



**AALBORG UNIVERSITET**

School of Engineering and Science

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## Project and Course Examination

### Rules for Conducting Project and Course Exams at the School of Engineering and Science

#### PURPOSE AND SCOPE

This document is a set of guidelines for conducting and participating in project and course exams under the School of Engineering and Science. It should be noted that these rules and guidelines are drawn up on the basis of the rules in the Examination Policies and Procedures and the Joint Program Regulations, and should be seen as a compilation of the existing rules as well as practical advice for how course organizers should organize evaluations, and how students should conduct themselves in the evaluations.

The motivation for this is that in recent years there have been examples of great variation in conducting exams and in the criteria for passing exams in different courses, and confusion on the part of the students about the rules that apply in the evaluations.

The School of Engineering and Science recommends that these guidelines should be read through in the planning and execution of each exam so that they are fresh in mind.

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### Project exams:

#### *Internal co-examiner on project exams*

In addition to the examiner(s) who has/have served as supervisor(s), an internal co-examiner is designated who has not taught the student in the semester concerned. (The study board may grant an exemption from the rule that the internal co-examiner must not have taught in the semester). The internal co-examiner is designated from among assistant professors, associate professors and professors. The following require special permission by the chair of the study board to be internal co-examiners: part-time lecturers, PhD students, teaching assistants and research assistants. As far as possible, the use of part-time lecturers, PhD students, teaching assistants and research assistants as internal co-examiners should be avoided. PhD students must not serve as internal co-examiners if their own PhD supervisor is the examiner.

### Course exams

The exam format is normally stipulated in the curriculum. For the study boards where it is possible to choose between different exam formats in the curriculum (e.g. oral or written), the exam format must be determined no later than 2 weeks after the start of the course (cf. Examination Policies and Procedures). In all cases, the exam syllabus must be available no later than the 3rd course session.

Options for evaluation:

#### A. Written exam

- is normally after the project is handed in
- the exam result must be provided and the evaluation communicated to the student in accordance with the provisions of Section 7.2 of the Examination Policies and Procedures. (APPENDIX)

#### B. Oral exam

- is normally after the project is handed in
- the assessment is provided immediately after the exam is held

#### C. Week-long assignments and the like, including mini project and portfolio

- the exam result must be provided and the evaluation communicated to the student in

accordance with the provisions of Section 7.2 of the Examination Policies and Procedures.

- the last part of the exam may be placed during the semester.
- D. Assessment during the course/class participation
- the exam result must be provided and the evaluation communicated to the student in accordance with the provisions of Section 7.2 of the Examination Policies and Procedures.
  - the last part of the exam may be placed during the semester.

If it is desired to hold exam type A or B during the semester, permission must be applied for from the appropriate study board.

The date of the exam and the re-exam (with respect to the curriculum) are scheduled at the beginning of the semester, according to the school's guidelines for scheduling. Information on permissible aids is provided no later than 4 weeks prior to the exam date.

For all exam formats, the course organizer must make certain that the syllabus and the number of exam questions ensure that the learning objectives can be evaluated.

Furthermore, it must be ensured that the student's work effort in terms of course participation and the exam reasonably complies with the expected work effort (cf. the curriculum) (for one student 1 ECTS credit means an estimated workload of 30 hours, which includes lectures, exercises, preparation for each course session, etc., plus preparation for the exam).

#### A. Written exam

The written exam is designed as an assignment to be answered in a 2-4 hour exam (stipulated in advance). When designing the exam assignment, it is important to aim at -

- reflecting as much of the course syllabus as possible (cf. the course description) in order to determine whether the students have a reasonable overview of the material
- re-using a minimum of exam assignments from previous years. It is recommended to avoid assignments where the only difference, compared to previous similar assignments, is the change of a few constants
- making the assignments independent of each other in order to avoid that some are impossible to solve if the student has not been able to solve one or more of the previous assignment(s)
- having the scope of the exam reflect the complexity and scope of the course
- requiring that the exam assignment be submitted to the program secretary no later than 14 days before the exam is to be held

Prior to submission to the program secretary, the assignment must be presented to the co-examiner for comments. In the case of assessment by internal co-examiners, the assignment must be looked through by an academic peer. This must be noted on the front page of the assignment.

