

HEVERLEE 28 September 2018

# **CONCEPT NOTE**

# Scientific integrity at the Faculty of Science

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This concept note is based on the existing faculty vision on education and fed by discussions in the Faculty Taskforce on Scientific Integrity<sup>1</sup> during academic years 2016-2017 and 2017-2018. There is room for own accents and autonomy of the different programmes.

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# 1. Introduction

The Faculty of Science is responsible for educating students to become capable and integer scientists. The faculty offers high-level programmes based on eminent knowledge driven research. In this context it is of great importance that students learn how to handle research results, written sources and other people's ideas in a respectful and integer way. This respect forms the core of scientific integrity and is inseparable connected to the pride of a scientist. To familiarize oneself with scientific integrity is an important part of the disciplinary identity development of a scientist (disciplinary future self) and thus of each programme at the Faculty of Science. Therefore the faculty wants to invest explicitly and in all programmes in scientific integrity as an important part of the learning trajectories research and information skills. In these learning trajectories scientific integrity is part of the learning process: students learn gradually what scientific integrity means so that plagiarism can be prevented.

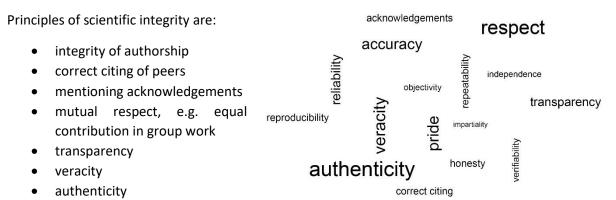
In addition to good education the university and faculty have a mission to conduct qualitative and objective research and hereby feed the social debate on live issues. The government, industry, citizens and many more stakeholders count on this. In the context of research and service delivery the faculty expects her researchers and employees to have an attitude of scientific integrity and pride. Correct and respectful scientific behaviour is the norm, and is necessary to teach students the same attitude (teach as you preach).

This concept note wants to give a framework for scientific integrity and define all its aspects. Tools (definitions, guidelines, procedures, responsibilities ...) are given for programmes, didactic teams, students, examination boards and other stakeholders to facilitate the learning process towards and dealing with (irregularities in) scientific integrity.

# 2. Definitions

#### 2.1. Scientific integrity

Scientific or academic integrity can be defined as conducting scientific research in a careful, reliable, controllable, reproducible, repeatable, objective, neutral and independent way. Authenticity is of great importance.



More information on scientific integrity at the KU Leuven and the Commission on Research Integrity (CRI) can be found at <a href="http://www.kuleuven.be/english/research/integrity">http://www.kuleuven.be/english/research/integrity</a>.

#### 2.2. Author's rights

"Authors right is the right of the maker or another entitled party of a literary, dramatic, musical or artistic work to define how, where and when this work is made public or reproduced." [Translated from: <a href="http://nl.wikipedia.org/wiki/Auteursrecht">http://nl.wikipedia.org/wiki/Auteursrecht</a>, consulted on 13 June 2018]

Extensive information on author's right at KU Leuven can be found at <a href="http://www.kuleuven.be/onderwijs/associatienet/auteursrecht/bescherming-eigen-werk">http://www.kuleuven.be/onderwijs/associatienet/auteursrecht/bescherming-eigen-werk</a> (in Dutch).

Regulations on author's rights in the case of PhD's and master's theses are given at <a href="http://admin.kuleuven.be/sab/jd/en/sv">http://admin.kuleuven.be/sab/jd/en/sv</a> reglement auteursrechten EN.html

#### 2.3. Forms of fraud

#### 2.3.1. Irregularity

Every conduct individual students display with which they (partially) inhibit or attempt to inhibit a correct judgement of their own knowledge, understanding and/or skills or those of other students, is considered an irregularity which may result in a suitable penalty. [From Regulations on Education and Examinations Article 84]

#### 2.3.2. Plagiarism

A special type of irregularity is plagiarism, i.e. copying the work (ideas, texts, structures, designs, images, plans, codes,...) of others or prior personal work in an exact or slightly modified way without adequately acknowledging the sources. [From Regulations on Education and Examinations Article 84]

#### 2.3.3. Replacing, adding or deleting research results

Changing research results intentionally and selectively by replacing, adding or deleting data is also a form of fraud. Background data should be made available in any case, so that reproducibility and feasibility can be checked.

