

BI1395, Postharvest – biology and technology after harvest, 15hp, 2025.01.20-2025.03.24**Course leader:** Larisa Gustavsson E-mail: Larisa.Gustavsson@slu.se**Deputy course leader:** Helena Persson Hovmalm Helena.Persson@slu.se**Teachers:** Lars Mogren (LM), Lotta Nordmark (LN), Larisa Gustavsson (LG), Jorunn Børve (JB), Helena Persson Hovmalm (HPH), Gun Hagström (GH), Marie Olsson (MO), Konstantinos Papoutsis (KP), Kibrom Abreha (KA)

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/>**Activities marked in red in the schedule are compulsory****January, week 4 BASIC PRINCIPLES OF POSTHARVEST PHYSIOLOGY AFFECTING QUALITY****INTRODUCTION ENGLISH COURSES (for new students)**[Orientation week, roll call and registration | Studentwebben \(slu.se\)](#)<https://student.slu.se/en/studies/new-student/orientation-week-and-roll-call/oriantation-week-and-roll-call-spring/>

21	9.15-12.00 Course introduction (LG) L: Background to quality changes after harvest. Senescence (MO) Project start (individually)	13.15-15.00 <i>Zoom</i> Tutorial of the project – Search and write; introduction and discussion with examples (MO)
22		13.15-17.00 Activity/Own studies
23	9.15-12.00 <i>Zoom</i> L: How does quality relate to chemical composition? Texture and taste (KP)	13.15-17.00 Project
24	9.15-12.00 <i>Zoom</i> L: Quality in relation to factors before harvest (LM)	13.15-17.00 Project

25

26

January-February, week 5 QUALITY ISSUES, FOOD LOSSES

27	9.15-12.00 <i>Zoom</i> L: Food losses in relation to quality (MO)	13.15-16.00 L: Impact of Genotype and postharvest practices on postharvest Quality. (KA)
28	9.15-12.00 Project	13.15-17.00 Project
29	9.15-12.00 <i>Zoom</i> L: HACCP and food processing (GH)	13.15-17.00 Activity/Own studies
30	9.15-12.00 Project	13.15-17.00 Project
31	9.15-12.00 <i>Zoom</i> S: Food losses. Circular bioeconomy (KP)	13.15-17.00 Own studies

1
2

February, week 6 FRUIT RIPENING AND STORAGE DISEASES

3	9.15-12.00 <i>Zoom</i> L: Fruit ripening Maturity indices, Ethylene (HPH)	13.15-17.00 Project
4	9.15-12.00 Project	13.15-17.00 Project
5	9.15-12.00 <i>Zoom</i> L: Physiological diseases (LG/JB); Plant pathology after harvest	13.15-17.00 Activity/Own studies
6	9.15-12.00 <i>Zoom</i> Practical class – Maturity indices in practice, plant pathology (HPH/LG)	13.15-17.00 Project Submit project at latest today!
7	9.15-12.00 Preparation for presentations and opposition	13.15-15.00 <i>Zoom</i> Students' presentations of the project (LG)

8
9

February, week 7 TECHNOLOGY PRESERVING POSTHARVEST QUALITY:

10	9.15-12.00 <i>Zoom</i> L: CA, DCA, MAP (HPH)	Own studies
11	9.15-12.00 <i>Zoom</i> L: Packaging and handling (LN)	13.15-16.00
12	9.15-12.00 <i>Zoom</i> L: Cooling technology and water loss (LM)	13.15-17.00 Activity/Own studies
13	9.15-12.00 Own studies	13.00-17.00 Own studies
14	9.15-12.00 Own studies	13.15-17.00 Own studies

15

16

February, week 8 INNOVATION AND PROCESSING

17	9.15-11.00 <i>Zoom</i> L: New products – Which will succeed? (HPH) 11.15-12.00 <i>Introduction to 21/2</i> (GH)	13.15-17.00 Own studies
18	9.15-12.00 Own studies	13.15-15.00 <i>Zoom</i> Product development theoretic models (GH)
19	9.15-12.00 Own studies	13.15-17.00 Activity/Own studies
20	9.15-12.00 <i>Zoom</i> Seminar with growers' companies food industry (HPH, LG)	13.15-17.00 Own studies
21	9.15-12.00 <i>Zoom</i> Development of prototypes (GH)	13.15-17.00 Own studies

22

23

February-March, week 9 DESIRABLE AND UNDESIRABLE QUALITY ATTRIBUTES; NUTRITION

24	9.15-12.00 Own studies	13.15-17.00 Own studies
25	9.15-12.00 Zoom L: Human nutrition and importance of horticultural products (MO)	13.15-17.00 Own studies
26	8-17 RE-EXAMINATION (other courses)	8-17 RE-EXAMINATION (other courses)
27	9.15-12.00 Zoom (GH) Practical product development at home under supervision	13.15-16.00 Practical product development at home under supervision
28	9.15-12.00 Zoom L: Food safety (LN)	13.15-17.00 Own studies

1
2

March, week 10 FOOD TECHNOLOGY AND NEW TECHNOLOGY

3	9.15-12.00 Zoom Introduction to next week's task about new postharvest technology (HPH/LG)	13.15-17.00 Own studies
4	9.15-12.00 Zoom Study visit online (LG)	13.15-17.00 Activity/Own studies
5	9.15-12.00 Students' own literature search regarding new postharvest technology	13.15-17.00 Own studies
6	9.15-12.00 Zoom Seminar new technology Introduction case, v. 12 (HPH, LG)	13.15-17.00 Own studies
7	9.15-12.00 Own studies	13.15-17.00 Own studies

8
9

March, week 11 SUMMARY AND STUDIES FOR WRITTEN EXAMINATION

10	9.15-12.00 Own studies	13.15-17.00 Own studies
11	9.15-12.00 Own studies	13.15-17.00 Own studies
12	9.15-12.00 / Zoom Seminar; questions before examination (LG) (not compulsory)	13.15-17.00 Activity/Own studies
13	9.15-12.00 Own studies	13.15-17.00 Own studies
14	8.00-12.00 through Canvas WRITTEN EXAMINATION	13.15-17.00 Own studies

15

16

March, week 12 POSTHARVEST HANDLING IN PRACTICE / Case studies of chosen product

17	9.15-12.00 Zoom Start case (LG)	13.15-17.00 Case studies
18	9.15-12.00 Case studies	13.15-17.00 Case studies
19	9.15-12.00 Case studies	13.15-17.00 Activity/Own studies
20	9.15-12.00 Case studies	13.15-17.00 Case studies
21	9.15-12.00 Zoom Seminar case studies (LG)	13.15-17.00 Own summary

16

17

March, week 13

24	9.15-12.00 Zoom Students' presentations (GH/LG) 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 12th)
- 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. More information will come later.

There will be one additional re-examination occasion before the next course in January 2026.

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.