Graduate School of Life Sciences PhD Course Guide





PhD Course Guide







PREFACE

Dear PhD candidate,

Obtaining your PhD involves more than just conducting a research project. It is also a time during which you can develop, improve, or refine your academic and transferable skills. The combination of research capabilities and individual skills will prepare you for a promising career beyond the borders of Utrecht University.

We hope that this PhD Course Guide will provide you with an overview of the numerous options available for self-development. We have compiled several courses and events that may be of interest to you. Most of the courses are organised by the PhD Course Centre, while others are offered by different departments or organisations at the Utrecht Science Park. Next to that the 15 PhD programmes also organise courses and events. We are aware that the courses included in this guide represent only a selection of what is available.

The PhD Course Guide has been created with great pleasure and accuracy. However, please note that courses may undergo changes in the coming months. Course names may change, and the content and availability of courses may also change. Always refer to the website of the course organisation for the latest updates and final information.

We wish you an inspiring PhD journey!

The PhD Course Centre Team

Colophon



Course schedule

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Table of content

| 1 | A short history of doctoral education in the Netherlands | 2 |
|---|--|------|
| | 1.1 Graduate School of Life Sciences & PhD Course Centre | 3 |
| 2 | The doctoral training programme at the GSLS | 4 |
| | 2.1 PhD Competence Model | 5 |
| | 2.2 PhD programmes | 8 |
| | 2.3 Training and Supervision Agreement (TSA) | 9 |
| | 2.4 PhD Training Portfolio and GSLS Training Certificate | 10 |
| | 2.5 Compulsory training | 11 |
| 3 | Interview | 12 |
| 4 | Courses | 14 |
| | 4.1 Competence area: Research Skills and Knowledge | 15 |
| | Introduction to R for Life Sciences | - 16 |
| | Introduction to Python for Life Sciences | 17 |
| | Introduction to the Command Line | 18 |
| | Introduction to Research Data Management | 19 |
| | Bring Your Own Data: create figures in Python | 20 |
| | Bring Your Own Data: create figures in R using ggpl <mark>ot2</mark> | 21 |
| | Bring Your Own Data: R-coding for analysing RNA-seq data | 22 |
| | Bring Your Own Data: analysing Metagenomics | 23 |
| | Introduction to Epidemiology | 24 |
| | Introduction to Statistics | 25 |
| | Introductory Biostatistics for Researchers | 26 |
| | Modern Methods in Data Analysis | 27 |
| | Study Design in Etiologic Research | 28 |
| | (ourses ottered by the Utrecht University Library | 20 |