#### 2.3.4. Fraud in author lists

If not everyone who has delivered a significant contribution to a work is mentioned as author, or if not all mentioned authors delivered a significant contribution the author list is fraudulent. This accounts for all forms of scientific publications, but also for student projects such as papers, reports or other output of group work.

# 3. Scientific integrity as an attitude

# 3.1. Scientific integrity within the context of the Faculty of Science

#### 3.1.1. Correct use of a reference method

All sources need to be part of a literature list or bibliography in a consequent way. Based on this list sources should be traceable in a library or online. Additionally a reference to the literature list should be placed in the text itself.

An overview of different citations styles within different science domain is given in the Information Literacy Tutorial [TOLEDO, C-5573273-K].

#### 3.1.2. Citing or paraphrasing adequately

Paraphrasing means rewriting an idea of another author in own words. The source should be mentioned correctly, with reference to the literature list, even if only a couple of sentences are paraphrased.

Exceptionally text is literally copied from another author. In this case citation markers, usually quotation marks, should be placed. The copied text can also be italicized or marked in another way, to make clear that the text is not own work. It is important that a correct reference to the source is applied.

#### 3.1.3. Translating literally

The literal translation of text corresponds to citing (see 3.1.2).

#### 3.1.4. Using footage or data of another author

Using other authors' pictures, figures, graphs, tables, schemes or other footage requires the mention of a source. This is usually done in the caption with reference to the bibliography.

A correct reference is also obligatory when using other people's data. It should be clear where the data come from and where the data is available. Principles for citing data correctly can be found at <a href="http://www.force11.org/group/joint-declaration-data-citation-principles-final">http://www.force11.org/group/joint-declaration-data-citation-principles-final</a>.

Republishing footage or data under copyright requires permission by the original author (also in master's and PhD theses). A clear procedure for doing this is mentioned at <a href="http://www.imperial.ac.uk/research-and-innovation/support-for-staff/scholarly-communication/open-access/theses/reproducing-published-works">http://www.imperial.ac.uk/research-and-innovation/support-for-staff/scholarly-communication/open-access/theses/reproducing-published-works</a>.

Make sure that own data is archived properly. More information on archiving data at <a href="http://bib.kuleuven.be/onderzoek/research-data-management/afronden">http://bib.kuleuven.be/onderzoek/research-data-management/afronden</a>.

#### 3.1.5. Referring to online sources

Static sources take precedence over dynamic sources. However, in some cases a dynamic online source can be used, for example when no static alternative is available. The url and the date on which the url was visited should be added in the reference.

A dynamic source can initially lead towards static sources. After all, a dynamic source is not verifiable on a longer term.

#### 3.1.6. Reusing previous own work

When using previous own work (publication, report, thesis ...) a reference should be placed.

#### 3.1.7. Referring to primary and secondary sources

Primary sources should be consulted and added to the reference list where possible. Secondary sources (e.g. review articles) should be mentioned if a relevant contribution is made to the own work.

#### 3.1.8. Materials and methods

'Materials and methods' may be paraphrased of the original text, but the source should be mentioned correctly. Implementation differs between different domains and research groups.

#### 3.1.9. Reproducibility and repeatability

Reproducibility and repeatability are important aspects of scientific integrity.

"Repeatability or test—retest reliability is the closeness of the agreement between the results of successive measurements of the same measurand carried out under the same conditions of measurement. In other words, the measurements are taken by a single person or instrument on the same item, under the same conditions, and in a short period of time." [Source: <a href="http://en.wikipedia.org/wiki/Repeatability">http://en.wikipedia.org/wiki/Repeatability</a>, consulted on 11 September 2018]

"Reproducibility is the closeness of the agreement between the results of measurements of the same measurand carried out with same methodology described in the corresponding scientific evidence. In other words, a particular experimentally obtained value is said to be reproducible if there is a high degree of agreement between measurements or observations conducted on replicate specimens in different locations by different people—that is, if the experimental value is found to have a high precision." [Source: http://en.wikipedia.org/wiki/Reproducibility, consulted on 11 September 2018]

#### 3.1.10. Making author lists

When drafting an author list for a publication the guidelines of the journal and the modus vivendi within the research domain should be taken into account. In any case a mutual agreement between the authors is necessary, all authors who delivered a significant contribution should be mentioned and all mentioned authors should have delivered a significant contribution. See also 2.2. Authors rights.

