



BOVA course programme
Detection Techniques for Cereal Quality Assessment 3 ECTS



PROGRAMME

Sunday 06.11.2016 Arrival

Monday 07.11.2016. **Venue:** Jelgava Palace, Lielā iela 2, Room 95

8:30 - 9:00	Opening of the course, information on the course and final work.	Dean, Prof. Inga Ciprovica, Leader of the course, Prof. Tatjana Kince, BOVA coordinator, Daiga Unferihta
9:00 - 10:30	Lecture: Evaluation of new hull-less and husked cereals breeding lines and varieties. Challenges for new varieties development.	Key researcher, Dr.agr. Arta Kronberga
10:30 - 11:00	Coffee break	
11:00 - 12:00	Lecture: Influence of agrotechnological parameters on cereal quality and future processing.	Key researcher, Dr.sgr. Arta Kronberga
12:00 - 13:00	Lunch	
13:00 - 14:00	Lecture: Methods for evaluation of cereal physical, chemical, rheological, baking and sensory parameters.	assist.prof., Dr.sc.ing. Evita Straumite
14:00 - 15:00	Lecture: Cereals application for new products development. New products development aspects.	prof., Dr.sc.ing. Tatjana Kince
15:00 - 15:30	Coffee break	
15:30 - 17:00	Seminar for groups. Planning of the group work, analysis of home work in groups, preparation of theoretical background for group work (wheat / rye, wheat / triticale, wheat / hull-less barley, and wheat / hull-less oats), analysis of the assignments completed in the distance learning part. The first ideas for the “Introduction” part of the final work.	Group leaders: assist.prof., Dr.sc.ing. Evita Straumite and prof., Dr.sc.ing. Tatjana Kince

Tuesday 08.11.2016.

Venue: Jelgava Palace, Lielā iela 2, Room 95 and Room 16

9:00 - 11:00	Excursion: Visiting of mill "Jelgavas Dzirnavas" (bus should be from dormitory No. 8)	
11:00 - 12:00	Lecture: Overview on cereals microbiological safety. Room 95	assoc.prof., Dr.sc.ing. Dace Klava
12:00 - 13:00	Lunch	
13:00 - 14:00	Lecture: Specific issues in determination of cereal quality parameters and legislation. Room 95	prof., Dr.sc.ing. Tatjana Kince
14:00 - 15:00	Chosen cereal types testing (Room 16) using "Infratec™ 1241 Grain Analyser" according to the research plan made on previous day (protein, starch etc.) for further detailed research – rheological, physical and sensory properties. Evaluation of flour falling number and gluten content of flour blends. The first detailed evaluation of the samples. Further evaluation should be completed during the following days.	
15:00 - 15:15 Coffee Break		
15:15 - 17:00		
	Preparation of "Material and Method" part of the final work at (Room 95)! <i>Group leaders: assist.prof., Dr.sc.ing. Evita Straumite and prof., Dr.sc.ing. Tatjana Kince; key researcher Dr.sc.ing. Martins Sabovics; key researcher Mg.agr. Anda Linina</i>	

Wednesday 09.11.2016.

Venue: Jelgava Rigas iela 22

<p>8:30 - 10:30</p>	<p>Laboratory work: Group I (wheat-rye) according to the experimental plan realise bread sample preparation from different cereal type (wheat-rye). <i>Room 128, group leaders assist.prof., Dr.sc.ing. Evita Straumite and asoc. prof., Dr.sc.ing. Dace Klava</i></p>	<p>Independent work: Group III (wheat-hull-less barley) manuscript preparation - literature review based on the study completed prior to course and studies of databases available at Fundamental Library of LLU, followed by description of materials and methods (group leaders). <i>Room 134, group leader prof., Dr.sc.ing. Tatjana Kince</i></p>	<p>Laboratory work: Group II (wheat triticale) according to the experimental plan analyse flour blends (wheat-triticale) rheological properties and viscosity. <i>Room 211, group leaders assoc.prof., Dr.sc.ing. Daiga Kunkulberga and assist.prof., Dr.sc.ing. Martins Sabovics</i></p>
<p>10:30 - 12:30</p>	<p>Laboratory work: Group II (wheat triticale) according to the experimental plan realise bread sample preparation from different cereal type (wheat-triticale). <i>Room 128, group leaders assist.prof., Dr.sc.ing. Evita Straumite and asoc. prof., Dr.sc.ing. Dace Klava</i></p>	<p>Independent work: Group I (wheat-rye) manuscript preparation - literature review based on the study completed prior to course and studies of databases available at Fundamental Library of LLU, followed by to carry on “Introduction” part of the final work. <i>Room 134, group leader prof., Dr.sc.ing. Tatjana Kince</i></p>	<p>Laboratory work: Group III (wheat-hull-less barley) according to the experimental plan analyse flour blends (wheat-rye) rheological properties and viscosity. <i>Room 211, group leaders assoc.prof., Dr.sc.ing. Daiga Kunkulberga and assist.prof., Dr.sc.ing. Martins Sabovics</i></p>
<p>12:30 - 13:00</p>	<p>Lunch</p>		