#### *Evaluation of the written exam*

In evaluating an exam assignment, it should be the method that counts, to a considerable extent, rather than the specific result. This means that the exam assignment does not fully count, even though the result is "correct," if the method used is not specified in the answer. This also means that an exam assignment can nearly fully count in the assessment, even though the individual results are "incorrect," if the appropriate methods and theories are used to solve the problem.

Because of the substantial difference between academic standards in the different courses, it is the course organizer's responsibility to set a reasonable level for a passing grade.

If necessary, the study board can prepare a positive/negative list of all aids.

The course organizer may impose restrictions on the use of aids, including a PC, according to the Examination Policies and Procedures, Section 3.3 (APPENDIX). The restrictions are determined when

deciding the exam format.

Permissible aids are specified along with the exam date. The examinee brings the permissible aids.

#### *Regulations and aids for written exams*

- Students must present a valid student ID or photo ID.
- Students must be seated before the assignments are handed out. Examinees must only write their student number (not name) on the exam paper – **on all pages**. For the First Year of Study, however, examinees must write their name on all pages.
- Students are requested to arrive one half hour before the exam is to begin. If a student arrives after the exam has begun, the teacher must be contacted to decide whether the delay is reasonable. Students will not be allowed entry to the examination room later than one half hour after the exam has begun.
- Students are not permitted to leave the examination room earlier than one half hour after the exam has begun, and they are not permitted to leave the examination room during the last half hour of the exam.
- If the student has to abandon the exam due to illness, the assignment is handed in with information about whether the student wants the assignment evaluated or not. If the student does not want the assignment evaluated, a doctor's certificate dated the same date must be submitted to the program secretary.
- If the student hands in the assignment before the end of the exam, the wording and the rough drafts are not to be removed from the examination room. The student must hand in these papers to the invigilator.
- If the examinee leaves the exam without writing the assignment, a blank page must be handed in with the student information filled in.
- During written (and oral) exams the study boards normally allow the students participating to bring and use all kinds of (engineering) aids, including books, notes, and advanced calculators. In this connection, however, it must be emphasized:
- All exams are individual, and that ANY KIND OF CONVERSATION AND OTHER COMMUNICATION BETWEEN PARTICIPATING STUDENTS AND BETWEEN PARTICIPATING STUDENTS AND OTHER PERSONS IS FORBIDDEN!
- Aids must be noiseless, and no type of electronic communication is permitted. Laptops may be used if they do not make any kind of noise, and if the screen is placed in a position so that no other student taking the exam is able to read the screen. If connection to the power supply is desired, students must bring an extension cord and power strip. All equipment must be connected in due time before the exam starts and cannot be removed before the exam is finished.
- If the student wishes to print out the assignment from his or her own computer, the student must bring a printer in order to print out the assignment. Printing out documents is only permitted when the exam time has ended.
- When making the exam assignment, the course organizer must be aware of the fact that the students have very different calculators (in terms of function and storage capacity, etc.). It is assumed, however, that all students have a calculator with trigonometric and logarithmic functions, storage capacity, etc. Students must be able to answer the questions WITHOUT A PC in the time available for the exam. However, the study board can grant an exemption from this.
- The use of headphones is not permitted, unless the student applies to the study board.

#### **Digital 'stedprøve' (a written exam at the university under supervision)**

Students bring their own PC to the exam. The exam must be designed such that students can answer the assignment electronically. To counteract cheating, students must install an exam monitor.

Not all aids are allowed; permissible aids such as programs, e-books, notes, assignments and the like in electronic format are announced at the same time as the exam date.

The study board can draw up a positive/negative list of permissible electronic aids.

Any use of electronic aids other than those permitted is considered cheating.