#### 3.1.11. Using didactic material

Exchanging notes of lectures for own use is ok, but selling notes is prohibited. Also copying and spreading course material is not allowed [Regulations on Education and Examinations Article 98 §4].

Making video or sound recordings or pictures of a lecture is not allowed unless if this is explicitly allowed by the lecturer and for own use [Regulations on Education and Examinations Article 98 §3].

#### 3.2. Examples

A link between seed dormancy and flowering time, two important transitions in a plant's life cycle, was revealed in the work of Huo et al. (2016).

Huo et al. (2016) claimed to have found a "previously unknown linkage between two critical developmental phase transitions".

This description was found at Wikipedia [4] on Lorenz equations. In literature list: [4] wikipedia: Lorenz system [http://en.wikipedia.org/wiki/Lorenz\_system] consulted on 7 December 2017.

In this chapter we will follow the approach of Jürgen Neukirch's *Algebraic Number Theory*, see [24, VII Section 6].

In the present chapter, based on joint work [42] with Pavel Bleher, we consider the normal matrix model with cubic plus linear potential.

Several authors have used depth in the context of classification. Christmann and Rousseeuw [6] and Christmann et al. [7] applied regression depth. The maximum depth classification rule of Liu [11] was studied by Ghosh and Chaudhuri [15] and extended by Li et al. [17]. Dutta and Ghosh [19] used projection depth.

The following proof is a modification of an idea first used by G. Freud in [5, Thm. 2.1].

# 3.3. Stakeholders and their responsibilities

Students	Have the end responsibility for example for a plagiarism-free report.		
	<ul> <li>Inform themselves on irregularities and plagiarism.</li> </ul>		
	Make an effort to deliver a relevant contribution to group work and		
	acknowledge the contribution of peers.		
Didactic teams	Inform themselves on the (faculty) policy on scientific integrity.		
	<ul> <li>Participate in professionalization initiatives on the theme.</li> </ul>		
	<ul> <li>Make 'plagiarism proof' assignments, in other words don't facilitate</li> </ul>		
	plagiarism e.g. by repeating the same assignments each year or		
	using te same parameters (see 4.2).		
	<ul> <li>Communicate the specific expectations of their courses to the students.</li> </ul>		
	<ul> <li>Lead students towards existing tools.</li> </ul>		
	Give adequate feedback.		
	<ul> <li>Play an exemplary role and guard their own scientific integrity, also in writing course material.</li> </ul>		
	<ul> <li>Report presumed irregularities (also mild cases) timely to the chair of the exam committee.</li> </ul>		
Promotors of bachelor's and	<ul> <li>Are alert for irregularities and plagiarism during the (writing) process.</li> </ul>		
master's theses	Give the necessary feedback to the students when detecting a risk		
	for plagiarism.		
	• Participate in professionalization initiatives on the theme.		
Master's thesis coordinators	<ul> <li>Screen Turnitin-reports of or delegate this, en assure the necessary follow-up (see 5.2.4.)</li> </ul>		

# Programme directors and OC-chairs

- Inform themselves on the (faculty) policy on scientific integrity.
- Make scientific integrity part of the programme action plan.
- Work out learning trajectories on information skills.
- Adjust and complete the faculty presentation on scientific integrity with relevant examples. Fit in this presentation within the programme in relevant courses.
- If necessary, initiate (additional) actions for lateral entrants and/or international students.

#### **Faculty and FPOC**

- Work out a detection plan and communicates this to the students.
- Appoints a faculty expert scientific integrity.
- Delivers material on irregularities and plagiarism, applied to the faculty, which can be used by didactic teams and programme responsibles.
  - An informative document that also explains the Turnitinprocedure and gives a link to tutorials.
  - An accessible and clear website (also with information on Turnitin)
  - A Powerpoint presentation about plagiarism and its consequences: a ppt which offers a point of departure and is adjustable with programme-specific information and examples.
- Offers professionalization initiatives on scientific integrity and plagiarism, complementary to the central offer.

# Facultary expert scientific integrity

- Delivers independent advice to the examination board about prevention, detection, seriousness and sanctions.
- Brings together a taskforce on scientific integrity if necessary.

# (Chairs of) examination boards

- Follow up on reported presumed irregularities and hear the involved lecturer and the student.
- Decide which sanction and/or prevention trajectory is suitable in correspondence to the exam regulations.

