

Professional Skills for Scientists (C004519)

Course size *(nominal values; actual values may depend on programme)*

Credits 4.0

Study time 120 h

Course offerings and teaching methods in academic year 2024-2025

A (Year)	Dutch, English	Gent	group work	0.0h
			seminar	0.0h
			lecture	0.0h
			independent work	0.0h

Lecturers in academic year 2024-2025

Smet, Philippe	WE04	lecturer-in-charge
Caluwaerts, Steven	WE05	co-lecturer

Offered in the following programmes in 2024-2025

	crdts	offering
Master of Science in Teaching in Science and Technology(main subject Physics and Astronomy)	4	A
Master of Science in Physics and Astronomy	4	A
Master of Science in Physics and Astronomy	4	A

Teaching languages

English, Dutch

Keywords

scientific communication, scientific reporting, media training, scientific debating, applying for jobs, science after graduation, grant writing.

Position of the course

The following topics will be covered:

- Physics and society
- Scientific communication
- Active participation to panel debates
- Media awareness and use of social media
- Preparation for the job market.

Contents

1. The lectures will focus on:

- (a)The role of physics in society and global challenges
- (b)Different formats of scientific communication
- (c)Overview and preparation towards the job market (e.g. overview of funding sources, CV writing)
- (d)Public communication (e.g. use and awareness of social media, communication to target groups)

2. The practical exercises comprise:

- (a)Active participation to panel debates with preparatory work
- (b)Writing of a press text dealing with physics
- (c)Job vacancy search and application (CV + cover letter)

The teaching activities will be followed by an info session on 'Physicists on the job market', where alumni physics share their experience.

Initial competences

Basic physics (Bachelor level)

Final competences

- 1 The student will have gained knowledge and understanding of the role of physics in society and global challenges.
- 2 Students will know and gain experience in writing a job application letter and a CV, and acquire know-how to match with specific job vacancy.
- 3 Students will be able to communicate orally (with written preparation) personal statements in a scientific manner and defend them during a debate.
- 4 Students will frame a physics topic within a broader scientific, but also societal and socio-economic context, using literature from the different domains.
- 5 Students will communicate scientific research to a broader audience by means of a press release (of a physics topic).

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Group work, Seminar, Lecture, Independent work

Extra information on the teaching methods

This course comprises lectures, as well as interactive seminars (panel discussion in debate format) and autonomous assignments (writing a press text, a CV and an application letter).

Study material

Type: Slides

Name: Slides

Indicative price: € 5

Optional: no

Language : English

Number of Slides : 100

Available on Ufora : Yes

Online Available : Yes

Available in the Library : No

Available through Student Association : No

Additional information: 5 euros is for the cost of printing the slides (which is not compulsory). Slides are also available digitally.

References

Course content-related study coaching

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment with open-ended questions

Examination methods in case of periodic assessment during the second examination period

Written assessment with open-ended questions

Examination methods in case of permanent assessment

Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Calculation of the examination mark

- 25% Skills test
- 75% Continuous assessment and assignments.