| <text></text> | | | |
|--|--------|---|--|
| Responsible Conduct of Research - Year 1 Responsible Conduct of Research - Year 2 Responsible Conduct of Research - Year 3 Responsible Conduct of Research - Year 4 3. Competence area: Communication Academic Writing 1 - Composing an Excellent Academic Text Academic Writing 2 - Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator Adobe Illustrator Adobe InDesign - from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 3.4 Competence area: Teaching Which supervising course fits me best? Supervising MSC students - Starter Kit Supervising Research of MSC Students Start to Teach 4.5 Competence area: Leadership and Management Research Planning and Time Management 4.6 Competence area: Personal Effectiveness Balance - Coping with Stress and Pressure Autonomy - Increase your Resilience Coping with Delay and Procrastination Mindfulness Psychological Flexibility Focus Like a Pro Courses Offered in the Development Guide 5. Jourses offered in the Development Guide Mund Development during your PhD Track Courses offered by Career Services Biobusiness Summer and Winter School | vents | | |
| Responsible Conduct of Research - Year 1 Responsible Conduct of Research - Year 3 Responsible Conduct of Research - Year 3 Responsible Conduct of Research - Year 3 Responsible Conduct of Research - Year 4 4.3 Competence area: Communication Reademic Writing 1 - Composing an Excellent Academic Text Academic Writing 2 - Writing a Scientific Paper with Impact Academic Writing 2 - Writing a Scientific Paper with Impact Academic Writing 2 - Writing a Scientific Paper with Impact Academic Writing 2 - Writing a Scientific Paper with Impact Academic Writing 2 - Writing a Scientific Paper with Impact Academic Writing 2 - Writing a Scientific Paper with Impact Academic Writing 2 - Writing a Scientific Paper with Impact Academic Writing 2 - Writing a Scientific Paper with Impact Acade InDesign Mobe InDesign - from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 4.4 Competence area: Teaching Which supervising course fits me best? Supervising MSC students - Starter Kit Supervising Research of MSc Students Start to Teach 4.5 Competence area: Leadership and Management Research Planning and Time Management Balance - Coping with Stress and Pressure Autonomy - Increase your Resilience Coping with Delay and Procrastination Mindfulness Paychological Flexibility Focus Like a Pro Course offered in the Development Guide 5.7 Competence area: Professional Development More Presonal Development Guide | | | |
| Responsible Conduct of Research – Year 1 Responsible Conduct of Research – Year 2 Responsible Conduct of Research – Year 3 Responsible Conduct of Research – Year 4 4. Competence area: Communication Rademic Writing 1 – Composing an Excellent Academic Text Academic Writing 2 – Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator – Scientific Artwork and Infographics Adobe InDesign Adobe InDesign – from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 4. Competence area: Teaching Mich supervising course fits me best? Supervising MSC students – Starter Kit Supervising Research of MSC Students Start to Teach 5. Competence area: Leadership and Management Autonomy – Increase your Resilience Daiance – Coping with Stress and Pressure Autonomy – Increase your Resilience Signey – Coping with Stress and Pressure Autonomy – Increase your Resilience Science Computing to Pressure Autonomy – Increase your Resilience Coping with Delay and Procrastination Mindfulness Psychological Flexibility Focus Like a Pro Courses offered in the Development Guide 5. Competence area: Professional Development | | | |
| Responsible Conduct of Research - Year 1 Responsible Conduct of Research - Year 2 Responsible Conduct of Research - Year 3 Responsible Conduct of Research - Year 4 4. Competence area: Communication Reademic Writing 1 - Composing an Excellent Academic Text Academic Writing 2 - Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator - Scientific Artwork and Infographics Adobe InDesign Adobe InDesign - from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 5. Competence area: Teaching Mich supervising course fits me best? Supervising Research of MSc Students Start to Teach 5. Competence area: Leadership and Management Research Planning and Time Management Autonomy - Increase your Resilience Coping with Stress and Pressure Autonomy - Increase your Resilience Coping with Delay and Procrastination Mindfulness Psychological Flexibility Focus Like a Pro Courses offered in the Development Guide 5. Competence area: Professional Development | | | |
| Responsible Conduct of Research - Year 1 Responsible Conduct of Research - Year 2 Responsible Conduct of Research - Year 3 Responsible Conduct of Research - Year 4 ACOMPETENCE area: Communication Academic Writing 1 - Composing an Excellent Academic Text Academic Writing 2 - Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator - Scientific Artwork and Infographics Adobe InDesign Adobe InDesign - from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Breaking Science Bublic speaking Act Ompetence area: Teaching Which supervising course fits me best? Supervising Research of MSc Students Start to Teach Actonext Exact Eadership and Management Actonext Exact Eadership and Management Autonomy - Increase your Resilience Roping with Delay and Procrastination Mindfulness Psychological Flexibility Focus Like a Pro Courses offered in the Development Guide | | | |
| Responsible Conduct of Research - Year 1 Responsible Conduct of Research - Year 2 Responsible Conduct of Research - Year 3 Responsible Conduct of Research - Year 4 4.3 Competence area: Communication Academic Writing 1 - Composing an Excellent Academic Text Academic Writing 2 - Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator - Scientific Artwork and Infographics Adobe InDesign Adobe InDesign - from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 4.4 Competence area: Teaching Which supervising course fits me best? Supervising Research of MSc Students Start to Teach 5.5 Competence area: Leadership and Management Research Planning and Time Management 4.6 Competence area: Personal Effectiveness Balance - Coping with Stress and Pressure Autonomy - Increase your Resilience Coping with Delay and Procrastination Mindfulness Psychological Flexibility Focus Like a Pro | 4.7 C | ompetence area: Professional Development | |
| Responsible Conduct of Research - Year 1 Responsible Conduct of Research - Year 2 Responsible Conduct of Research - Year 3 Responsible Conduct of Research - Year 4 4.3 Competence area: Communication Academic Writing 1 - Composing an Excellent Academic Text Academic Writing 2 - Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator - Scientific Artwork and Infographics Adobe InDesign Adobe InDesign - from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 4.4 Competence area: Teaching Which supervising course fits me best? Supervising MSC students - Starter Kit Supervising MSC students - Starter Kit Supervising Research of MSc Students Start to Teach 4.5 Competence area: Leadership and Management A.6 Competence area: Personal Effectiveness Balance - Coping with Stress and Pressure Autonomy - Increase your Resilience Coping with Delay and Procrastination Mindfulness Psychological Flexibility | С | ourses offered in the Development Guide | |
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| Responsible Conduct of Research – Year 1 Responsible Conduct of Research – Year 2 Responsible Conduct of Research – Year 3 Responsible Conduct of Research – Year 4 4.3 Competence area: Communication Academic Writing 1 – Composing an Excellent Academic Text Academic Writing 2 – Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator – Scientific Artwork and Infographics Adobe InDesign Adobe InDesign – from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 4.4 Competence area: Teaching Which supervising course fits me best? Supervising Research of MSc Students Start to Teach 4.5 Competence area: Leadership and Management Research Planning and Time Management 4.6 Competence area: Personal Effectiveness Balance – Coping with Stress and Pressure Autonomy – Increase your Resilience | | | |
| Responsible Conduct of Research – Year 1 Responsible Conduct of Research – Year 2 Responsible Conduct of Research – Year 3 Responsible Conduct of Research – Year 4 4.3 Competence area: Communication Academic Writing 1 – Composing an Excellent Academic Text Academic Writing 2 – Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator – Scientific Artwork and Infographics Adobe InDesign Adobe InDesign – from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 4.4 Competence area: Teaching Which supervising course fits me best? Supervising MSC students – Starter Kit Supervising Research of MSc Students Start to Teach 4.5 Competence area: Leadership and Management Research Planning and Time Management 4.6 Competence area: Personal Effectiveness Balance – Coping with Stress and Pressure Autonomy – Increase your Resilience | | | |
| Responsible Conduct of Research – Year 1 Responsible Conduct of Research – Year 2 Responsible Conduct of Research – Year 3 Responsible Conduct of Research – Year 4 4.3 Competence area: Communication Academic Writing 1 – Composing an Excellent Academic Text Academic Writing 2 – Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator – Scientific Artwork and Infographics Adobe InDesign Adobe InDesign – from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 44 Competence area: Teaching Which supervising course fits me best? Supervising Research of MSc Students Start to Teach 55 Competence area: Leadership and Management 66 Competence area: Personal Effectiveness Balance – Coping with Stress and Pressure | | | |
| Responsible Conduct of Research – Year 1 Responsible Conduct of Research – Year 2 Responsible Conduct of Research – Year 3 Responsible Conduct of Research – Year 4 4.3 Competence area: Communication Academic Writing 1 – Composing an Excellent Academic Text Academic Writing 2 – Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator – Scientific Artwork and Infographics Adobe InDesign Adobe InDesign – from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 4.4 Competence area: Teaching Which supervising course fits me best? Supervising MSC students – Starter Kit Supervising Research of MSc Students Start to Teach 4.5 Competence area: Leadership and Management 4.6 Competence area: Personal Effectiveness | | | |
| Responsible Conduct of Research – Year 1 Responsible Conduct of Research – Year 2 Responsible Conduct of Research – Year 3 Responsible Conduct of Research – Year 4 4. Acompetence area: Communication Academic Writing 1 – Composing an Excellent Academic Text Academic Writing 2 – Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator – Scientific Artwork and Infographics Adobe InDesign Adobe InDesign – from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking 4. Competence area: Teaching Which supervising course fits me best? Supervising MSC students – Starter Kit Supervising Research of MSc Students Start to Teach 4. Stanter Planning and Time Management | | | |
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| Responsible Conduct of Research – Year 1 Responsible Conduct of Research – Year 2 Responsible Conduct of Research – Year 3 Responsible Conduct of Research – Year 4 4.3 Competence area: Communication Academic Writing 1 – Composing an Excellent Academic Text Academic Writing 2 – Writing a Scientific Paper with Impact Adobe Illustrator Adobe Illustrator – Scientific Artwork and Infographics Adobe InDesign Adobe InDesign – from Dissertation Layout to Poster Design Analytic Storytelling Breaking Science Science Communication: Relevant and Clear The Art of Presenting Science Public speaking | | | |
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| Responsible Conduct of Research – Year 1 Responsible Conduct of Research – Year 2 Responsible Conduct of Research – Year 3 Responsible Conduct of Research – Year 4 4.3 Competence area: Communication Academic Writing 1 – Composing an Excellent Academic Text | | | |
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| Responsible Conduct of Research – Year 1 Responsible Conduct of Research – Year 2 Responsible Conduct of Research – Year 3 Responsible Conduct of Research – Year 4 | | | |
| Responsible Conduct of Research – Year 1 Responsible Conduct of Research – Year 2 Responsible Conduct of Research – Year 3 | | | |
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01