# 4. Prevention of irregularities

# 4.1. Informing students

Students are informed through several channels:

- Faculty presentation on scientific integrity
  - The faculty makes available a presentation in which basic concepts on scientific integrity are explained and different aspects of irregularities and plagiarism are covered.
     Programmes can add programme-specific information and examples.
     http://wet.kuleuven.be/sbook/wi/en/ppt
  - This presentation should be presented to students at the start of the programme, and during the first class of courses within the learning trajectories research and information skills.
- ECTS-files
  - o Information on examination modalities (e.g. open or closed book, allowed material ...) is given in the tab evaluation of the ECTS-file. Lecturers should keep this information up-to-date. The (P)OC monitors this.

## 4.2. Advance scientific integrity when designing assignments

A lecturer can take into account several aspects when designing assignments in order to stimulate students to work in a scientific integer way. Some tips [from the document *Wetenschappelijk integriteit als doel in de preventie van plagiaat*, DUO, KU Leuven, December 2010]:

- Provide variable and challenging assignments
- Give clear instructions
- Ask or provide 'unique' elements
- Make sure that students have sufficient time to do the assignment, ask for intermediate products with their own deadlines
- Ask a meta-analysis
- Use the assessment moment

## 4.3. Learning trajectories research and information skills for students

#### 4.3.1. Research and information skills

Examples of research skills:

- Formulating research questions and scientific problem statements
- Setting up hypotheses
- Building evidence and reasoning
- Designing and initiating experiments
- Planning, implementing and performing a research project
- Processing, interpreting and commenting on research results in a critical way
- Reporting research results
- Reflecting on research methods and results
- Taking into account deontological behaviour rules

Examples of information skills:

- Knowing and being able to distinguish information sources (internet, library, journals, databases ...)
- Formulating searches (search terms, from subject to problem statement, search platforms ...)
- Review information (usability, reliability ...)
- Using information correctly (citing, referring, plagiarism ...)

The Faculty of Science wants her students to be able to develop these skills in a gradual way in logical learning trajectories throughout their education. Moreover, the faculty wants to educate her students to become integer, critical thinking scientists step by step.

### 4.3.2. Certificate information skills

The faculty wants students to obtain a certificate information skills during the course of their bachelor's or master's programme based on an online tutorial. The Information Literacy Tutorial [TOLEDO, C-5573273-K] is recommended. This tutorial has been developed by Campus Library Arenberg and is integrated in Toledo. All students and lecturers of the Science and Technology Group have access to this tutorial. If a lecturer or staff member does not have access you can mail to <a href="mailto:onderwijs.cba@kuleuven.be">onderwijs.cba@kuleuven.be</a>. Each programme can decide to use another equivalent tutorial.

It is recommended to link acquiring the certificate to a course within the learning trajectory information skills. Having the certificate is a condition for submitting the bachelor's and master's thesis.

#### 4.3.3. Other building blocks for the learning trajectories research and information skills

- Tips to work in a methodological correct way: http://www.kuleuven.be/english/education/plagiarism/prevention
- Facultary presentation about scientific integrity: <a href="http://wet.kuleuven.be/sbook/pptwi">http://wet.kuleuven.be/sbook/pptwi</a>
- Writing aid ILT: <a href="http://ilt.kuleuven.be/schrijfhulp">http://ilt.kuleuven.be/taalcoaching/english</a>

#### 4.3.4. Example of a learning trajectories research and information skills

#### Master of mathematics

- First Master Phase:
  - G0S01A Mathematics of the 21st century

The students prepare an individual report of one of the lectures of the first term. The report should also contain additional material which was not given during the lecture.

The students will be organized in small teams of 2-3 students and each team gives a presentation of one hour about a subject from a list of subjects. Each presentation contains a description of the problem, a number of mathematical aspects and the impact for other sciences and (possibly) for society.

- Second Master Phase:
  - o G0K97A Master thesis
  - G0U69A Student seminar in mathematics

The students will also learn how to present research work to other researchers. To this end, they will synthesize the results of a selected research project or article in a seminar talk to fellow students as well as more advanced researchers.