*Example of guidelines for the use of aids* (to be indicated in the exam plan and on the exam assignment)

Category	Permissible aids
Other use of the Internet besides digital exam	<ul style="list-style-type: none"> <li>• This section is left blank if the Internet may not be used</li> <li>• This section states 'Allowed' if the Internet may be used</li> </ul>
Other software besides word processing programs	<ul style="list-style-type: none"> <li>• This section is left blank if other software besides word processing programs may not be used</li> <li>• This section states 'All' if all types of software are allowed</li> <li>• This section states 'List' if only specific software is allowed               <ul style="list-style-type: none"> <li>○ a</li> <li>○ b</li> <li>○ c</li> </ul> </li> </ul>
Digital materials	<ul style="list-style-type: none"> <li>• This section is left blank if digital materials may not be used</li> <li>• This section states 'All' if all types of digital materials are allowed</li> <li>• This section states 'List' if only specific digital materials are allowed               <ul style="list-style-type: none"> <li>○ a</li> <li>○ b</li> <li>○ c</li> </ul> </li> </ul>
Non-digital materials	<ul style="list-style-type: none"> <li>• This section is left blank if non-digital materials may not be used</li> <li>• This section states 'All' if all types of non-digital materials are allowed</li> <li>• This section states 'List' if only specific non-digital materials are allowed               <ul style="list-style-type: none"> <li>○ a</li> <li>○ b</li> <li>○ c</li> </ul> </li> </ul>

## B. Oral exam

Two options are available for conducting oral exams.

- Before the exam, the examiner prepares a number of questions/topics (at least 4 different ones) that cover the learning objectives of the course. These may be, for example, subtopics within the syllabus, specific course sessions or assignments from the course. The questions/topics are presented to the students no later than 14 days after the last lecture so they have time to prepare for the exam.
- The examiner only sets the syllabus. A number of questions (at least four) are prepared that again reasonably cover the contents of the course, as mentioned above. The students do not see the questions in advance, but the questions must be prepared beforehand and used during the exam.

*Thus, it is not permitted to hold an oral exam without written exam questions being prepared in advance.*

In the exam, an element of randomness must be ensured in selecting the topics each student will be examined on; for example the students may draw lots covering the topics. With courses, each student is expected to be examined for 10-15 minutes. This means that when planning the exam, 15-20 minutes should be allocated per student, including extra time for the assessment, announcement of the

grade, calling the next student in, etc. Students can be given preparation time between the drawing of lots and the exam itself. If preparation time is given, this should be reflected in a more thorough/prolonged exam (at least 15 minutes and maximum 30 minutes per student). Please be aware that all students must have equal preparation time.

#### *Evaluation of the oral exam*

Because of the substantial difference between academic standards in the different courses, it is again up to the course organizer to set a reasonable level for a passing grade. Emphasis is given to the student's ability to demonstrate a reasonable overview of the topic and/or syllabus concerned. Emphasis is not given to rote learning but to insight and the ability to apply the theories and methods presented during the course. An extra examiner must always be present during an oral exam. **Be aware that the extra examiner must be qualified to teach the subject. The extra examiner is allowed to have taken part in the course as a second lecturer or assistant teacher. At least one of the examiners must be at the assistant professor level or above.**

Permissible/necessary aids for oral exams must also be announced at the same time as the exam date. The examinee brings the permissible/necessary aids.

#### **C. Week-long assignments and the like (including mini-projects and portfolios)**

This exam format implies that the student is given some assignments or some material in the form of a problem posed, a larger assignment, a case, a scientific article or the like, at a set time before the assessment or the exam. The length of the preparation time is stipulated in connection with the selection of the exam format. The exam begins when the student is given the assignment or the material.

It can be stipulated that the student must hand in a written assignment, for example in the form of a mini-project or a portfolio, based on the material given. In this case, late submission results in the student having used an exam attempt, even if it is only one of several weekly assignments for that course. However, if the student is unable to hand in an assignment due to illness, they may apply to the study board for an exemption to hand in the assignment at a later time. Normally, exemptions are only granted in the case of illness, and this requires a doctor's certificate.