A short history of doctoral education in the Netherlands

For a long time, pursuing a PhD degree in the Netherlands was regarded as the first step on the ladder of an academic career. This view of a PhD as the start of an academic career was enforced by the status of a PhD candidate as an employee, rather than a student. This notion started to change in the 1980's, when we saw an educational reform in the Netherlands, in which education at the master level (at the time *doctoraal*) was reduced from three to two years. Because of this shortening of their study period, students were less well-trained in scientific and general skills than previous generations.

So, the scientific community felt that by the time these students started their PhD track they needed to catch up in these skills during their PhD period. To organise training in these skills, senior scientists working in the same field established so-called research schools, that offered training and education in both academic and personal skills.

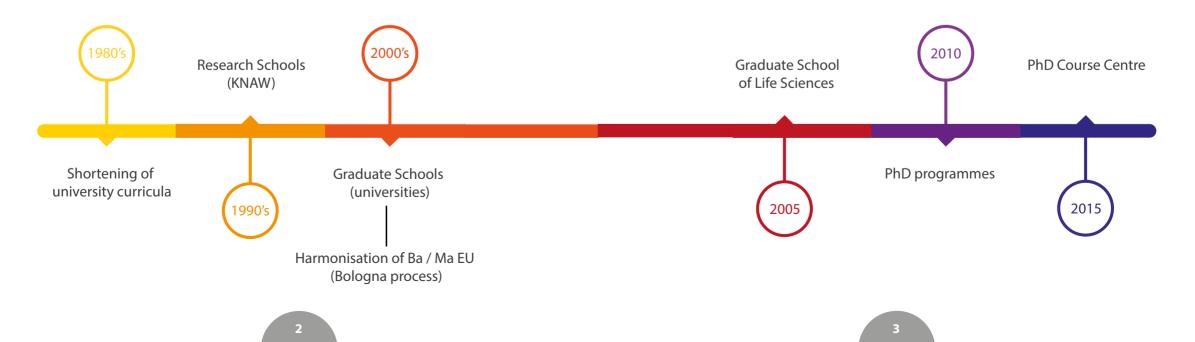
In the years 'oo these research schools were transformed into graduate schools, in which PhD (and research master) training and education was organised. This initiative coincided with developments in the EU, where Bachelor and Master education in EU countries was harmonised (the Bologna process). In this process, the PhD phase was recognised as the third cycle of academic education in the EU. As a result, gradually, also in the Netherlands, the PhD phase evolved partly from the first step in academic employment to the last step in academic education. In fact, a PhD candidate holds a dual position, embodying characteristics of both an employee and a student.

1.1 Graduate School of Life Sciences & PhD Course Centre

One of the Graduate Schools established at Utrecht University is the Graduate School of Life Sciences (GSLS). It was established in 2005 by incorporating various Life Sciences master's degree courses from the faculties of Veterinary Medicine, Science, and Medicine (UMC Utrecht). As a result, it became the first interfaculty Graduate School at Utrecht University. In 2010, disciplinary PhD programmes were added to the Graduate School of Life Sciences, which included training and courses in disciplinary knowledge and skills. Approximately half of these programmes were a continuation of existing local research schools.

In 2015, the PhD Course Centre was established to provide training and courses for the development of general academic and transferable skills. We take pride in our professional and dedicated pool of trainers, many of whom work at Utrecht Science Park, including the Department of Educational Development & Training (UU), Julius Center for Health Services and Primary Care (UMC Utrecht), the Communication Skills Academy of the Freudenthal Institute (Faculty of Science), the Utrecht Bioinformatics Centre, the UU Library and Career Services. Together with a pool of freelance trainers, they offer courses that are highly valued by PhD candidates and their supervisors, with an average rating of 8.3.

Currently, we have 15 PhD programmes and approximately 1,800 participants at the PhD Course Centre per year, and a total of over 2,000 PhD candidates distributed across three faculties and associated research institutes. Furthermore, these numbers continue to rise as we explore two additional PhD programmes, observe a growing number of PhD candidates, and witness a 20% increase in course participants at the PhD Course Centre each year.



