

BI1395, Postharvest – biology and technology after harvest, 15hp, 2024

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All lectures (L) and seminars (S) will be online by Zoom.

The same goes for the practical classes. Tasks to be performed at home, or they will be arranged otherwise as distant learning.

Please observe that details in the schedule may be changed.

Here is more information for international students: [New SLU student | Studentwebben](https://student.slu.se/en/studies/new-student/)
<https://student.slu.se/en/studies/new-student/>

Activities marked in red in the schedule are compulsory

January, week 3 BASIC PRINCIPLES OF POSTHARVEST PHYSIOLOGY AFFECTING QUALITY

15	INTRODUCTION ENGLISH COURSES (for new students)? Orientation week, roll call and registration Studentwebben (slu.se)	
16	9.15-12.00 Zoom Course introduction (LG) L: Background to quality changes after harvest. Senescence (MO)	13.15-15.00 Own studies
17	9.15-11.00 Zoom Tutorial of the project – Search and write; introduction and discussion with examples (MO)	13.15-17.00 Activity/Own studies
18	9.15-12.00 Zoom L: How does quality relate to chemical composition? Texture and taste (MO)	13.15-17.00 Project
19	9.15-12.00 Zoom L: Quality in relation to factors before harvest (LM)	13.15-17.00 Project

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January, week 4

QUALITY ISSUES, FOOD LOSSES

22	9.15-12.00 Zoom L: Food losses in relation to quality (MO)	13.15-17.00 Own studies
23	9.15-12.00 Project	13.15-17.00 Project
24	9.15-12.00 Zoom L: HACCP and food processing (GH)	13.15-17.00 Activity/Own studies
25	9.15-12.00 Project	13.15-17.00 Project
26	9.15-12.00 Zoom S: Food losses. Circular bioeconomy (MO)	13.15-17.00 Own studies
27		
28		

January-February, week 5 FRUIT RIPENING AND STORAGE DISEASES

29	9.15-12.00 Zoom L: Fruit ripening Maturity indices, Ethylene (HPH)	13.15-17.00 Project
30	9.15-12.00 Project	13.15-17.00 Project
31	9.15-12.00 Zoom L: Physiological diseases (LG, JB); Plant pathology after harvest	13.15-17.00 Activity/Own studies
1	9.15-12.00 Room Kemisal, Articum / Zoom Practical class – Maturity indices in practice, plant pathology (HPH/LG)	13.15-17.00 Project Submit project at latest today!
2	9.15-12.00 Preparation for presentations and opposition	13.15-15.00 Zoom Students' presentations of the project (LG)
3		
4		

February, week 6 TECHNOLOGY PRESERVING POSTHARVEST QUALITY:

5	9.15-12.00 <i>Zoom</i> L: CA, DCA, MAP (HPH)	Own studies
6	9.15-12.00 Own studies	13.15-16.00 <i>Zoom</i> L: Packaging and handling (LN)
7	9.15-12.00 <i>Zoom</i> L: Cooling technology and water loss (LM)	13.15-17.00 Activity/Own studies
8	9.15-12.00 Own studies	13.00-17.00 Own studies
9	9.15-12.00 Own studies	13.15-17.00 Own studies
10		
11		

February, week 7 INNOVATION AND PROCESSING

12	9.15-11.00 <i>Zoom</i> L: New products – Which will succeed? (HPH) 11.15-12.00 Introduction to 16/2 (GH)	13.15-17.00 Own studies
13	9.15-12.00 Own studies	13.15-15.00 <i>Zoom</i> Product development theoretic models (GH)
14	9.15-12.00 <i>Zoom</i> Seminar with growers' companies food industry (HPH, LG)	13.15-17.00 Activity/Own studies
15	9.15-12.00 Own studies	13.15-17.00 Own studies
16	9.15-12.00 <i>Food Lab, Vegetum</i> Development of prototypes, practical class (GH) (or own task according to instructions online)	13.15-17.00 Own studies
17		
18		

February, week 8 DESIRABLE AND UNDESIRABLE QUALITY ATTRIBUTES; NUTRITION

19	9.15-12.00 Own studies	13.15-17.00 Own studies
20	9.15-12.00 <i>Zoom</i> L: Human nutrition and importance of horticultural products (MO)	13.15-17.00 Own studies
21	8-17 RE-EXAMINATION (other courses)	8-17 RE-EXAMINATION (other courses)
22	9.15-12.00 <i>Food Lab (GH)</i> Practical class Food technology (or own task according to instructions online)	13.15-16.00 Practical class Food technology (or own task according to instructions online)
23	9.15-12.00 <i>Zoom</i> L: Food safety (MO)	13.15-17.00 Own studies
24		
25		

February-March, week 9 FOOD TECHNOLOGY AND NEW TECHNOLOGY

26	9.15-12.00 <i>Zoom</i> Introduction to next week's task about new postharvest technology (HPH/LG)	13.15-17.00 Own studies
27	9.15-12.00 <i>Zoom</i> Study visit online (LG)	13.15-17.00 Activity/Own studies
28	9.15-12.00 Students' own literature search regarding new postharvest technology	13.15-17.00 Own studies
29	9.15-12.00 <i>Zoom</i> Seminar new technology Introduction case, v. 12 (HPH, LG)	13.15-17.00 Own studies
1	9.15-12.00 Own studies	13.15-17.00 Own studies

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March, week 10 SUMMARY AND STUDIES FOR WRITTEN EXAMINATION

4	9.15-12.00 Own studies	13.15-17.00 Own studies
5	9.15-12.00 Own studies	13.15-17.00 Own studies
6	9.15-12.00 / Zoom Seminar; questions before examination (LG) (not compulsory)	13.15-17.00 Activity/Own studies
7	9.15-12.00 Own studies	13.15-17.00 Own studies
8	8.00-12.00 through Canvas WRITTEN EXAMINATION	13.15-17.00 Own studies
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March, week 11 POSTHARVEST HANDLING IN PRACTICE / Case studies of chosen product

11	9.15-12.00 Zoom Start case (MO)	13.15-17.00 Case studies
12	9.15-12.00 Case studies	13.15-17.00 Case studies
13	9.15-12.00 Case studies	13.15-17.00 Activity/Own studies
14	9.15-12.00 Case studies	13.15-17.00 Case studies
15	9.15-12.00 Zoom Seminar case studies (LG)	13.15-17.00 Own summary
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March, week 12

18	9.15-12.00 Zoom Students' presentations (GH/LG)	
19	Course evaluation	

Activity / own studies in Wednesday afternoons means student's own studies or other activity arranged by e.g. Student union.

Compulsory for approved grade (3, 4, or 5) of the course:

- Participation in seminars (not including the seminar March 8th)
- Participation in study visits online
- Approved grade of individual project (including presentation and opposition).
- Approved case study (including presentation).
- Participation in practical classes or tasks
- Approved result of the written examination

If needed, re-examination of the written examination will take place May 3rd. There will be one additional re-examination occasion before the next course in January 2024.

Grade for whole course (3, 4, 5, not approved): 75% written examination; 25% individual project.

All other compulsory tasks will have grades approved / not approved.