



*Schedule for*  
*Complex tissue analysis with multistaining and imaging techniques (3BL010)*  
*Magisterprogrammet i biomedicinsk laboratorievetenskap*  
**Term 2 2025**  
**26 March-08 June 2025**

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**Course director:** Malgorzata Parniewska (KI, Avd. för Patologi) [malgorzata.parniewska@ki.se](mailto:malgorzata.parniewska@ki.se)

**Examiner:** Pernilla Lång (KI, Avd. för Patologi) [Pernilla.Lang@ki.se](mailto:Pernilla.Lang@ki.se)

**Teachers:** Malgorzata Parniewska  
Pernilla Lång  
Carlos Fernandez Moro (KI, Avd. för Patologi) [carlos.fernandez.moro@ki.se](mailto:carlos.fernandez.moro@ki.se)  
Wenyang Shi (KI, Avd. för Patologi) [wenyang.shi@ki.se](mailto:wenyang.shi@ki.se)

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| Week   | Date                  | Teaching activity  | Location | Time  | Teachers                                       |
|--|-----------------------|--|----------|-------|--|
| <b>0. Introduction + 1. Multistaining technologies and their role in diagnostic pathology and research</b> |                       |  |          |       |  |
| 13/14  | Wed 26/3              | Introduction to course +<br>Q&A session<br>Optional Quiz in Canvas | Zoom     | 9-12  | Malgorzata Parniewska                          |
|  | Thur- Tue 27/3 – 1/4  | Self preparation + discussion<br>forum in Canvas                   |          |       | Malgorzata Parniewska<br>Carlos Fernandez Moro |
|  | Wed 2/4               | TBL 1  | Zoom     | 9-12  |  |
| 14/15  | Thur – Tue 3/4 – 8/4  | Project work 1   |          |       |  |
|  | Mon 7/4               | Q&A session  | Zoom     | 17-18 |  |
|  | Wed 9/4               | Project work 1 presentation  | Zoom     | 9-12  |  |
| <b>2. Image acquisition techniques used in diagnostic pathology and research</b>                           |                       |  |          |       |  |
| 15/16  | Thur –Tue 10/4 – 15/4 | Self preparation + discussion<br>forum in Canvas                   |          |       | Pernilla Lång<br>Wenyang Shi                   |
|  | Wed 16/4              | TBL 2  | Zoom     | 9-12  |  |
| 16/17  | Thur-Tue 17/4–22/4    | Project work 2   |          |       |  |
|  | Fri 18/4              | Good Friday  |          |       |  |
|  | Mon 21/4              | Easter Monday  |          |       |  |
|  | Tue 22/4              | Q&A session  | Zoom     | 17-18 |  |
|  | Wed 23/4              | Project work 2 presentation  | Zoom     | 9-12  |  |
| <b>3. Quantitative analysis of tissues using ImageJ</b>  |                       |  |          |       |  |
| 17-19  | Thur –Tue 24/4 – 29/4 | Self preparation + discussion<br>forum in Canvas                   |          |       | Malgorzata Parniewska                          |
|  | Wed 30/4              | TBL 3  | Zoom     | 9-12  |  |
|  | Thur 1/5              | May 1st  |          |       |  |
|  | Fri-Tue 2/5–6/5       | Project work 3   |          |       |  |
| 19   | Mon 5/5               | Q&A session  | Zoom     | 17-18 |  |
|  | Wed 7/5               | Project work 3 presentation  | Zoom     | 9-12  |  |
| <b>4. Statistical analysis of image data</b>   |                       |  |          |       |  |
| 19/20  | Thur –Tue 8/5 – 13/5  | Self preparation + discussion<br>forum in Canvas                   |          |       |  |
|  | Wed 14/5              | TBL 4  | Zoom     | 9-12  | Malgorzata Parniewska                          |

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|  |                          |  |      |       |  |
| 20/21  | Thur-Tue<br>15/5—20/5    | Project work 4                                   |      |       |  |
|  | Mon 19/5                 | Q&A session                                      | Zoom | 17-18 |  |
|  | Wed 21/5                 | Project work 4 presentation                      | Zoom | 9-12  | Malgorzata Parniewska                          |
| <b>5. Machine learning and AI in diagnostic pathology and research</b> |                          |  |      |       |  |
| 21-23  | Thur –Tue<br>22/5 – 27/5 | Self preparation + discussion<br>forum in Canvas |      |       | Malgorzata Parniewska<br>Carlos Fernandez Moro |
|  | Wed 28/5                 | TBL 5  | Zoom | 9-12  |  |
|  | Thurs 29/5               | Ascension Day                                    |      |       |  |
|  | Thur-Tue<br>30/5—3/6     | Self study                                       |      |       |  |
| 23   | Mon 2/6                  | Q&A session before<br>examination                | Zoom | 17-18 | Malgorzata Parniewska<br>Pernilla Lång         |
|  | Wed 4/6                  | Examination                                      | Zoom | 9-12  |  |