

# Biostatistics requirements

## Requirements

- *Lectures*: Attendance to lectures is not mandatory but strongly recommended.
- *Seminars*: Attendance to seminars is mandatory. Students must not miss more than two (2) seminars. **Certificates of any kind, including a medical certificate, are not accepted for the absences. Making up for missed classes is not possible.**
- **Be on time! Being late from the seminar may mean the loss of the attendance.**
- *Bonus points*: During the semester on three of the seminars, students write a test for earning bonus points. Bonus points earned by the (***optional***) tests written in the seminars are added to the test result of part B of the final exam and/or the grade offering test.
- All tests are included in the average, so missed tests count with a score of 0 points.
- Taking the test relies on the students' own smart devices and network connection. Eduroam is mostly available, but it may be useful to have a good mobile network connection as well.
- Seminar tests will take place on:

• week 4: topics of lectures on week 2 covered	10p – Ave $\geq 95\%$
• week 7: topics of lectures on weeks 3-5 covered	8p – $95\% > \text{Ave} \geq 90\%$
• week 10: topics of lectures on weeks 6-8 covered	6p – $90\% > \text{Ave} \geq 80\%$
	4p – $80\% > \text{Ave} \geq 70\%$
	2p – $70\% > \text{Ave} \geq 60\%$
	1p – $60\% > \text{Ave} \geq 40\%$

*Exemptions:* Applications for exemption from the biostatistics course have to be turned in to the Credit Transfer Committee. Such requests are not accepted by the Biomathematics Division or the Department of Biophysics and Cell Biology.

*Requirements for the signature:* Maximum 2 absences are allowed from the seminars. If the number of absences from the seminars is more than 2, signature for the semester will be denied.

*Grade-offering course test and exam:*

Students will write a grade-offering course test on week 12. Exact time and place will be announced later. The structure of this test will be identical to that of the final exam.

Exams are usually held once a week during the exam period. The exam is written. The structure of the final exam:

- part A: minimum requirement questions and short calculations (descriptive statistics, binomial and Poisson distributions, standardization of a normal distribution, etc.). Maximum score of part A is 40 points.
- part B: test questions (true or false questions, multiple choice questions, etc.), essay questions, calculations. Maximum score of part B is 100 points.

•If the score of part A is less than 75% (30 out of 40 points), the student fails the grade-offering test or the final exam. Bonus points earned by tests written in the lectures and seminars are not added to the result of part A. If a student passes part A (i.e. the score is greater than or equal to 75%) on an exam or the grade-offering course test, the result is valid for his/her subsequent exam chances, i.e. it does not have to be retaken.

•If the result of part A is less than 75%, part B is not evaluated (except for a C chance exam). If the student passes part A, bonus points are added to the score of part B (max 100 points).

Based on this final score (part B + BP)

the following grades are offered:

- $FS < 60$  fail
- $60 \leq FS < 70$  pass
- $70 \leq FS < 80$  satisfactory
- $80 \leq FS < 90$  good
- $90 \leq FS$  excellent

Evaluation of the grade-offering test and the final exam is identical.

A grade of 2 or better achieved on the grade-offering test is valid for the final exam. The bonus points earned by tests written in the seminars and the exemption from retaking part A of the exam are only valid for the course in which they have been achieved, i.e. they are not valid for repeated courses or exam courses.

*Reading materials:* Wayne W. Daniel: Biostatistics, A foundation for Analysis in the Health Sciences, John Wiley&Sons

*Rules for calculators:* detailed in the requirements on e-learning

*Information for repeaters:* For repeaters the attendance on seminars is not compulsory. Credits achieved in a semester cannot be transferred to other semesters. Therefore, students repeating the course are subject to the same rules and requirements as those taking the course for the first time.

*Rules for C-chance exams:*

	result of part B is a fail	result of part B is above the passing level
result of the minimum requirement questions (part A) is a pass ( $\geq 75\% = 30p$ )	final exam grade: FAIL	exam grade is according to the result of the 'B' test
result of the minimum requirement questions (part A) is a fail, but at least 65% (=26 p)	final exam grade: FAIL	oral exam
result of the minimum requirement questions (part A) is less than 65% (=26 p)	'B' test not scored, final exam grade: FAIL	

If the result of the written part of a C-chance exam is at least a pass (2) according to the rules pertaining to A and B-chance exams, the grade of the C-chance exam will be what is to be offered based on the rules of the A and B chance exams. Part B of a C chance exam will be scored even if the score of part A is  $65\% \leq S < 75\%$ . In this case, if the score of part B together with the bonus points would be above the passing level, the written part will be followed by an oral exam. In this case the grade of the C chance exam will be determined by the result of the written test and the performance on the oral exam.