13:00 - 15:00	<p>Laboratory work: Group III (wheat-hull-less barley) according to the experimental plan realise bread sample preparation from different cereal type (wheat-hull-less oats). <i>Room 128, group leaders assist.prof., Dr.sc.ing. Evita Straumite and asoc. prof., Dr.sc.ing. Dace Klava</i></p>	<p>Independent work: Group II (wheat triticales) manuscript preparation - literature review based on the study completed prior to course and studies of databases available at Fundamental Library of LLU, followed by description of materials and methods (group leaders). <i>Room 134, group leader prof., Dr.sc.ing. Tatjana Kince</i></p>	<p>Laboratory work: Group I (wheat-rye) according to the experimental plan analyse flour blends (wheat-hull-less barley) rheological properties and viscosity. <i>Room 211, group leaders assoc.prof., Dr.sc.ing. Daiga Kunkulberga and assist.prof., Dr.sc.ing. Martins Sabovics</i></p>
15:00 - 17:00	<p>Seminar-discussion for groups (group leaders): Brain storm – preparation of the discussion part, interpretation of the results, drawing conclusions. <i>Room 134, group leaders prof., Dr.sc.ing. Tatjana Kince and assist.prof., Dr.sc.ing. Evita Straumite</i></p>		

Thursday 10.11.2016.

Venue: Jelgava Palace, Lielā iela 2, Room 95

8:30 - 10:00	<p>Laboratory work: All student work together. Sensory evaluation of prepared bread samples. <i>Group leaders assist.prof., Dr.sc.ing. Evita Straumite and prof., Dr.sc.ing. Tatjana Kince</i></p>	
10:00 - 11:00	<p>Lecture: innovative rapid methods for mycotoxins determination in kernels and the biocontrol of aflatoxins, trichothecenes (type A and B), zearalenone, fumonisins, ochratoxins and patulin by bacteria, fungi and yeasts will be discussed more in depth to develop further proper management practices using biocontrol agents to ensure food safety and to protect consumer's health.</p>	<p>prof., Dr.hab.sc.ing. Grazina Juodeikiene</p>

11:00 - 12:00	Lecture: Impact of glutenins composition of wheat on flour parameters.	prof., Dr.biol. Elena Bartkiene
12:00 - 13:00	Lunch	
13:00 - 15:00	Laboratory work (group leaders): according to the experimental plan wheat model systems with different amount of Fusarium contaminated grains (10%; 20% and 30% of scabby grains in the mixtures) preparation. An acoustic equipment, developed in Kaunas University of Technology (Lithuania), will be used for the rapid prediction of DON in wheat. <i>Room 95, group leaders prof., Dr.habil.sc.ing. Grazina Juodeikiene, prof., Dr.biol. Elena Bartkiene, senior Researcher Dr. Daiva Zadeike</i>	
15:00 - 15:30	Coffee Break	
15:30 - 16:30	Seminar-discussion for groups (group leaders): Brain storm – preparation of the discussion part, interpretation of the results, drawing conclusions. <i>Room 95, group leaders prof., Dr.sc.ing. Tatjana Kince and assist.prof., Dr.sc.ing. Evita Straumite</i>	

Friday 11.11.2016.

Venue: Jelgava Palace, Lielā iela 2, Room 95

8:30 - 10:30	Lecture: Consideration of cereal processers' requirements on cereal quality in food product development. Future trends.	assoc.prof., Dr.sc.ing. Dace Klava
10:30 - 11:00	Coffee Break	
11:00 - 12:30	Final presentation and discussion (<i>all course lecturers who are in Jelgava on this day</i>): Presentation of group works. Closing of the course (Daiga Unferihta)	
12:30 - 13:30	Lunch	
Individual Departures		

Teachers:

Tatjana Kince LLU

Grazina Juodeikiene KTU

Atra Kronberga AREI

Dace Klava LLU

Evita Straumite LLU

Martins Sabovics LLU
Daiga Kunkulberga LLU
Elena Bartkiene LUHS
Vija Strazdina AREI
Daiva Zadeike KTU
Anda Linina LLU

