

**Course name:**

**NUTRIGENOMICS**

**Course code:**

**Number of ECTS: 2**

**Lecturers:**

Form of classes (hours): 15

Key competences:

Lectures:

Topics:

1. Introduction. Gene, genome, chromosome
2. Nutrition and human genetic information.
3. Genomics, transcriptomics, proteomics, metabolomics.
4. Methods used in nutrigenomics.
5. Biomarkers used in genetic and nutritional research.
6. Gene polymorphism and nutritional components.
7. Carbohydrates, proteins, fats and gene expression.
8. Micronutrients in the regulation of gene expression.

Labolatories:

Exercises:

Requirements: basic knowledge of human nutrition and nutrition physiology