

Agreements (consent) about breaks:

On Tuesday, 9-50 – 10-35; 5' break 10-40 – 11-25;

Class 1: 8/09/25 Moodle content and files sent by mail

I. File !ReadmeGroup2025 *.pdf contains information about methodical material, tasks, literature (sent by mail before).

!ReadmeGroup2025.pdf - it is the starting point for each class!

II. Instructions: MatLab Update and Yandex-teleconference

III. Lecture. Review (presentation)

Class 2-3: 15-23/09/25:

I. File !ReadmeGroup2025 *.pdf contains information about methodological material, tasks, literature (sent by mail before).

II. Moodle: Preliminary Data Analysis.

Presentation. Preliminary Data Analysis and MatLab

III. Folder *Methodological materials* contains

- 1) input Data – **crabs.xlsx** - Excel data – 7 properties description of 173 crabs (dichotomic, nominal, quantitative data)
- 2) DataForAnalysis.mat – binary MatLab file containing quantitative crabs characteristics in form of double array – MatrixCrabs (173×5) and names of correspondent data in the form of cell array – NamesProperties (1×5)

3) Examples:

- a) *InputOutput.m* – script file explaining the input, output of MatLab data for various types and their storage (step-by-step explanation and getting DataForAnalysis.mat)
- b) *preprocessingPage9.m* – the simplest data preprocessing

IV. Tabular methods and functions.pdf – this file help to deal with tabular data

Instructions and help are at the beginning of the course in Moodle!!!

✓ Stochastic Modeling and Statistical Data Processing ✎



ФАЙЛ

ACADEMIC CARD OF THE DISCIPLINE ✎



ПАПКА

Instructions: MatLab Update and Yandex-teleconference ✎

Common



ФАЙЛ

Help: Tabular methods and functions ✎

Files

29 September Telemost online

Class 4: 30/09/25:

I. File !ReadmeGroup2025 *.pdf contains information about methodological material, tasks, literature (sent by mail before).

- 1) PresentationPage11.pdf (Explanation for Characteristics of Central Tendency in form of using blackboard)
- 2) Theoretical manual: pp.13-21 (without *Coding*)

Repeat

- 3) Example: *InputOutput.m* – script file explaining the input, output of MatLab data for various types input data (matrix, table, excel table, binary files) and their storage (step-by-step explanation and getting DataForAnalysis.mat)
- 4) *crabs.xlsx* – data for your next research

Task!!!

Based on *InputOutput.m* save in binary file with name *CrabsPart* such variables: *NamesProperties* and corresponding data in the table which represented as matrix with name *MatrixCrabs*. Create new your file, download your data, which was saved in *CrabsPart* and choose numeric column (any crabs characteristic) and determine all central tendency properties, also construct histogram with fitting theoretical density function. What MatLab function are you going to use?

Class 5: 07/10/25:

Practical session

1. On Task1, Task2. How to prepare report.
2. Lecture 2,3 you can find in the Moodle, Section *Stochastic Modeling and Statistical Data Processing*, Folder *Lectures*
3. Perform *task3* yourself (Moodle)