllabus for MATLAB summer bootcamp</u>

Week 1: Intro to MATLAB, getting started, variable types, arrays

Week 2: functions, debugging

Week 3: if/for/else/while loop

Week 4: if/for/else/while loop continued and plotting figures

Week 5: find peaks and curve fitting

<u>Guest lectures:</u>

Week 6 Lecture 1 (by Dr. Matthew Creamer): Data analysis I - normal distribution, p-values, comparing central tendency in 1 or more groups (t-test, ANOVA)

Week 6 Lecture 2 (by Dr. Matthew Creamer): Data analysis II – regression, correlation, visualization

Week 7 Lecture 1 (by Zaid Zada): Natural Language Processing

Week 7 Lecture 2 (by Dr. Sam Nastase): Open science, code reproducibility, GitHub