

## Biotechnical Faculty / FOOD SAFETY / KNOWLEDGE AND NUTRITIONAL VALUE OF FOOD

| Course:                          | KNOWLEDGE AND NUTRITIONAL VALUE OF FOOD   |                        |                   |   |  |  |  |  |
|----------------------------------|---|------------------------|-------------------|---|--|--|--|--|
| Course ID                        | Course status   | Semester               | ECTS credits      | Lessons (Lessons+Exer cises+Laboratory) |  |  |  |  |
| 12391                            | Mandatory   | 1                      | 6                 | 2+2+0                                   |  |  |  |  |
| Programs                         | FOOD SAFETY   |                        |                   |   |  |  |  |  |
| Prerequisites                    | No prerequisites  |                        |                   |   |  |  |  |  |
| Aims                             | Course aims: teaching this course aims for students to learn basic science of food, connection between tourism and food, culture food, national cuisine, macro- nutrients, macro-nutrients etc.   |                        |                   |   |  |  |  |  |
| Learning outcomes                | After passing the exam, the student is expected to: define the basic components of food. It distinguishes the specificities of the composition of certain food groups. Critically evaluates the quality of food products in terms of their nutritional value and nutritional composition. Recognizes the importance of food health safety for its marketing, and values the importance of food and nutrition. Recognizes the importance of organic food in overall food production. Applies acquired knowledge in various social/professional situations related to food production, marketing and promotion. He continues to independently develop the acquired knowledge. |                        |                   |   |  |  |  |  |
| Lecturer / Teaching<br>assistant | Vesna Vujacic, Associate Professor  |                        |                   |   |  |  |  |  |
| Methodology                      | Lectrues, learning and self- development of coursework, consultation.   |                        |                   |   |  |  |  |  |
| Plan and program of work         |   |                        |                   |   |  |  |  |  |
| Preparing week                   | Preparation and registration of the semester  |                        |                   |   |  |  |  |  |
| l week lectures                  | Introductory lecture. Instructions for attending the lectures. Introducing students to the program, aim and tasks.  |                        |                   |   |  |  |  |  |
| I week exercises                 | Introductory lecture. Instructions for attending the lectures. Introducing students to the program, aim and tasks.  |                        |                   |   |  |  |  |  |
| II week lectures                 | History of food culture, Cindi program-food pyramid.  |                        |                   |   |  |  |  |  |
| II week exercises                | Revival of materials (previous lectures), interactive conversation with students.   |                        |                   |   |  |  |  |  |
| III week lectures                | Food products, basic terms. Legal acts of Montenegro regarding health food safety. ISO standard 22000, brands from Montenegro with the mark of the HACCP standard. HACCP standard and its importance. "Good from Montenegro" brand.   |                        |                   |   |  |  |  |  |
| III week exercises               | Revival of materials (previous lectures), interactive conversation with students.   |                        |                   |   |  |  |  |  |
| IV week lectures                 | Food composition, dissociation (separation of food), energy value of food, calories, AD; DRA; RDI (nutrient dose).  |                        |                   |   |  |  |  |  |
| IV week exercises                | Revival of materials (previous lectures), interactive conversation with students.   |                        |                   |   |  |  |  |  |
| V week lectures                  | Macronutrients: proteins, amino acids, a role of the proteins.  |                        |                   |   |  |  |  |  |
| V week exercises                 | Revival of materials (previous lectures), interactive conversation with students.   |                        |                   |   |  |  |  |  |
| VI week lectures                 | Macronutrients: carbohydrates-structure, distribution and role of carbohydrates. Macronutrients: lipids-structure, classification, role of lipids.  |                        |                   |   |  |  |  |  |
| VI week exercises                | Revival of materials (previous lectures), interactive conversation with students.   |                        |                   |   |  |  |  |  |
| VII week lectures                | Macronutrients: lipids-structure, classification, role of lipids. Micronutrients: vitamins, vitamin division, liposoluble vitamins, vitamins hidrosolubilmi, the role of vitamins.  |                        |                   |   |  |  |  |  |
| VII week exercises               | Revival of materials (previous lectures), interactive conversation with students.   |                        |                   |   |  |  |  |  |
| VIII week lectures               | Test.   |                        |                   |   |  |  |  |  |
| VIII week exercises              | Revival of materials (previous lectures), interactive conversation with students.   |                        |                   |   |  |  |  |  |
| IX week lectures                 | Micronutrients: vitamins, division of vitamins, liposoluble vitamins, hydrosoluble vitamins, role of vitamins.  |                        |                   |   |  |  |  |  |
| IX week exercises                | Revival of materials (previous lectures), interactive conversation with students.   |                        |                   |   |  |  |  |  |
| X week lectures                  | Micronutrients: Minerals, division of minerals, microelements, macroelements, role of minerals in the body, free radicals and antioxidants.   |                        |                   |   |  |  |  |  |
| X week exercises                 | Revival of materials (previous lectures), interactive conversation with students.   |                        |                   |   |  |  |  |  |
| XI week lectures                 | Food, sharing. Foods  | of animal origin and n | utritional value. |   |  |  |  |  |