#### 4.4. Offer for lateral entrants

Also lateral entrants, students who for instance did not study their bachelor at KU Leuven, need to acquire the certificate information skills in order to be allowed to submit their bachelor's or master's thesis. This can be linked to a course in preparatory or bridging programmes. To support lateral entrants optimally, the faculty will organise a session on information skills regularly in cooperation with the Campus Library Arenberg.

# 4.5. Workshops and courses for staff

KU Leuven offers several relevant workshops and online courses, e.g. about integrating research in education, or guiding master's theses. <a href="http://www.kuleuven.be/onderwijs/professionalisering">http://www.kuleuven.be/onderwijs/professionalisering</a>

There is also an online course about scientific integrity for researchers at KU Leuven: http://www.kuleuven.be/english/research/integrity/training/lirics.

The faculty anticipates on certain topics and questions by organising ad hoc information sessions. The facultary expert scientific integrity can be contacted for this.

http://wet.kuleuven.be/sbook/wi/en

# 5. Detection of irregularities

#### 5.1. Clear agreements and communication

The detection of plagiarism can be a part of the prevention of plagiarism. This means that the lecturer can still remedy the student during the learning process, before the students submit a final piece of work.

The difference between prefinal and final versions of assignments therefore needs to be clarified:

- Prefinal versions: detection of plagiarism is a part of the learning process;
- Final versions: all cases of irregularities or plagiarism need to be reported to the examination board by the lecturer or teaching assistant, to initiate the procedure (see 6.1.2). This also accounts for light cases.

Each didactic team need to clarify and explicit how this difference is made and communicate to all students what the consequences of plagiarism detection are.

#### 5.2. Using Turnitin

#### *5.2.1.* What is Turnitin?

**Turnitin does not detect plagiarism** but detects similarities with existing material.

Moreover Turnitin cannot detect everything: some sentences or formulations exist in many articles and sentences can be adjusted in order to be undetectable. Interpretation is therefore crucial when evaluating a Turnitin-report.

#### 5.2.2. Use of Turnitin by students

Students do not have standard access to Turnitin, but lecturers can give them access to Turnitin reports (see <a href="http://wiki.associatie.kuleuven.be/toledopedia/img">http://wiki.associatie.kuleuven.be/toledopedia/img</a> auth.php/TII Scenario 05.pdf) (in Dutch).

Overall it is not recommended, as students could by-pass a 'bad' report, but in some cases it can be useful to give students extra feedback. If students have access to Turnitin, it is important that uploaded preliminary versions of documents are not kept in the database of Turnitin, to avoid extreme high similarity indices when uploading a final version. This should be checked during the initiation of a Turnitin assignment.

If a preliminary version does get saved in the database and influences the final Turnitin report, it is still possible to exclude this source so that the 'real' similarity index can be determined. See <a href="http://wiki.associatie.kuleuven.be/toledopedia/img">http://wiki.associatie.kuleuven.be/toledopedia/img</a> auth.php/TII Scenario 08.pdf (in Dutch).

#### 5.2.3. Use of Turnitin by didactic teams

Lecturers and teaching assistants can screen documents with Turnitin within an existing course Toledo environment, or within a self-made community.

Uploading documents: Documents > '+' > 'Assessments' > 'Turnitin Assignment'

- Consulting and downloading Turnitin reports: Control panel > 'Evaluation' > 'Turnitin Assignments'
- More information and tutorials: http://wiki.associatie.kuleuven.be/toledopedia/index.php/Turnitin Assignment

It is of high importance that a Turnitin report is thoroughly interpreted. A high similarity index does not necessarily indicate plagiarism, a low index does not necessarily means that there is no plagiarism.

#### 5.2.4. Systematic electronic screening of master's theses

Since the second examination period of 2015-2016 all master's theses at KU Leuven are screened by Turnitin. This is coordinated centrally and is organised within our faculty in a Toledo community to which the master's thesis coordinator has access. The central services upload the master's theses here, and Turnitin reports are generated. The master's thesis coordinator is responsible for screening these reports or delegating this process. There is no standard procedure for this, but in any case interpretation needs to be done carefully. A high similarity index does not necessarily indicate plagiarism, a low index does not necessarily mean that there is no plagiarism.

#### 5.3. Detection of other irregularities

Assessors, exam supervisors or lecturers can catch students when they commit an irregularity or can suspect irregularities. University wide rules and guidelines to deal with such cases are applicable.

