

Schedule of the Course 'Immunology and Genetics at the Organismal and Molecular Levels' 15 HP (BI1280), 2021-08-31 to 2021-11-01

Obligatory sessions are in bold script.

OBL = Obligatorisk aktivitet i klass; **obl** = obligatorisk aktivitet på valfri plats

| Date and time | Room | Attendance | Activity | Group | Teacher |
|---|-------------------------------|-------------------------|---|---|---------|
| Week 35 (course week 1) Tuesday Aug 31 09.15-10.00 | Loftets bankettsal | OBL | Course introduction | | ES |
| 10.00-10.15 | | OBL | Distribution/selection of projects | | ES |
| 13.15-15.30 15.30-17.00 | | Zoom Zoom or home | | Library introduction Project | |
| Wednesday Sep 1 10.15-12.00 | Zoom | | L2. Immune system 1 | | JM |
| Thursday Sep 2 09.00-12.00 | Zoom or home | obl | Project | | |
| 13.00-14.45 | Zoom | | L2. Immune system 2 | | JM |
| Friday Sep 3 10.15-12.00 | Zoom | | L3. Generation of antibodies | | JM |
| 13.15-15.00 | Zoom | | L4. Application of antibodies, application of antibodies in food science | | AK |
| Week 36 (course week 2) Monday Sep 6 09.15-10.00 | Zoom | obl | Introduction to lab report writing | All | IM, SM |

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| 10.00-12.00 | digital | obl | P1. Purification of antibodies | all | IM, SM |
| 12.00-17.00 | digital | obl | P1. Purification of antibodies | | IM, SM |
| Tuesday Sep 7 10.15-12.00 | Zoom | | L5. Food allergies | | IW |
| 13.15-16.00 | Sal V | OBL | Group exercise | Group A | ES |
| Wednesday Sep 8 10.15-12.00 | Zoom | | L6. Recent Immunological Techniques; Applications of Immunoassays in Food Analysis | | ES |
| Thursday Sep 9 09.15-12.00 | Sal W | OBL | Group exercise | Group B | ES |
| 13.15-17.00 | digital | obl | P2. ELISA step 1 | All | IM, SM |
| Friday Sep 10 09.15-12.00 | digital | obl | P2. ELISA step 2 | All | IM, SM |
| 13.15-15.30 | digital | obl | P2. ELISA step 3 | All | IM, SM |
| Week 37 (course week 3) Monday Sep 13 09.00-17.00 | home | obl | Individual studies – exam preparation | | |
| Tuesday Sep 14 09.00-17.00 | home | obl | Individual studies – exam preparation | | |

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| Wednesday Sep 15 09.00-12.00 | home | obl | Individual studies – exam preparation | | |
| Thursday Sep 16 09.00-17.00 | home | obl | Individual studies – exam preparation | | |
| Friday Sep 17 10.15-12.00 | Zoom | | L7. Mitosis and Meiosis, chap.2 | | PI |
| 13.00-17.00 | home | obl | Individual studies – exam preparation | | |
| Week 38 (course week 4) Monday Sep 20 09.00-12.00 | home | obl | Individual studies – exam preparation | | |
| 13.00-17.00 | Audhumbla | OBL | Immunology exam | all | |
| Tuesday Sep 21 09.00-12.00 | Zoom or home | obl | Project | | |
| 13.00-17.00 | home | | Writing lab reports | | |
| Wednesday Sep 22 09.15-11.00 11.15-12.00 | Zoom Zoom | obl | L8. Mendelian Genetics, chap. 3 Case study, chap. 3 | | PI |
| Thursday Sep 23 | | | | | |

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| 10.15-12.00 | Zoom | | L9. Modifications of Mendelian Ratios, chap.4 | | PI |
| 14.15-15.15 15.30-17.00 | Zoom Zoom or home | obl | L10. Sex chromosomes, chap. 5 Project | | GMA |
| Friday Sep 24 09.15-12.00 | Sal S | OBL | Cross-group discussions | | ES |
| 13.00-17.00 | Zoom or home | obl | Project | | |
| Week 39 (course week 5) Monday Sep 27 09.45-12.00 | Zoom | | L11. DNA structure and analysis, chap. 9 L12. DNA sequence organization, chap. 11 | | ES |
| 13.15-14.45 | Zoom | | L13. DNA replication, chap.10 | | JS |
| 15.00-17.00 | Zoom or home | obl | P3. Mutation lab (step 1) | | AM, DK, FD |
| Tuesday Sep 28 09.15-12.00 | digital | obl | P3. Mutation lab (step 2) | all | AM, DK, FD |
| 13.15-17.00 | digital | obl | P3. Mutation lab (step 2 continue) | all | AM, DK, FD |
| Wednesday Sep 29 | | | Educational information day | | |
| Thursday Sep 30 09.15-12.15 | digital | obl | P3. Mutation lab (step 3) | all | AM, DK, FD |

