1. Appointment of examiners

At the commencement of each academic year, the Board of Examiners determines which lecturers meet the requirements to qualify for signatory authority. These are the examiners. This authority of an examiner is linked to the course they are responsible for. The Board of Examiners publishes a list of examiners of the current academic year on its website.

External lecturers typically do not have signatory authority (although exceptions are made), instead the authority to sign is assigned to an internal examiner. Other than the programme directors, the educational director and the members of the Board of Examiners have signatory authority.

The list of examiners can be altered or expanded if necessary, for instance in cases of personnel mutations. If mutations are relevant for the ongoing academic year, they should be passed along to the secretary of the Board of Examiners.

The Board of Examiners generally expects lecturers to have a PhD, but exceptions are possible. PhD candidates can teach courses and supervise bachelor and master students, but are generally not appointed as examiners. This only happens in exceptional cases, for PhD students with a substantial teaching load and teaching experience. The procedure for appointing PhD students as examiners is added as Appendix 1.

Only members of the Board of Examiners are authorised to sign BSc and MSc diplomas.

2. Exams

The first page of each (written) exam should contain all necessary information for the students. Each exam section should be provided with the maximum number of points that can be obtained from it.

The website of the Board of Examiners has exam templates for Word and LaTeX.

Each year in October, teachers are asked by the course coordinators to archive their exams (written exams and assignment descriptions) together with the grading schemes (answer models).

2.1. Oral exam

It is possible to take an oral exam instead of a written exam. The examiner/lecturer can agree with this in consultation with the Board of Examiners. In some cases the examiner/lecturer will be asked by the Board of Examiners to issue an additional (oral) exam. The examiner/lecturer is not obliged to grant this request, however a motivation for the decision will be demanded.

An oral exam is taken by the examiner and an assistant, a PhD student or another colleague. The presence of a second person is mandatory when taking an oral exam. The assistant will write a brief report of the exam; i.e., date, place, name of the assistant, and a brief elaboration on the questions asked and the answers given. Like a regular exam, this report should be archived with the assessment. The examiner sends the grade to the Science Student Administration.
2.2. Calamities and irregularities during the exams
In case of a calamity during the exam (vacation due to a fire alarm) the following procedure should be followed (for an exam of 3 hrs):

If the fire alarm rings during the first hour of the exam, the exam will automatically be cancelled. All exams should be left at the tables and cannot be taken along. If the fire alarm rings during or after the second hour of the exam, the exam is also cancelled. However, the submitted exams will be assessed. For the students who had not submitted their exams, an additional resit will be scheduled. Students will have to be informed about the new date of their exam, and it should be included in the invigilation regulations. Other irregularities during exams should be reported to the Board of Examiners, to find an appropriate solution.

2.3. Publication of final results (grades)
Since 25 May 2018, the GDPR is in place for Leiden University. Therefore, results cannot be publicly announced or through Google Drive. The typical channel to communicate (partial) grades to the students is Brightspace.

2.4. Archiving exams
The institute provides a facility to store or archive exams and accompanying documents. This is handled by the Education Office.

3. Thesis project supervision and grading
3.1. Supervision
Everyone who is listed as examiner for a LIACS curriculum (see Section 1), can be an examiner for a thesis in that curriculum.

- Bachelor thesis: Supervisors for a BSc thesis project should be assigned in consultation with the coordinators of the Bachelor Class. For the final assessment of the thesis project, two supervisors are necessary. At least one of the supervisors needs to be a member of the scientific staff (UD, UHD, HL) of LIACS. The other supervisor can be a PhD student or an external supervisor. An external supervisor should at least have a master’s degree. The names of all those involved with the thesis assessment should be mentioned on the assessment form.

- Master thesis: An MSc thesis must be assessed by at least two examiners. The first examiner is the main supervisor of the student. At least one of the supervisors needs to be a member of the scientific staff (UD, UHD, HL) of LIACS. The other supervisor can be an external supervisor. An external supervisor should have a PhD degree. A PhD student can be involved in master student supervision, but if they are not an examiner for the student’s program they cannot be an examiner for the thesis and therefore are not responsible for the assessment. It is recommended that everyone who had a supervision role in the project is added to the front page of the thesis as a supervisor.