The doctoral training programme at the GSLS

The main objective of your PhD journey at the GSLS is to evolve into an independent scientist through research, scientific training, and, for many of you, teaching. Our goal is to offer you an optimal environment for developing research skills and other competencies. In order to become a future Life Sciences academic, you need both specialised knowledge and expertise in a specific scientific field, as well as a critical academic mindset. Additionally, gaining insight and experience in other disciplines is crucial for working in an interdisciplinary setting. This means that upon completion of your PhD journey, you will not only produce a doctoral thesis, but also graduate as an individual equipped with specific academic skills and competencies. You will have transformed into a T-shaped professional with expertise in a particular scientific discipline, while also cultivating other essential transferable competencies.

The two sections below provide further details regarding the objectives and expected learning outcomes throughout your PhD journey.

Objectives of the PhD training programme

The objectives of the PhD training programmes are as follows:

- To equip you with practical and methodological knowledge and skills necessary for collecting, analysing, presenting, and discussing research data. This will enable you to contribute independent and original scientific work within the scope of your research project.
- To provide you with discipline-specific knowledge that enables you to read, discuss, and contribute to scientific literature within the field of your research project.
- To develop transferable skills (such as teaching, management, writing, presenting, teamwork, and grant application) that are essential for your future career, whether it be within a university or in other sectors of society.
- To foster awareness of the principles of open science and the responsibilities of scientists towards society. This includes emphasising the importance of conducting scientific practices with integrity.

These skills, when combined, will enable you to achieve the learning outcomes required for a PhD degree.

Learning outcomes for PhD candidates

In accordance with the Doctoral Degree Regulations of Utrecht University, the following learning outcomes are expected to be achieved upon completion of your PhD journey:

- You will have made an original contribution to academic research of a quality that can withstand peer review.
- You will have demonstrated the ability to independently apply academic methods relevant to your field for the development, interpretation, and implementation of new knowledge.
- You will have acquired and engaged with a substantial body of knowledge that encompasses, at minimum, the principles and methods of international academic practice, theory, methodology, and study within your discipline.
- You will possess the capability to design and execute a significant research project to generate new knowledge.
- You will be able to effectively transmit knowledge and methodologies from your discipline or specialisation.
- You will demonstrate social responsibility in conducting, applying, and utilising your own research.

Before providing you with an overview of the courses, this chapter will provide you with information regarding the PhD Competence Model, your Training and Supervision Agreement (TSA), PhD Training Portfolio, and compulsory training.

2.1 PhD Competence model

To enhance your academic and transferable skills, the Graduate School of Life Sciences provides a wide range of courses that are classified based on the PhD Competence Model. This model comprises a set of essential competencies that every PhD candidate should possess. In addition to academic skills, it places significant emphasis on personal development and career orientation. To assist you in identifying the skills and competencies you may wish to develop or improve, we strongly encourage you to undertake a self-assessment of competence development. This tool enables you to monitor your progress throughout your PhD journey. We recommend conducting this self-assessment on an annual basis as part of your preparation for your annual PhD progress meetings.

Each of the 15 PhD programme offers courses and events focused on discipline-specific research skills and knowledge, while the PhD Course Centre provides programme-wide courses tailored to developing additional academic and transferable competencies. Your PhD programme coordinator can provide you with information regarding the training opportunities offered within their specific programme. For up-to-date information on education programmes, please visit the website of the PhD Course Centre.

Competence areas of the PhD Competence Model



RESEARCH SKILLS & KNOWLEDGE

You should possess the ability to formulate clear research questions and hypotheses, as well as design robust research protocols. Researchers should demonstrate a deep understanding of their field, acknowledge the forthcoming challenges, and exhibit a broad scientific interest beyond their specific research area.



COMMUNICATION

You should demonstrate effective interpersonal, written, verbal, listening, and non-verbal communication skills, enabling you to convey facts, ideas, or opinions to colleagues, the general public, and the media in a clear and appropriate manner.

LEADERSHIP & MANAGEMENT

You should possess the skills to manage and develop project ideas, as well as facilitate effective teamwork

and problem-solving. Researchers should also be capable of mentoring others, such as students.



PERSONAL EFFECTIVENESS

You should be capable of adapting your personal qualities and behaviors to achieve improved outcomes.

RESPONSIBLE CONDUCT OF SCIENCE

You should demonstrate the capacity to make sound

ethical and legal decisions based on knowledge of

accepted professional research practices, relevant

policies, and guidelines. Researchers should be

aware of the available resources in the event of

You should be able to define learning outcomes for

the target audience and effectively and appropriately deliver the material in a motivational manner.

ethical or integrity concerns.

TEACHING



The PhD competence model describes the competencies that PhD candidates should develop during their PhD journey.







Self-assessment tool





PROFESSIONAL DEVELOPMENT

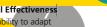
You are able to improve their transferable skills to

further their career prospects.

The skill to manage and develop project ideas as well as to facilitate effective team work including problem solving skills and mentoring skills.









Awareness of the resourc

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concerns arise.

2.2 PhD programmes

Training offered by GSLS PhD programmes

The GSLS consists of 15 thematic PhD programmes, each focused on a specific domain within the Life Sciences. The PhD programme provides education in research skills and knowledge relevant to your discipline. At the beginning of your PhD track, in consultation with your supervisory team, you will choose to join one of these programmes. We strongly recommend becoming part of the community of a PhD programme.

The PhD programme offers the following benefits:

- Participation in well-defined, high-quality, and in-depth thematic training, which includes courses, seminars, conference presentations, PhD candidate retreats, journal clubs, and opportunities to teach Master's students.
- Enhancement of your knowledge not only in your research topic but also in other exciting areas.
- Advice from the PhD programme coordinator regarding valuable courses in your research field.
- An active and inspiring PhD community, providing opportunities to connect with fellow PhD candidates, principal investigators, other researchers, and alumni.