Whether an irregularity is the consequence of a conscious choice by the student(s) or not and whether the involved student(s) have benefit from the irregularity, is irrelevant at the moment of the observation.

#### 5.3.1. Assessing an exam after observing an irregularity

See <a href="http://www.kuleuven.be/onderwijs/associatienet/faqoer/ER1215\_08">http://www.kuleuven.be/onderwijs/associatienet/faqoer/ER1215\_08</a> (in Dutch)

#### 5.3.2. Guidelines for assessors and exam supervisors

Assessors: <a href="http://www.kuleuven.be/onderwijs/associatienet/faqoer/vraagER28\_01">http://www.kuleuven.be/onderwijs/associatienet/faqoer/vraagER28\_01</a> (in Dutch) Exam supervisors: <a href="https://wet.kuleuven.be/personeel/intern/guidelines-for-supervisors.pdf">https://wet.kuleuven.be/personeel/intern/guidelines-for-supervisors.pdf</a>

# 6. Sanctioning irregularities

#### 6.1. Sanctioning plagiarism

#### 6.1.1. Seriousness of plagiarism

Within the procedure of sanctioning plagiarism, the examination board will take into account three criteria to determine the seriousness of, and the penalty for, plagiarism: (1) the nature of plagiarism, (2) the extent of plagiarism, (3) the experience in research and information skills.

(see <a href="http://www.kuleuven.be/english/education/plagiarism/seriousness">http://www.kuleuven.be/english/education/plagiarism/seriousness</a>).

Intentions to commit plagiarism are not a formal criterion to determine the seriousness of plagiarism. However, if it is cristal clear that the student plagiarized intentionally (with the intention to defraud), this will add to the seriousness of the plagiarism.

A university wide model scheme 'evaluation plagiarism' was developed to determine the seriousness of plagiarism: see annex 1 or <a href="http://www.kuleuven.be/onderwijs/plagiaat/intranet/modelschema-evaluatie-plagiaat">http://www.kuleuven.be/onderwijs/plagiaat/intranet/modelschema-evaluatie-plagiaat</a> (currently only in Dutch).

#### 6.1.2. Procedure in the case of plagiarism

Procedure KU Leuven: https://www.kuleuven.be/english/education/plagiarism/sanctioning:

- 1. The limited examinition board (chair, secretary, ombuds, if asked the facultary expert scientific integrity) will 'hear' the student.
- 2. The file is discussed on the counsel where the entire examination board is present, either in real life or virtually until a consensus is reached.
- 3. They will investigate whether the student really committed plagiarism and they will investigate the seriousness of the plagiarism based on three criteria: (1) the nature of the plagiarism, (2) the size of the plagiarism and (3) the experience of the student in research and information skills.
- 4. Afterwards, the examination board will discuss the penalty. If plagiarism was clearly committed intentionally and with the intention to defraud this will add to the seriousness and thus the penalty.
- 5. The examination board will inform the student about their decision (Dutch template on <a href="http://www.kuleuven.be/onderwijs/plagiaat/intranet/sjabloon-fraudebeslissing.docx">http://www.kuleuven.be/onderwijs/plagiaat/intranet/sjabloon-fraudebeslissing.docx</a>).
- 6. The student has the opportunity to appeal against the examination board's decision until five days after the announcement of the examination results. If the board decides that it was plagiarism, 'OR' (for irregularity) will be noted in the files of the student.

#### 6.1.3. Possible penalties in the case of plagiarism

The Education and Examination Regulations provide seven possible penalties for examination fraud, of which plagiarism is a part:

- 1. The faculty determines a deadline to edit and re-submit the student's paper;
- 2. The student gets a reduced grade for the paper;
- 3. The students gets a zero grade for the paper or the course the paper is part of;
- 4. The student gets a zero grade for multiple or all exams in the concerning examination period;
- 5. Rejection for one or more courses in the concerning examination period: the student will get a zero grade for those courses and cannot re-do his/her exam;
- 6. Rejection from a programme: the student will get a zero grade for every course in the concerning examination period and will not be allowed to continue for the rest of the academic year;
- 7. Rejection without being allowed to re-register: the student cannot enroll in any programme from KU Leuven for one or two years.