The final part of the exam can, for instance, consist of:

- Individual assessment of the written assignment(s).
- Oral examination based on the written assignment(s) or the like handed in by the students (Section 4.2 of the Examination Policies and Procedures can be taken as a starting point regarding exams in projects). In this case, the assignment must be produced by a maximum of 7 students. The scope of mini-projects must conform to the time available in the course. During the exam of mini-projects it is suggested that the students each present parts of the mini-project. If the examiner or co-examiner would like to have parts of the material elaborated, they may ask questions during and after the presentation. They may of course ask questions on the entire course syllabus and not only on the mini-project. Since the students' choice of presentation is not random, it is the responsibility of both the examiner and co-examiner to ensure that each student has a sufficient overview of the entire syllabus.
- Oral examination based on one or more questions that are related to the material given.

#### *Evaluation of week-long assignments or the like*

As with oral exams, there can be substantial difference between academic standards in the different courses; therefore it is again up to the course organizer to set a reasonable level for a passing grade. Emphasis is given to the student's ability to demonstrate a reasonable overview of the topic and/or syllabus concerned. Emphasis is not given to rote learning but to insight and the ability to apply the theories and methods presented during the course. An extra examiner must always be present during an oral exam. **Be aware that the co-examiner must be qualified to teach the subject. The co-examiner is allowed to have taken part in the course as a second lecturer or assistant teacher. At least one of the examiners must be at the assistant professor level or above.**

Permissible/necessary aids for evaluations of week-long assignments or the like must be indicated on

the timetable along with the examination date(s)/submission dates. The course organizer informs the program secretary about this at the beginning of the semester. The examinee brings the permissible aids.

#### **D: Assessment during the course/class participation**

This exam format always requires course attendance of minimum 80 percent, and it is possible to fail solely due to the lack of attendance. The reason for this is that attendance and the interaction with the lecturer and the other students is an integrated and essential part of the course. Moreover, an additional form of assessment must be used as to whether and to what extent the student's qualifications comply with the course objectives. This assessment can be done for instance by having the students hand in notes, work sheets, assignments, and by questioning the students during exercises, etc. At the start of the course, the course organizer must inform the students as to how the evaluation of the course will proceed, i.e. which methods the course organizer will use and to what extent.

#### *Evaluation of the basis for assessment and the like*

In addition to checking class participation the assessment is based on the individual written assignments, oral performances, exercises or tests connected to the course sessions. If assessment is to be based on written assignments, a submission deadline is stipulated. If submission does not take place on time, the student has used an exam attempt. However, if the student is unable to hand in an assignment due to illness, they may apply to the study board for an exemption to hand in the assignment at a later time. Normally, exemptions are only granted in the case of illness, and this requires a doctor's certificate.

If the student does not pass the exam, the teacher is encouraged to inform the student of the reason for this and what material the student should read up on before taking the re-exam.

#### **Evaluation of cross-disciplinary course modules**

Cross-disciplinary course modules are course modules that include two or more fundamentally different subjects.

In evaluating cross-disciplinary course modules, grading must be based on a joint assessment of the subjects. This is done by assigning the percentage to each assignment in each subject area (all assignments for all sub-elements = 100%). Based on this, a total percentage is calculated for how much of the course the student has passed, and from this a total grade for the course is calculated.

If this rule is to be deviated from, the course organizer must send an application to the appropriate study board in connection with a study board meeting, so that the student can be informed of the decision no later than 4 weeks before the exam is to be held. An exemption is also valid for the re-exam.

If the grade is "pass/fail", all subjects must be passed in order for the course module to be passed.

Only one total grade appears on the diploma, and if the student fails one of the subjects then the entire course is failed. Re-examination includes **all** subjects in the course, if any are failed. Examination in a cross-disciplinary course module is held as one overall examination. **It is permitted to conduct the exam as part-exams only in exceptional cases, if the structure of the course calls for this. The study board makes a decision about this in connection with approval of the examination plan.**

It is **not** possible to transfer credits for parts of cross-disciplinary courses.

#### **Illness:**

For all exams, in the event of illness, the student must notify the program secretary and submit a doctor's certificate no later than two weeks after the exam has been held.