In exceptional cases it is possible to deviate from these requirements; dispensation can only be granted by the Board of Examiners. Other assessors can be involved in the (regular) assessment. The names of all involved assessors of the thesis must be mentioned on the assessment form.

3.2. Procedure Assessment Thesis projects
Specially designed assessment forms (available on the website of the Board of Examiners) should be used to assess the thesis projects. The first supervisor (an examiner) is responsible for the clear and
insightful completion of the form. The relative weight of grades is documented in the form and must be followed. A motivation should argue why a grade is issued. Both examiners each decide on the grade independently, then together decide on the final grade. Both examiners need to sign the form.

Assessment forms for bachelor theses should also be signed by an examiner of the bachelor class, confirming that the student has completed the bachelor class activities.

The final grade for a thesis (BSc, MSc) must be sent to the Science Student Administration (cijfersliacs@science.leidenuniv.nl) by means of a signed assessment form, with a cc to the coordinator of the curriculum. The first examiner also sends the thesis PDF itself to the coordinator.

For a grade 9 and higher as well as for a grade 6 (or lower), a stricter policy should be followed. See below for the explanation with respect to these policies for a BSc- or MSc thesis.

3.3. Thesis Title Page
The first and second examiner are mentioned on the title page of the thesis and must be the same as on the assessment form. It is recommended to mention further supervisors; i.e., an external supervisor or a supervising PhD candidate.

3.4. Grading
Bachelor thesis
Before assessment can take place, a plagiarism check should be carried out.

For a grading of 9 or higher, it is expected that the student conducted excellent, independent and well-structured research. This is reflected by an adequate problem definition, approach, literature revision, design and implementation of experimentation, software, mathematical theory as well as interpretation of the obtained results. These aspects are clearly presented in the thesis. Original results, which have potential to be published, can be a sign of an excellent thesis.

When the thesis has been a collaboration between two or more students, it should be clear from the report which student is responsible for which part of the thesis. The total thesis work should be more extensive to justify the activities of two or more BSc graduate students.

Master thesis
Before assessment can take place, a plagiarism check should be carried out.

For a rating of 9 or higher it is expected that, in addition to the criteria for a bachelor’s thesis, the master’s thesis project is of sufficient originality and quality for a scientific publication, that is, it is suitable for the proceedings of a peer-reviewed scientific journal, conference or workshop. In the assessment form, a clear commitment to submit a publication, including the time of submission, is given. A draft publication strengthens this commitment, and it is recommended – but not required – to add such a draft to the assessment.

Reviewing
As part of the general quality control policy of the education at LIACS, the process of thesis assessment requires extra quality control in case of a grade 9 or higher or 6 (or lower). This quality control is based on the following documents: (1) the assessment form, (2) the thesis manuscript, and – potentially – (3) the (concept) publication that has resulted from the thesis (in case of 9 or higher). Once the procedure is completed, and the grade is accepted, the Board of Examiners will countersign the assessment form and send it to the student administration for further processing.
The quality control is performed by an independent third assessor with appropriate knowledge. This person is appointed by the Board of Examiners. The assessment from this third party concerns an assessment of the quality requirements as outlined above. In case of a grade 9 or higher or 6 (or lower), the assessment form is merely valid when signed by a member of the Board of Examiners, and/or are provided with a stamp and the signature of a member of the Board of Examiners. The grade will not be processed by the Education Office of the Faculty of Science without proper signatures/stamp. The student can only be informed of the final grade after the Board of Examiners has received and agreed with the report of the third assessor.

The flow for the submission of the thesis grade is depicted in Figure 1 at the end of this document.

**Sufficient assessment thesis (BSc/MSc)**

The regulations of the thesis assessment state that the work of a student is sufficient when graded with a 6.0 or higher. The rubric ‘thesis’ on the assessment form should be 6.0 or higher, and cannot be insufficient and compensated by the other rubrics. If a grade 6.0 is to be issued, the supervisor notifies the Board of Examiners. The reviewing process outlined above applies.

**3.5. Results thesis projects (BSc/MSc)**

It should be noted on the assessment form that the results of the (thesis) projects are archived. To archive the code, Gitlab of LIACS should be used. Measurement results should be archived in consultation with the supervisors. The results are an integral part of the student's work and should be retrievable. A plagiarism control is always part of the assessment procedure.