To make sure the link between the judgement on seriousness and the penalty is done in a uniform way, the Faculty of Science formulates the following recommendation:

SUM SCORE SERIOUSNESS (SEE ANNEX 1)	RECOMMENDED PENALTY (SEE 6.1.3)	
3	(self-study) training; penalty 1; penalty 2	
4	penalty 1; penalty 2; penalty 3a	
5	penalty 2; penalty 3a; penalty 3b	
6	penalty 3a; penalty 3b; penalty 4	
7	penalty 3b; penalty 4; penalty 5	
8	penalty 4; penalty 5; penalty 6	
9	penalty 5; penalty 6; penalty 7	

# 6.2. Sanctioning irregularities detected during an assessment activity

#### 6.2.1. Procedure in the case of irregularities detected during an assessment activity

"The examiner informs the chair of the examination committee as soon as possible about every irregularity detected during an assessment activity that could affect the decision of the examination committee. The select examination committee investigates the severity of the irregularity, hears the student and forms a proposal on the penalty and/or on whether or not to implement a prevention plan. In accordance with article 75, the select examination committee can also invite other people.

For irregularities relating to possible plagiarism, the select examination committee preferably consults with the faculty expert on plagiarism. The final decision on discipline regarding examinations is an independent decision of the examination committee.

Pending the decision of the examination committee, the students concerned can finish the examinations of the examination period concerned, including the examination in question, but, if necessary, after the confiscation of the items and the copy of the examination under dispute.

The select examination committee can decide, in consultation with the examiner, to convene the examination committee early.

### Special arrangement for incoming exchange students

After hearing the parties concerned, the select examination committee and the exchange coordinator compile a file containing at least the results obtained at KU Leuven and a proposed penalty. This file will allow the examination committee responsible in the home university to make a final decision on a penalty in accordance with the established rules of the home university.

The exchange coordinator contacts the exchange student's home university and discusses the further progress and the conclusion of the exchange."

[OER Artikel 85]

6.2.2. Penalties in the case of irregularities detected during an assessment activity Zie http://www.kuleuven.be/education/regulations/2018#art86.

# 7. Contact and overview of interesting links

# 7.1. Faculty expert scientific integrity

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#### 7.2. Interesting links

- http://wet.kuleuven.be/sbook/wi/en
- <a href="http://www.kuleuven.be/onderwijs/plagiaat">http://www.kuleuven.be/onderwijs/plagiaat</a>
   <a href="http://www.kuleuven.be/english/research/integrity">http://www.kuleuven.be/english/research/integrity</a>
- http://www.kuleuven.be/education/regulations/2018
- http://www.kuleuven.be/onderwijs/associatienet/auteursrecht/bescherming-eigen-werk
   (in Dutch)
- http://admin.kuleuven.be/sab/jd/en/sv reglement auteursrechten EN.html
- <a href="http://www.force11.org/group/joint-declaration-data-citation-principles-final">http://www.force11.org/group/joint-declaration-data-citation-principles-final</a>
- <a href="http://www.imperial.ac.uk/research-and-innovation/support-for-staff/scholarly-communication/open-access/theses/reproducing-published-works">http://www.imperial.ac.uk/research-and-innovation/support-for-staff/scholarly-communication/open-access/theses/reproducing-published-works</a>
- <a href="http://ilt.kuleuven.be/schrijfhulp">http://ilt.kuleuven.be/schrijfhulp</a> (in Dutch)
- http://www.kuleuven.be/onderwijs/professionalisering
- <a href="http://www.kuleuven.be/english/research/integrity/training/lirics">http://www.kuleuven.be/english/research/integrity/training/lirics</a>
- <a href="http://wiki.associatie.kuleuven.be/toledopedia/img">http://wiki.associatie.kuleuven.be/toledopedia/img</a> auth.php/TII Scenario 05.pdf (in Dutch)
- http://wiki.associatie.kuleuven.be/toledopedia/img\_auth.php/TII\_Scenario\_08.pdf (in Dutch)
- http://wiki.associatie.kuleuven.be/toledopedia/index.php/Turnitin Assignment (in Dutch)
- <a href="http://www.kuleuven.be/onderwijs/associatienet/faqoer/ER1215\_08">http://www.kuleuven.be/onderwijs/associatienet/faqoer/ER1215\_08</a> (in Dutch)
- http://www.kuleuven.be/onderwijs/associatienet/faqoer/vraagER28 01 (in Dutch)
- http://www.kuleuven.be/onderwijs/traject/intranet/documentatie/fraude (in Dutch)