For descriptions of the PhD programmes and their respective training programmes, please visit our website. You will also find contact details for each PhD programme coordinator who can provide further information about the specific training offered.

While it is possible to attend training from other GSLS PhD programmes, availability may be limited to those not belonging to the programme. Priority is given to PhD candidates within the programme.



PhD Programmes

2.3 Training and Supervision Agreement (TSA)

The Training and Supervision Agreement (TSA) is a standard agreement between the PhD candidate and the supervisory team, approved by the relevant PhD programme coordinator. The TSA serves as a contract that ensures your right to receive proper supervision, as well as appropriate training and education throughout your PhD journey.

The TSA includes the following information:

- The name of the PhD programme to which you have been admitted.
- The names of your supervisory team and independent advisor(s)/mentor(s).
- Your individual training plan, which outlines your intended training activities, such as thematic and general training sessions, as well as research-related meetings (please refer to the "Requirements PhD Training Portfolio" section for a list of specific requirements).
- The TSA form provides more detailed information about its contents. You can find the latest version of the form using the provided QR code. It is mandatory to submit the TSA to the Utrecht University-wide PhD registration system, MyPhD, within three months after starting your PhD journey.

The individual training plan is usually subject to adjustments throughout your PhD journey. It should be treated as a dynamic document and should be discussed during the annual PhD progress meeting. As your PhD progresses, it is common to modify your initial training plan, especially in relation to monitoring your development using the self-assessment tool and participating in annual PhD progress meetings.

Discipline-specific training and education are provided by your PhD programme. If space allows, you may also enroll in discipline-specific courses offered by other PhD programmes (with priority given to PhD candidates within that specific programme). For further information, please reach out to the respective PhD programme coordinator(s).



Training and Supervision Agreement (TSA)

2.4 PhD Training Portfolio and GSLS Training Certificate

Upon completing your PhD journey, you have the opportunity to apply for the GSLS Training Certificate, which serves as evidence of your active participation in doctoral training and the development of your personal competencies.

As a PhD candidate, it is your responsibility to gather documentation (certificates of attendance) for the training activities you have completed throughout your PhD journey. These documents form your PhD Training Portfolio, which must meet the requirements specified in the "Requirements PhD Training Portfolio" section, aligning with the TSA requirements. Your PhD programme coordinator, acting on behalf of the Board of Studies of the GSLS, will assess your PhD Training Portfolio and determine your eligibility for the GSLS Training Certificate. The certificate is typically awarded during your PhD defense ceremony. To request your Training Certificate, please submit an application form available on our website at least two months prior to your defense date.

Requirements for the PhD Training Portfolio

- Your training should encompass a minimum of 5 credits (according to the European Credit Transfer System (ECTS), where 1 credit is equivalent to 28 hours and 1.5 credits equal 1 week) for each full-time equivalent year of research appointment, which will typically span at least 3 years (resulting in a minimum of 15-20 ECTS credits in total).
- A minimum of 40% of the total credits should be dedicated to discipline-specific training and education.
- A minimum of 20% of the total credits should encompass training and education in general academic and personal skills.
- A maximum of 20% of the total credits may be attributed to symposia/conferences where you have served as an oral/poster presenter.



Request Training Certificate

2.5 Compulsory training

If you commenced your PhD journey after September 1st, 2020, training in research integrity and teaching (if you have any teaching tasks, including supervising students) is mandatory as part of your doctoral training. This requirement applies to all types of PhD candidates at Utrecht University and is based on the feedback from PhD candidates themselves, expressing a desire for better education in these areas. Both types of training should be included in your individual training plan outlined in the TSA.

Please note that the information provided here reflects the compulsory training requirements at the time of writing this PhD Course Guide. Utrecht University continually enhances its educational offerings, so it is advisable to consult the website of the PhD Course Centre for the most up-to-date information regarding compulsory training.

Research integrity

The GSLS organises the course Responsible Conduct of Research, which consists of a half-day training session each year of your PhD journey (totaling four sessions). In these trainings, various aspects of research integrity will be discussed, accompanied by a diverse range of case studies. You will have the opportunity to share your experiences with fellow PhD candidates. Attendance at all four sessions is mandatory for all GSLS PhD candidates, without exceptions. Even if your PhD duration is shorter than four years, you are still required to complete all four trainings. You can participate in the first training during your first year, the fourth training in your final year, and the second and third trainings at your convenience during the intervening years.

For further information about the courses related to research integrity, please refer to the "Responsible Conduct of Science" section under the Competence category.

Teaching

The GSLS, Utrecht University, and UMC Utrecht provide training for various types of teaching, such as teaching and supervising Master's students. You can choose a course that aligns with your specific teaching responsibilities. For instance, if you will be assisting during practicals or delivering lectures, you can participate in the "Start to Teach" course. If you will be supervising students, we offer both a starter kit course and an advanced course.

Additional details about the courses related to teaching can be found in the "Teaching" section under the Competence category.



Compulsory courses

03 Interview

"Studies show that many PhD students start their career orientation quite late"

Why is it good to be prepared for life after your PhD?

The statistics indicate that approximately 70% of PhD candidates leave the university after their graduation. That's a significant number. It means that, among your peers, two out of three will be searching for employment elsewhere. Therefore, it is beneficial to start exploring your future career early.

How can you properly orientate yourself?

There are several stages in the career orientation process. Of course, it starts with the realisation that your PhD track will soon come to an end, but you don't have a job lined-up. What should you do? Some will get a postdoc position or a permanent position. But this a not the majority. This can lead to feelings of uncertainty.