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| 13.00-17.00 | Zoom or home | obl | Project | | |
| Friday Oct 1 09.15-12.15 | digital | obl | P3. Mutation lab (step 4) | all | AM, DK, FD |
| 13.00-17.00 | home | obl | Writing lab reports | | |
| Week 40 (course week 6) Monday Oct 4 10.15-12.15 | Zoom | | L14. Gene Mutation, transposition, and DNA repair, chap. 14 | | CD |
| 13.00-17.00 | Zoom or home | | Project | | |
| Tuesday Oct 5 09.15-11.30 | Zoom | | L15. Transcription, chap. 12 L16. Translation, chap.13 | | ES |
| 13.15-17.00 | home | obl | Writing lab reports | | |
| Wednesday Oct 6 09.15-12.15 | digital | obl | P4. RT-PCR lab (step 1) | all | SM, DK |
| Thursday Oct 7 09.15-12.15 | | | L17. Regulation of gene expression, chap. 15 | | ES |
| 13.15-17.00 | digital | obl | P4. RT-PCR lab (step 2) | all | SM, DK |
| Friday Oct 8 | | | | | |

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| 09.15-12.00 | digital | obl | P4. RT-PCR lab (step 3) | all | SM, DK |
| 13.15-17.00 | digital | obl | P4. RT-PCR lab (step 4 and 5) | all | SM, DK |
| Week 41 (course week 7) Monday Oct 11 09.15-11.00 11.15-12.15 13.00 13.15-17.00 | Zoom Zoom e-mail home | obl obl obl | L18. Quantitative Genetics, chap.21 (old book chap.22) Case study, chap.21 (old book chap.22) Deadline to submit your project to the supervisor and the reviewing group Writing lab reports | all | PI PI |
| Tuesday Oct 12 09.00-17.00 | home | obl | Preparations for project presentation | | |
| Wednesday Oct 13 09.15-12.15 | home | obl | Preparations for project presentation | | |
| Thursday Oct 14 09.15-12.00 13.15-16.15 | home Sal S | obl OBL | Writing lab reports Cross-group discussions | | ES |
| Friday Oct 15 09.00-17.00 | Zoom or home | obl | Preparations for project presentation | | |
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| Week 42 (course week 8) Monday Oct 18 09.10-12.00 13.15-17.00 | Zoom or home Sal S | obl OBL | Project Presentation of the project | | ES |
| Tuesday Oct 19 09.15-12.00 13.00-17.00 | To be announced home | OBL obl | Presentation of the project (in case there are more than 7 groups) Writing lab reports | | ES |
| Wednesday Oct 20 09.15-11.00 | Zoom | obl | L19. Plant breeding for improved food: quantitative aspects | | PI |
| Thursday Oct 21 09.15-11.00 13.00-17.00 | Zoom home | obl | L20. Plant breeding for improved food: qualitative aspects Writing lab reports | | RA |
| Friday Oct 22 09.15-12.15 16.00 | Sal V | OBL obl | Cross-group discussions Deadline to submit final version of lab reports (labs P3 and P4) | all | ES |
| Week 43 (course week 9) Monday Oct 25 09.00-17.00 | home | obl | Individual studies – exam preparation | | |

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| Tuesday Oct 26 09.00-17.00 | home | obl | Individual studies – exam preparation | | |
| Wednesday Oct 27 10.15 -12.00 | Zoom | | Student questions | | teachers |
| Thursday Oct 28 09.00 -17.00 | home | obl | Individual studies – exam preparation | | |
| Friday Oct 29 13.00-17.00 | Sal W | OBL | Genetics exam | all | |

Course textbooks:

1). Understanding Immunology, 3rd edition (2011), Peter Wood Pearson Education Ltd. ISBN-10: 0273730681; ISBN-13: 9780273730682

<http://www.bokus.com/bok/9780273730682/understanding-immunology/>

2). Klug, W.S., Cummings, M.R., Spencer, C.A. and Palladino, M.A. Essentials of Genetics, Ninth Edition (2016) Pearson Education Ltd. ISBN 9781292108865 or earlier editions

<https://www.adlibris.com/se/bok/essentials-of-genetics-global-edition-9781292350424>

<https://www.bokus.com/bok/9781292350424/essentials-of-genetics-global-edition/>

Examination

To pass the course you have to complete lab reports, project presentation and pass the exams.

Course administrator

eugene.savenkov@slu.se

phone 018-673236, room D-455 at BioCenter SLU

Lecturers and lab supervisors

Anders Kvarnheden AK Anders.Kvarnheden@slu.se

Anis Meschichi AM anis.meschichi@slu.se

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|-----------------------|-----|------------------------------|
| Christina Dixelius | CD | Christina.Dixelius@slu.se |
| Dimitrios Kokoretsis | DK | dimitrios.kokoretsis@slu.se |
| Eugene Savenkov | ES | Eugene.Savenkov@slu.se |
| German Martinez Arias | GMA | German.Martinez.Arias@slu.se |
| Ida Waern | IW | Ida.Waern@slu.se |
| Irene Merino | IM | Irene.Merino@slu.se |
| Jens Sundström | JS | Jens.Sundstrom@slu.se |
| Johan Meijer | JM | Johan.Meijer@slu.se |
| Jonas Petersson | JP | jonas.petersson@slu.se |
| Pär Ingvarsson | PI | par.ingvarsson@slu.se |
| Roger Andersson | RA | Roger.Andersson@slu.se |
| Silvana Moreno | SM | silvana.moreno@slu.se |

Number of students registered this year: 15