# ANNEX 1: Recommended link between the judgement on seriousness of plagiarism and the penalty

based on the KU Leuven scheme at <a href="http://www.kuleuven.be/onderwijs/plagiaat/intranet/modelschema-evaluatie-plagiaat">http://www.kuleuven.be/onderwijs/plagiaat/intranet/modelschema-evaluatie-plagiaat</a> (in Dutch)

	Laag niveau	Tussenniveau	Hoogniveau
Omvang van het plagiaat	Score 1	Score 2	Score 3
Omvang of proportie van het werkstuk dat niet van de student zelf afkomstig is. / De mate waarin de evaluatie van de eigen bijdrage van de student in het gedrang gebracht wordt	Zeer beperkte omvang. Bv Enkele zinnen, een paragraaf, een (kleine) grafiek of tekening - Enkele instructies van computercode	Omvang is substantieel maar nog klein in verhouding tot het totaal van de eigen bijdrage. Bv.  - Twee of drie paragrafen of een deel van een achtergrondbeschrijving die niet essentieel is in de eigen bijdrage (bv. beschrijving van de werking van een te onderzoeken softwarepakket kopiëren van een website)  - Enkele modules van computercode	Omvang is substantieel en de essentiële bijdrage van het werk is gekopieerd waardoor de correcte beoordeling van de eigen bijdrage onmogelijk wordt.  Bv.  - Een aanwijsbaar deel van de eigen bijdrage is gekopieerd.  - De omvang van het gekopieerde deel is groot.  - Het aan zichzelf toeschrijven van de ideeën of het artistieke werk  - Meerdere pagina's of delen van tekst of grafische voorstellingen gekopieerd.
Ervaring van de student	Score 1	Score 2	Score 3
Heeft te maken met de verwachting dat de student zich bewust kan zijn van de ernst van zijn acties.	Er zijn duidelijke redenen om aan te nemen dat de student nog geen kennis heeft van wat plagiaat concreet inhoudt. Bv.  - Eerstejaarsstudent of zij-instroomstudent in het eerste semester van een masteropleiding  - Duidelijke verzachtende omstandigheden bv. geen eerdere toelichting over plagiaat, onduidelijke instructies, culturele aspecten bij Internationale studenten.	De student heeft reeds een basiskennis over plagiaat. Bv.  - De student heeft een preventietraject doorlopen.  - Studenten na hun eerste semester maar nog geen afstuderende of masterstudent  - Na het gevolgd hebben van een methodologisch opleidingsonderdeel of een opleidingsonderdeel waarbij een werkstuk gemaakt moet worden  - Na het gevolgd hebben van een sessie of opleiding over hoe plagiaat te vermijden/correct refereren	Er wordt van de student verwacht het concept academische integriteit volledig te begrijpen en er blijk van te geven Bv.  - De student heeft een preventietraject volledig doorlopen - Afstuderende of masterstudent, ervaren student - Bij recidive (na een eerdere waarschuwing of sanctie)
Aard van het plagiaat	Score 1	Score 2	Score 3
Aard van de inbreuk op de academische normen	Het plagiaat lijkt eerder het gevolg te zijn van het foutief toepassen van regels met betrekking tot citeren, dan van het ontbreken van referenties en citatietekens. Bv.  - Referenties of toeschrijven van werk is niet duidelijk of adequaat, of vertoont fouten  - Onbehoorlijk parafraseren	Ontbrekende referenties en citatietekens. Bv.  - Het werk van andere studenten ten dele overnemen  - Aandeel in groepswerk onjuist weergeven  - Fragmenten van websites, boeken of andere publicaties (ten dele) kopiëren zonder bronvermelding  - Recycleren van vroeger eigen werk	Gefabriceerde referenties Bv Verzonnen referenties of citaten - Gekochte werkstukken - Andermans werkstuk stelen

Sum score seriousness	Penalty (see 6.1.3)	Sum score seriousness	Penalty (see 6.1.3)
3	(self-study) training; penalty 1; penalty 2	7	penalty 3b; penalty 4; penalty 5
4	penalty 1; penalty 2; penalty 3a	8	penalty 4; penalty 5; penalty 6
5	penalty 2; penalty 3a; penalty 3b	9	penalty 5; penalty 6; penalty 7
6	penalty 3a; penalty 3b; penalty 4		