The first stage in your career process is reflection. Who am I? What do I want? What skills do I have to offer? The next step is to explore the job market and available

Interview with: Rutger-Jan Scholtens

At the UU since:

Position: Career Officer

Best thing about my job: What I really love is that I can contribute to the development of awareness, autonomy, and personal/ professional skills. I really appreciate meeting with PhD candidates, because they bring a lot of knowledge and skills that I can also lean on as a trainer during workshops.

positions. What types of roles are there? What organisations are hiring? This is an iterative process. Some of the information in this process will appeal to you, while other information may cause a feeling of resistance.

After reflection and orientation, the next step is to establish contact with potential employers or individuals working in organisations you may be interested in. This way, you can gain a better understanding of your own identity and aspirations. Sometimes, visiting a company can provide valuable insights into a particular job. The last step is to apply for a job.

Do you believe that PhD candidates prepare themselves well enough for this?

No. Studies also show that many PhD students start their career orientation quite late. This is not surprising considering the increasing workload as they progress in their PhD journey, with tasks such as finishing their research and writing. It leaves very little time for job orientation. In fact, two elements often converge here: the increased workload, and the uncertainty that keeps popping up. You really can't start early enough: orientate yourself in the first years of your PhD trajectory. But don't be too compulsive. There's no need to know everything right from the beginning.

What opportunities are available for PhD candidates outside the academic world?

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PhD students can still engage in research but outside the academic realm. There are many research institutes or R&D companies where they can still work as a scientist. The public sector offers various options, such as roles in education, government, or semigovernmental institutions related to energy or public transport, as well as in the NGO sector. The private sector provides opportunities in consulting, advisory services, or as freelancers. The healthcare sector also offers cross-border and cross-disciplinary initiatives.

Have you noticed any changes in the courses and training offered by Career Services in the past 5-10 years?

Not particularly. We have a comprehensive catalog that covers the various aspects I mentioned earlier, including self-reflection, career exploration, networking, job interviews, and resume writing.

I have observed that our workshop on selfanalysis is very popular. It addresses the existential questions I mentioned earlier. Many PhD students enroll in this course, while others may already have a good understanding of themselves and benefit more from networking sessions or interview preparation.

Which course do you believe every PhD candidate should take?

It may be a safe choice, but I would recommend the workshop on job market exploration and networking. As I mentioned earlier, 70% of PhD candidates will leave the university environment. It is crucial to have a clear understanding of available positions, companies, and sectors. However, you should also embark on a personal journey of discovery. Determine whether you prefer working for a small or large organisation, locally or internationally, and in a formal or informal work culture. These choices reflect your own aspirations and preferences.

What advice would you give to second or third-year PhD candidates?

I would advise dedicating some time to selfreflection and developing skills beyond the content of your research. It is up to you to determine when and how you do this. It could be half a day per week, one day every two weeks, or even a moment each month for personal reflection or skills training. You must schedule this in your agenda. These activities are not urgent, and they won't demand immediate attention, but they are crucial.

Moreover, you can accomplish a lot without physically being present at Utrecht Science Park. You can take online tests or watch animated videos on how to write letters or resumes. Start exploring online resources from the comfort of your home. Additionally, engage in face-to-face discussions with career coaches. Join workshops as part of a group to meet individuals who share similar questions, struggles, and interests. I also encourage students to connect with professionals in their desired fields. Participating in events can provide valuable networking opportunities. There is a wide range of activities available to you.



Career Services

04 Courses

Research skills and knowledge are essential for conducting rigorous and meaningful academic inquiry. At its core, research involves the systematic investigation and analysis of information in order for you to generate new knowledge and insights.

One of the key research skills is the ability to **formulate research questions** that are clear, specific, and relevant to your area of study. This involves a deep understanding of the existing literature and theoretical frameworks in the field, as well as the ability to identify gaps and opportunities for new research.

Another important skill is the ability to **design and implement appropriate research methods and techniques** to collect and analyse data. This may involve qualitative or quantitative methods, or a combination of both, depending on your research question and the nature of the data.

In addition, you must have a thorough understanding of **ethical considerations** and standards for research, including informed consent, privacy, and data protection.

Effective research also requires strong **critical thinking** and **analytical skills**, as well as the ability to interpret and **communicate findings** in a clear and concise manner. This may involve using statistical software or other tools to analyse data, and presenting findings through written reports, presentations, or other formats.

Ultimately, the ability to conduct rigorous and impactful research requires a combination of knowledge, skills, and expertise, as well as a commitment to continuous learning and professional development. By staying up to date with the latest developments in the field and engaging in ongoing research activities, you can contribute to the advancement of knowledge and the betterment of society as a whole.

Introduction to R for Life Sciences

Introduction to Python for Life Sciences



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4

Number of sessions

Total hours of

course participation

Total study time

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EC

Number of credits

Maximum numbe

of participants

Number of times

the course is

offered per year

TARGET AUDIENCE

This course is for anyone who wants to learn the basics of R and RStudio.

COURSE DESCRIPTION

Due to technological advances in molecular biology, research in the life sciences is becoming increasingly data rich. Analysing a large-scale dataset appropriately can be a limiting factor. R is a widely used and powerful software environment for statistical computing that provides a wide variety of libraries for data manipulation, modeling, and visualisation.

LEARNING OBJECTIVES

For many researchers, getting up and running with R can be a hurdle. In this course, we will give you an introduction to using R and R-studio for your data. We will look at data types and structures, functions, importing and manipulating data, plotting, making figures, and some basic statistics. But we will also learn some basic programming skills in R, such as flow control, writing functions, and packages/libraries.

TRAINER

The trainer is from the Utrecht Bioinformatics Center (UBC). The UBC performs Life Science research using big data analysis on DNA, genes, proteins, and cells. They also coordinate the different bioinformatics education activities at the Utrecht Science Park such as PhD courses.

