

Technologies in oil, sugar and sweets industries

(IIIrd Year of study, IIIrd Semester)

Credit value (ECTS) 4

Course category

Domain (Imposed)

Course holder:

Lecturer PhD. Steluța RADU

Discipline objectives (course and practical works)

The course aims to learn oils and sugar extraction technologies; knowledge of modern technologies by: acquiring and understanding the theoretical and practical principles specific to the technologies in the oil, sugar and sugar products industry, the skills of applying knowledge in practice; training skills to act autonomously in the observation, analysis, interpretation and provision of solutions, in order to obtain finished products; the acquisition by students of the knowledge of conditioning and processing of raw materials used in the oil, sugar and sugar products industry for their transformation into finished products.

At the practicals there will be didactic activities for students to learn the technique of working in the laboratory, as well as the formation of practical skills to assess the quality of food, allowing them a good knowledge of the field of technological application in the field of oil, sugar and sugar products or another sweets.

Content (syllabus)

Courses (Chapters/subchapters)
The object of study, the history and the importance of technologies in oil, sugar and sweets industries
Sugar beet processing technology: Reception and storage, silage, mass cleaning, sugar beet processing, sorting, technological phases of obtaining of sugar.
Glass candy processing technology: presentation of the technological scheme, description of operations, characteristics of raw materials and glass candies.
Chocolate manufacturing technology: presentation of the technological scheme, description of operations, characteristics of raw materials and chocolate.
Laboratory candy technology: presentation of the technological scheme, description of operations, characteristics of raw materials and laboratory candies.
Edible oil manufacturing technology: presentation of the technological scheme, description of operations, characteristics of raw materials and edible oils of sunflower, olives.
Starch manufacturing technology: presentation of the technological scheme, description of operations, characteristics of raw materials and starch.

Practical works
Labor protection rules, safety and health norms, PSI rules specific to analysis laboratories; Laboratory presentation: laboratory equipment and utensils; presentation of working place in the laboratory
Sugar beet analysis: quality assessment methods, sensory and physico-chemical analysis
Analysis of glass candies. Sensory and physico-chemical analysis.
Analysis of chocolate. Sensory and physico-chemical analysis.
Analysis of laboratory candies. Sensory and physico-chemical analysis.
Analysis of oriental sweets .Sensory and physico-chemical analysis.
Analysis of oils. Sensory analysis, physico-chemical, making recipes for halva.
Starch and glucose analysis. Sensory and physico-chemical analysis of starch and glucose
Final colloquium of knowledge evaluation

References

1. Radu, Steluța, 2009 – Vegetable processing technologies, vol II. Universitas XXI-Publishing House;
2. Radu, Steluța – 2012- Practical book -Vegetable processing technologies II, Ed.Pim;

Evaluation

Evaluation forms	Evaluation methods	Percentage of the final grade
Exam	Written test for evaluation	70%
Appreciation of activity during the semester	Oral assessment during the semester, verification tests and final laboratory colloquium.	30%

Contact

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