**3.6. Bio-informatics Research project (MSc)**

A final presentation is not mandatory for a research project.

Before assessment can take place, a plagiarism check should be carried out. The assessment should be done according to the regulations. For a rating of 9 or higher, it is expected that the student conducted excellent and well-structured research. This is reflected by an adequate problem definition, approach, literature revision, design and implementation of experiments, software, mathematical theory etc., as well as interpretation of the obtained results. These aspects are clearly presented in the report. Original results, which have potential to be published, can be a sign of an excellent project.

For the assessment of the research project the specially designed assessment forms should be used. The grade should be documented on a grade submission form. The relative weight of the grades is pre-documented on the forms and should be applied.

The report and results are handled in the same manner as the thesis project.

**3.7. SBB internship report**

For the SBB internship (20, 30, or 40 EC), requires extra quality control in case of a grade 9 or higher or 6 (or lower). This quality control is based on the following documents: (1) the assessment form and (2) the internship report. Once the procedure is completed, and the grade is accepted, the Board of Examiners will countersign the assessment form or authenticate it with a stamp it and send it to the student administration for further processing.

1. **Plagiarism**

The examiner of each course will elaborate in the beginning of the course or per assignment what plagiarism is (e.g. to what extent originality of code is a criterion) and what the consequences of plagiarism are. This is a repetition/specification of the information provided for the different curricula in the institute by the Board of Examiners. Our advice to teachers is as follows:
In instructions for assignments, please write explicitly that students have to write their own text, that Turnitin or MOSS is used for plagiarism check, and that suspicions of fraud and plagiarism will be reported to the Board of Examiners. Make clear to the students what is allowed and what not for the assignment (e.g., can they re-use code from tutorials, or do they write their code from scratch?). You can also mention that use of generative AI (such as ChatGPT) is not allowed to generate code or text that will be graded.

An overview of plagiarism check options @ LIACS can be found at the end of this document.

When the examiner has a suspicion of plagiarism in an assignment, report, code, or exam, they should take the following steps:

1. The examiner informs the students about the suspicion and asks for a response (preferably by email so that we can include it as a ‘rebuttal’; a template email can be found at the end of this document). The grades for these students are not registered yet
2. The examiner sends all information to BoardOfExamers@liacs.leidenuniv.nl: what the assignment was, what the student submitted, any evidence such as Turnitin or MOSS output, the teacher’s explanation of why they think it is plagiarism, and how serious they think it is, and the reaction of the student.
3. The BoE assesses the report. The BoE will consult with the examiner about the sanction
4. The BoE either sends a letter with the warning or sanction to the student or decides it is not a case of proven plagiarism.

The document ‘Rules and Regulations set by the Boards of Examiners’ has a list of possible sanctions (article 6.4). The sanction might be heavier if the student has repeatedly plagiarized. The Board of Examiners will register the name of each student who has plagiarized and, at graduation verifies whether the student qualifies for cum laude. The registration of plagiarism excludes the student from cum laude.

4. Fraud
If one student or a group of students committed fraud, or when there is reasonable suspicion for this, it must immediately be brought to the attention of the Board of Examiners. The Board of Examiners will, thereupon, investigate the case. If fraud is established, a sanction will be imposed that is proportional to the nature of the fraud. In certain cases, the sanction will be decided on in consultation with the legal counsellors at Administration and Central Services of the university. In this case a sanction may concern exclusion of exams or elimination of a student from the university.

Appendix 1. Procedure for appointing PhD candidates as examiners

This procedure is intended for PhD candidates with a substantial teaching load (i.e., having more teaching tasks in return for a longer contract period).

It is recommended that the applicant starts teaching courses together with more experienced examiners. Once adequate teaching experience is obtained and an agreement for more autonomy in the course(s) management is reached between applicant and their PhD project supervisor, the following requirements should be met in order to be registered as examiner:

- Holding the role as PhD candidate for at least two years;
Board of Examiners, LIACS. Instructions for examiners in the programmes of LIACS

- Approval of PhD candidate’s supervisor; and
- Having taught at least two courses (can be the same course for two years).