> As a beginner in programming with R, everything was exciting. It is amazing how your learning curve is taking you to a higher point day by day

TARGET AUDIENCE

This course is for anyone who wants to learn the basics of Python.

COURSE DESCRIPTION

Nowadays, almost all disciplines in medical and biological sciences have to deal with an increasing amount of data. Microsoft Excel is frequently used to load and process such datasets. However, there are many examples where datasets become too large or structurally too complicated that another approach, using a programming language, becomes not only preferred but also essential.

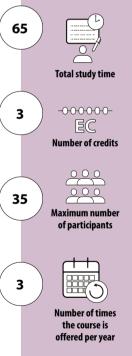






Total hours of course participation

Number of session



LEARNING OBJECTIVES

The aim of this course is to provide you with a basis in programming using Python. You will learn how to use basic functions and write scripts via the webbased computing platform Jupyter Notebook. You will become familiar with working with variables, lists, and dictionaries, making figures, opening/closing files, and obtaining data. The course is a combination of in-class lectures, selfstudy exercises, and hands-on Q&A sessions.

TRAINER

The trainer is from the Utrecht Bioinformatics Center (UBC). The UBC performs Life Science research using big data analysis on DNA, genes, proteins and cells. They also coordinate the different bioinformatics education activities at the Utrecht Science Park such as PhD courses.

> Surprised of how many Python skills can be learned in two weeks

Introduction to the Command Line

Introduction to Research Data Management



3

10

35

1.5

35

2

000

Number of sessions

Total hours of

course participation

Total study time

-0-0-0-0-0-0-

EC

Number of credits

Maximum numbe

of participants

Number of times

the course is offered per year

TARGET AUDIENCE

Anyone who would like to learn the basics of using the command line as the interface to operate a computer.

COURSE DESCRIPTION

An operating system is a complex suite of computer programmes that allows users to interact with the software and hardware of a computer. Although Microsoft's Windows is the most commonly used operating system on personal computers, there are alternatives such as Apple's macOS and free and opensource Unix-like operating systems. Linux, which is based on Unix, is particularly popular among bioinformaticians.

LEARNING OBJECTIVES

While the graphical interfaces of Linux systems are often intuitive, the textbased interface, known as the command line, can be intimidating. However, once you become familiar with the command line, you will find it to be efficient and powerful. This course will cover the basics of using the command line as the interface for operating a computer. We will delve into files and folders, search functions, and installing and running software.

TRAINER

The trainer is from the Utrecht Bioinformatics Center (UBC). The UBC performs Life Science research using big data analysis on DNA, genes, proteins and cells. They also coordinate the different bioinformatics education activities at the Utrecht Science Park such as PhD courses.



TARGET AUDIENCE

Anyone who wants to learn about proper management of research data.

COURSE DESCRIPTION

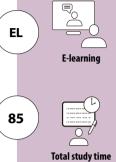
Proper management of research data is a requirement nowadays by funding agencies, publishers and academic institutions. This course provides you with the technical keys to understand how to model, structure and guery data. The benefits of having these skills are numerous: you gain a better insight on how to manage research data and comply this with research data management policies, you can store and re-use important data for computational experiments more efficiently, and you will be more aware of the current techniques available to make these tasks easier

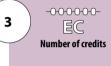
LEARNING OBJECTIVES

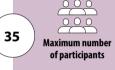
In this course we will focus on Research Data Management and databases, data and models, starting with MySQL and Workbench, structuring and querying data, storing and processing data with Python, and working with data repositories.

TRAINER

The trainer is from the Utrecht Bioinformatics Center (UBC). The UBC performs Life Science research using big data analysis on DNA, genes, proteins and cells. They also coordinate the different bioinformatics education activities at the Utrecht Science Park such as PhD courses.











hands on approach

Bring Your Own Data: Create figures in Python

Bring Your Own Data: Create figures in R using ggplot2



5

6

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1.5

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Number of sessions

Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-

EC

Number of credits

Maximum numb

of participants

Number of times

the course is

offered per year

TARGET AUDIENCE

Basic understanding of Python and Jupyter Notebook is required. If you do not have this yet, consider to take the course Introduction to Python for Life Sciences first.

COURSE DESCRIPTION

Sharing, presenting, and publishing life sciences results requires performing statistics and creating figures. A combination of large datasets, choosing the right statistical analysis, and the ability to code can make this challenging. With this course, we offer you the opportunity to Bring Your Own Data (BYOD) to create high-quality figures, including assistance in selecting the appropriate statistics to apply to your data.

LEARNING OBJECTIVES

All sessions are hands-on and supervised by an experienced trainer. You must bring processed data that is ready to be analysed to the course. The goal is for you to have generated a manuscript-ready figure by the end of the course. Additionally, you will gain valuable experience in creating additional figures. The course is a combination of in-class lectures, hands-on Q&A sessions, and working on your own data.

TRAINER

The trainer is from the Utrecht Bioinformatics Center (UBC). The UBC performs Life Science research using big data analysis on DNA, genes, proteins and cells. They also coordinate the different bioinformatics education activities at the Utrecht Science Park such as PhD courses.

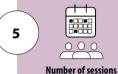
TARGET AUDIENCE

Basic understanding of R and R-studio is required. If you do not have this yet, consider taking the course Introduction to R for Life Sciences first.

COURSE DESCRIPTION

In this course we offer you the opportunity to Bring Your Own Data (BYOD) and learn how to use the R package ggplot2 to make high-quality figures. We will also assist you in choosing the correct statistics to apply to your data.





Hours per session

Total hours of

course participation

6

30

10

1.5

LEARNING OBJECTIVES

All sessions are hands-on and under the supervision of an experienced trainer. You need to bring processed data ready to be analysed to the course. The aim is that you have generated a manuscript-ready figure at the end of the course. In addition, you will have obtained valuable experience to generate additional figures. The course is a combination of in-class lectures, hands-on Q&A sessions and working on your own data.