The student must have consulted the doctor on the day of the exam and any expenses are borne by the student. A re-exam due to illness will be held under the conditions that apply for re-exams.

## Rules for re-exams

The date for the first re-exam must be stipulated no later than 2 weeks in advance and must be held in August, alternatively in February, after the ordinary exam (cf. [Examination Policies and Procedures](#), Section 1.1.).

Re-exams take place according to the same procedures as the ordinary exam, except for the fact that evaluation during the course cannot be used as an exam format in a re-exam.

It is not required that the exam formats for the re-exam and ordinary exam are the same. The teacher informs the program secretary about the permissible aids and the format of the re-exam no later than 2 weeks before the date of the re-exam.

## ORIGIN, BACKGROUND AND HISTORY

Describe here, when the policy/rule/procedure has been prepared, reviewed and approved, on what basis and by which division and by whom. Note also whether there are special circumstances surrounding termination.

## OVERALL FRAMEWORK

The rules are based on the [Examination Policies and Procedures](#)

## CONTACT

School of Engineering and Science

## DEFINITION OF TERMS

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## APPENDIX

### Examination Policies and Procedures (excerpts)

#### 3.3. Aids

Aids for the exam, those necessary as well as those permitted, are announced no later than the announcement of the time the exam is to be held. Unless the study board has drawn up general rules regarding the use of a personal computer or similar electronic equipment during an exam, the extent to which a personal computer can be used during the exam must also be communicated at this time.

#### 7.2 Announcement of the assessment

The result of the examination must be disclosed, i.e., communicated to the student.

Unless the assessment is told to the student immediately following the examination, the date for when the assessment will be disclosed must be announced at the same time as the announcement of the date



the exam is to be held (cf. section 1.1.).

The time period for communication of the assessment must lie within the following time limits:

1. For oral exams, the assessment is given immediately after the exam is held.
2. For written exams, the assessment must be communicated to the student no later than 20 working days after the exam is held. If the exam is in the digital exam system the assessors must register the assessment no later than 20 working days after the exam is held. If the exam is not in the digital exam system, the assessment must be made available no later than 15 working days after the exam is held.
3. For assessments during a course, the assessment must be given no later than 15 working days after the course ends if the exam is not in the digital exam system. If the exam is in the digital exam system, the assessment must be registered no later than 20 working days after the course ends.

The assessment is personal. Students thus have the right to receive an assessment of an oral performance without the participation of the other examinees or the audience. In cases where the assessment is not communicated immediately after the exam, students are informed via the STADS self-service system.

### Relevant documents

- Examination Policies and Procedures
- Joint Program Regulations
- Examination complaints
- Exemptions

The documents can be found here:

<http://www.en.ses.aau.dk/students-employees/rules-and-regulations/>

<http://www.en.engineering.aau.dk/education-programmes/Education+and+Programmes/>

### Updates

06.10.2015: updated based on the Progress Reform (exam registration) and the new Examination Policies and Procedures (checking exam assignments for written exams).

03.11.2015: updated section 'Rules for re-exams'. The date for the first re-exam must be stipulated no later than 2 weeks in advance and must be held in August, alternatively in February, after the ordinary exam (cf. Examination Policies and Procedures, Section 1.1.).

21.03.2016: updated section 'Project exams'. The study board chair may allow part-time lecturers, PhD students, teaching assistants and research assistants to serve as internal co-examiners, but the use of these as internal co-examiners should be avoided as far as possible. PhD students must not serve as internal co-examiners if their own PhD supervisor is the examiner.

21.12.2016: updated with new section 'Digital stedprøve'. In the section 'Course exams': new deadlines for when the assessment must be completed and the student must be informed of the assessment according to the Examination Policies and Procedures, Section 7.2.

23.06.2017: updated with example of guidelines on the use of aids for 'digital stedprøve'.

04.01.2018: new layout. Section on illness inserted. Clarification on academic peer going through the exam assignment (written exam). Text concerning study board approval deleted. Excerpts from the Examination Policies and Procedures, Sections 3.3 and 7.2, reproduced as an appendix. Corrections (cf. Study Council meeting 13-12-17).