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| XI week exe  | rcises                 | Revival of materials (previous lectures), interactive conversation with students.   |   |   |   |   |                                       |  |  |
|--|------------------------|---|---|---|---|---|---------------------------------------|--|--|
| XII week lect  | ures                   | Remedial test 1. Seminar papers.  |   |   |   |   |                                       |  |  |
| XII week exe   | ercises                | Seminar papers  |   |   |   |   |                                       |  |  |
| XIII week lec  | tures                  | Foods of plant origin. Wine, pairing wine and food and nutritional value. F   |   |   |   |   |                                       |  |  |
| XIII week ex   | ercises                | Revival of materials (previous lectures), interactive conversation with students.   |   |   |   |   |                                       |  |  |
| XIV week led   | tures                  | Food from organic production - role and importance.   |   |   |   |   |                                       |  |  |
| XIV week ex  | ercises                | Revival of materials (previous lectures), interactive conversation with students. Seminar papers.   |   |   |   |   |                                       |  |  |
| XV week lec  | tures                  | Food additives. Codex Alimentarius.   |   |   |   |   |                                       |  |  |
| XV week exe  | ercises                | Revival of materials (previous lectures), interactive conversation with students. Seminar papers.   |   |   |   |   |                                       |  |  |
| Student wo   | orkload                | Weekly The calculation of workload: $6 \times 40/30 = 8h$ and 0 min Structure: Lectures: 2h Exercises: 2<br>Independent work and consultation : 4 h in semester Lectures and final exam: 8h and 0 min x 16 = 128 h and 0 min Necessary preparations: 8h and 0 min x 2 = 16 h and 0 min Total workload for the course: $5 \times 30 = 180$ h Additional work: 36 h 0 min Workload structure: 128h and 0 min (lectures)+ 16h and 0 min(preparation)+ 36h (add.work) |   |   |   |   |                                       |  |  |
| Per week   |                        |   | Per semester  |   |   |   |                                       |  |  |
| <ul> <li>6 credits x 40/30=8 hours and 0 minuts</li> <li>2 sat(a) theoretical classes</li> <li>0 sat(a) practical classes</li> <li>2 excercises</li> <li>4 hour(s) i 0 minuts</li> <li>of independent work, including consultations</li> </ul> |                        |   | Classes and final exam:<br>8 hour(s) i 0 minuts x 16 =128 hour(s) i 0 minuts<br>Necessary preparation before the beginning of the semester<br>(administration, registration, certification):<br>8 hour(s) i 0 minuts x 2 =16 hour(s) i 0 minuts<br>Total workload for the subject:<br>6 x 30=180 hour(s)<br>Additional work for exam preparation in the preparing exam period,<br>including taking the remedial exam from 0 to 30 hours (remaining time from<br>the first two items to the total load for the item)<br>36 hour(s) i 0 minuts<br>Workload structure: 128 hour(s) i 0 minuts (cources), 16 hour(s) i 0<br>minuts (preparation), 36 hour(s) i 0 minuts (additional work) |   |   |   |                                       |  |  |
| Student obligations  |                        |   | Student responsibilities: Students are required to attend classes, be prepared for the same, be active during classes to take tests and homework.   |   |   |   |                                       |  |  |
| Consultations  |                        |   | After the lecture.  |   |   |   |                                       |  |  |
| Literature   |                        |   | Vesna Vujačić, Poznavanje namirnica, UCG, FTH Kotor, UCG, 2001,<br>ISBN978-86-908213-4-1 COBBISS.CG-ID 17514512   |   |   |   |                                       |  |  |
| Examination methods  |                        |   | Forms of testing knowledge and method of evaluation: attendance 5 points, test 40 points, seminars students 5 points. Final exam 50 points. A ( $\geq$ 90 - 100 points); B ( $\geq$ 80 do< 89); C ( $\geq$ 70 do< 79); D ( $\geq$ 60 do< 69); E ( $\geq$ 50 do< 59) F < od 50.  |   |   |   |                                       |  |  |
| Special remarks  |                        |   | Does not have   |   |   |   |                                       |  |  |
| Comment  |                        |   | Does not have   |   |   |   |                                       |  |  |
| Grade:   | F                      |   | E   | D   | С   | В   | А                                     |  |  |
| Number<br>of points  | less than 50<br>points |   | greater than or<br>equal to 50 points<br>and less than 60<br>points   | greater than or<br>equal to 60 points<br>and less than 70<br>points | greater than or<br>equal to 70 points<br>and less than 80<br>points | greater than or<br>equal to 80 points<br>and less than 90<br>points | greater than or<br>equal to 90 points |  |  |