

SLU BI1339 – Grading criteria 2020

Grading scale: 5: Pass with Distinction; 4: Pass with Credit; 3: Pass; U: Fail

Half of the course consists of lectures/seminars/exercises and half of the course is project work(s). The first part is mostly linked to the intended learning outcomes (ILOs) 1-3 (see below) and is examined through a written or oral exam. The project components are mostly linked to ILOs 4-5 (see below) and examined through an assessment of the student's work, written group project report(s), and oral group project presentation(s).

To pass the course, the grades of the exam and the project work(s) need to be either equal or greater than 3 (i.e., both parts of the course need to be passed). The final grade is the rounded value of the mean of the grades for the exam and the project work.

Participation in the compulsory activities (including the seminars) is required to pass the course (for grade 3). If a student is absent, the student should get in contact with the teacher responsible for the missed part to discuss a make-up task. This task should be carried out independently and handed in as a written report in order to achieve a pass, in agreement with the teacher responsible for that part.

Grading criteria for the written or oral exam

The written or oral exam will examine the student's knowledge of the topics covered during the course lectures and seminars, thus testing primarily whether the student has met the following three ILOs (listed on the course syllabus):

- 1) describe the basic methods for measuring and assessing the growth of plants
- 2) describe the basic principles of growth modelling of plants
- 3) evaluate different quantitative methods for measuring structural and functional plant properties in modern phenotyping facilities.

The final grade of the written or oral exam will be determined as follows:

Grade 5: Achievement of at least 85 % of the maximum score of the *whole* exam.

Grade 4: Achievement of at least 70 % of the maximum score of the *whole* exam.

Grade 3: Achievement of at least 55 % of the maximum score of the *whole* exam.

Grading criteria for the project work(s)

The assessment of the project work(s) primarily aims at determining whether the student has met the following ILOs (listed on the course syllabus):

- 4) independently implement simple methods for plant growth analysis
- 5) independently plan, implement and assess scientific experiments focusing on the growth of plants in relation to the surrounding environment (plant – environment and plant – plant interaction).

The following weights will be used to evaluate the different aspects of the project work(s): the student's work during the course (30%), the final written report(s) (50%) and the oral presentation(s) together with the mini-documentary produced during the project work(s) (20%).

Percentages refer to the grading of the project work(s) only. If more than one project work is included in the course, the grades of all separate project works need to be either equal or greater than 3 (i.e., all project works that are part of the course need to be passed), and the grades for the separate project works will be weighted according to their approximate proportions (i.e., a shorter project work will contribute less to the final project grade than a larger project work). The final project work(s) grade is then averaged with the written exam grade, as specified above.

Evaluation of the student's work in the project(s) (30%)

The student's work will be assessed based on the student's participation in the discussion on the experimental work, independence regarding data analysis and report writing.

Grade 5: The student leads the discussion regarding the experimental work and actively participates in the work. The student independently performs the data analyses and writes the report.

Grade 4: The student actively participates in the discussion regarding the experimental work and actively participates in the work. The student actively discuss data analyses and writes the report with minimal support from the tutor.

Grade 3: The student participates in the discussion regarding the experimental work and actively participates in the experimental work. The student performs data analyses and writes the report with support from the tutor.

Evaluation of the written project report(s) (50%)

The project written report(s) will be graded to assess the student's ability to explain the connection between the project work and the state of the art (building on literature review, course lectures and seminars), to present the experiment and its design (what was done), as well as the demonstrated analytical understanding and reflections (why/how it was done) and writing quality (form and language).

Grade 5: Demonstrate advanced understanding of the subject through application in project work and thorough review of relevant scientific literature. Provide original, significant and correct analysis of data with respect to the main hypotheses of the project work. Provide insightful and thorough discussion of the results of project work. Use existing scientific literature to place project results in the context of current published theory. Good use of figures and graphics combined with concise text in proper scientific tone without errors in grammar or spelling. Appropriate referencing to existing literature.

Grade 4: Demonstrate adequate understanding of the connections between the state of the art and the application in project work, with a review of relevant scientific literature. Provide correct and significant analysis of data with respect to the main hypothesis of the project work. Provide discussion of the results of project work. Use existing scientific literature to place project results in the context of previously published theory. Good use of figures and graphics combined with concise text in proper scientific tone. Appropriate referencing to existing literature.

Grade 3: Demonstrate a limited understanding of the connections between the state of the art and the application in project work, with a limited review of relevant scientific literature. Provide correct analysis of data with respect to the main hypothesis of the project work. Discussion of the results of project work with minimal referencing to existing literature. Use correctly figures and graphics combined with concise text.

Evaluation of oral presentation(s) and mini-documentary of the project work(s) (20%)

The oral presentation(s) and mini-documentary will be assessed for clarity of the presentation(s) and visuals.

Grade 5: Presents clearly, in a well-structured way, and in a scientifically appropriate tone the project hypotheses, methods, main results, and their implications. Excellent management of time. Responds to questions from the audience.

Grade 4: Presents clearly and in a well-structured way the project hypotheses, methods, main results, and their implications. Good management of time

Grade 3: Presents the project hypotheses, methods and main results.