The following documentation is necessary to prove that the aforementioned requirements are met:

- Teaching curriculum vitae (demonstrating teaching experience), including:
  - Starting year of the PhD contract
  - Teaching history (courses taught, courses assisted, theses supervised)

Please notice that the same documentation is part of the requirements for the completion of the BKO certification.

**Procedure:** The applicant must send a petition to the Board of Examiners 1. attaching the documentation listed above, 2. indicating the course(s) for which they request examiner status, and 3. cc’ing their PhD project supervisor.

**Appendix 2. Template for informing students on plagiarism**

**Beste ...,**

Onlangs heb je opdracht X gemaakt en ingeleverd. Deze opdracht is nagekeken, maar helaas hebben wij het vermoeden dat je wellicht plagiaat hebt gepleegd.

Dit is tegen de richtlijnen van de universiteit en als blijkt dat je inderdaad plagiaat hebt gepleegd zal ik dat moeten melden aan de examencommissie. Je hebt nu echter wel de mogelijkheid om jezelf te verantwoorden en uit te leggen wat er precies gebeurd is. Aan de hand van deze verklaring zal ik je alsnog je cijfer voor deze opdracht toekennen, of dit melden bij de examencommissie. In dat laatste geval stuur ik uiteraard je eigen verklaring mee.

Mocht dit de eerste keer zijn dat je in contact komt met de examencommissie, maak je dan niet meteen al te grote zorgen. In de Regels & Richtlijnen van onze faculteit (artikel 6.4) kun je meer informatie vinden over hoe de examencommissie te werk gaat en wat eventuele gevolgen/sancties zijn.

Ik hoor graag van je.

Met vriendelijke groeten, ...

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Dear ..., 

Recently you made assignment X and handed that in. We have checked your assignment, but unfortunately we believe that you may have committed plagiarism.
This is against the rules of the university and if you did indeed commit plagiarism, then I need to contact the board of examiners about that. You have, however, now the opportunity to explain yourself what happened. With this explanation I will then decide to grade your assignment or send it to the board of examiners. In that last case I will send your explanation as an attachment.

If this is the first time that you need to come forward by the board of examiners, then you should not directly panic. In the Rules & Regulations of our faculty (article 6.4) you can find more information on the board of examiners and what the consequences of plagiarism may be.

I hope to hear from you.

Best regards, …

Appendix 3. Overview of Plagiarism Check Options @ LIACS
Written by: Thomas Moerland

Official University instructions on these issues can be found here and here. This document will briefly summarize two settings:

1. Assignments: Automatic Brightspace Turnitin Configuration
2. Thesis: Manual access to Turnitin account

1. Assignments: Automatic Brightspace Turnitin Configuration

You can automatically set up Turnitin for all your assignments that are handed in through Brightspace (link).

1. Go to your assignment
   - New assignment: ‘Course Tools’ → ‘Assignments’ → ‘New Assignment’
   - Edit assignment: ‘Course Tools’ → ‘Assignments’ → (Your assignment) → ‘Edit Assignment’

2. Under ‘Evaluation & Feedback’ (on the right panel):
   - Click ‘Manage Turnitin’
   - Check the bullet ‘Enable Similarity Report in This Folder’ and leave ‘Automatic similarity checking on all submissions’ on
   - ‘Save’

3. Under ‘Submission & Completion’ (on the right panel):
   - Set ‘Allowable File Extensions’ to ‘Custom File Types’ (since Turnitin cannot scan .zip).
   - Enter you allowed file type, e.g., ‘.pdf, .py, .txt, .md’.
   - ‘Save’.

That’s it! Students will now have to separately submit their pdf, which is automatically processed through Turnitin.

Assessing similarity
Once students start submitting their reports, Turnitin will automatically process them. When you click on the assignment, you will see a marker appear behind every submission, indicating the
amount of similarity (and a green, yellow or red indicator). Click on this percentage and you get to see the actual Turnitin report of the document the student uploaded.

2. Thesis: Manual access to Turnitin

You can manually upload any document in Turnitin, such as a student thesis. See the for instructions: https://universiteitleiden.screenstepslive.com/a/1296699 Note that for the Bachelor thesis and Master thesis students themselves are required to generate the similarity report in Brightspace.

Figure 1 Flow for submission of a thesis grade.