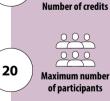


The trainer is from the Utrecht Bioinformatics Center (UBC). The UBC performs Life Science research using big data analysis on DNA, genes, proteins and cells. They also coordinate the different bioinformatics education activities at the Utrecht Science Park such as PhD courses.



Total study time

EC





Number of times the course is offered per year

Bring Your Own Data: R-coding for analysing RNA-seq data

Bring Your Own Data: Analysing Metagenomics



000

Number of sessions

Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-0-

EC

Number of credits

000

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Maximum number of participants

Number of times

the course is

offered per vear

5

6

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1.5

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TARGET AUDIENCE

Basic understanding of R and R-studio is required. If you do not have this yet, consider to take the course "Introduction to R for Life Sciences" first. In addition, the course will be easier to follow with some knowledge of the R package ggplot2. If you do not have this yet, consider taking the course Bring your Own Data: create figures in R using ggplot2.

COURSE DESCRIPTION

In this course, we offer you the opportunity to Bring Your Own Data (BYOD) and learn how to obtain results from processed RNA-seq data (count tables) using R. A combination of large data sets, performing the right statistics, the multitude of analysis options, and being able to code can be a challenge. You will become aware of the analysis steps needed to analyse RNA-seq data and make highquality, near-publication-ready figures.

LEARNING OBJECTIVES

All sessions are hands-on and under the supervision of an experienced trainer. You need to bring processed data ready to be analysed to the course. At the end of the course, you will have analysed your data set and generated a figure of your analysis results. The course is a combination of in-class lectures, hands-on Q&A sessions, and working on your own data.

TRAINER

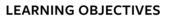
The trainer is from the Utrecht Bioinformatics Center (UBC). The UBC performs Life Science research using big data analysis on DNA, genes, proteins and cells. They also coordinate the different bioinformatics education activities at the Utrecht Science Park such as PhD courses.

TARGET AUDIENCE

Anyone who wants to explore their own metagenomics data step-by-step guided by experienced trainers.

COURSE DESCRIPTION

Metagenomics enables us to study the distribution and dynamics of the microbial world. Since sequencing has become more affordable and has high throughput, the amount of raw data has increased tremendously. To investigate these datasets, many different methods are available to address different questions. During this course, you will have the opportunity to explore your own metagenomics data step-by-step, guided by an experienced trainer. You need to bring processed data ready to be analysed to the course.



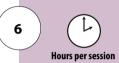
In this course, you will gain knowledge about available statistical methods, learn different visualisation options, work with metagenomics-specific statistics, and compare your data with public databases.

TRAINER

The trainer is from the Utrecht Bioinformatics Center (UBC). The UBC performs Life Science research using big data analysis on DNA, genes, proteins and cells. They also coordinate the different bioinformatics education activities at the Utrecht Science Park such as PhD courses.

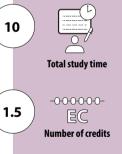








Total hours of course participation



20 Maximum number of participants



Number of times the course is offered per year

22

Introduction to Epidemiology

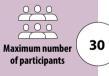
Introduction to Statistics





Total study time







2

Number of times the course is offered per year

TARGET AUDIENCE

The course is open for participants who want to get an introduction in the basic terminology and principles in epidemiology. The course is organised by the Julius Center, UMC Utrecht. There are 15 free spots for GSLS PhDs.

COURSE DESCRIPTION

This course provides insight into the basic terminology and principles used in epidemiology. It will begin by covering the history and design of epidemiological research, as well as different measures of frequency and association. Additionally, the principles of bias and confounding will be addressed. In the second part of the course, various fields of epidemiological research covered at the UMC Utrecht and Utrecht University will be presented.

LEARNING OBJECTIVES

By the end of the course, you will be able to apply different measures of frequency, association, and impact commonly used in epidemiological research, and calculate these measures using simple numerical examples. You will also be able to distinguish between, explain, and apply different aspects of epidemiological research (causal and descriptive), as well as the advantages and disadvantages of different study designs used in epidemiological research, including cohort, case-control, and cross-sectional studies.

TRAINER

The trainer is from the Julius Center, a knowledge center for Health Services and Primary Care at UMC Utrecht.

> The course is well balanced and introduces new concepts at a solid pace

TARGET AUDIENCE

The course is open for participants who want to get an introduction in statistics, 2 The course is organised by the Julius Center, UMC Utrecht. There are 15 free spots for GSLS PhDs.

COURSE DESCRIPTION

This course provides you with basic knowledge of statistics. It is aimed to level differences in prior knowledge among students and provide the necessary base for the next two statistical courses in the MSc Epidemiology programme. The course can best be followed at the start of your PhD track.

LEARNING OBJECTIVES

The Introduction to Statistics course explains and uses the different types of variables: quantitative (numerical) versus qualitative (non-numerical) with their corresponding sub-types (continuous, discrete, ordinal, non-ordinal). You will learn how to interpret univariate graphs and calculate descriptive statistics, (standard) normal and binomial probabilities and confidence intervals. At the end of the course you can perform simple statistical analyses in the statistical packages SPSS and R.

TRAINER

The trainer is from the Julius Center, a knowledge center for Health Services and Primary Care at UMC Utrecht.



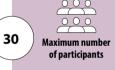




Number of session



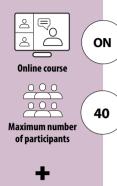






the course is offered per year

24



Face-to-face course

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Maximum numb

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Total time

investment

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EC

Number of credits

of participants

USP/

Zeist

20

120

4

TARGET AUDIENCE

Participants need to have some basic knowledge on statistics and mathematics. The course is organised by the Julius Center, UMC Utrecht.

COURSE DESCRIPTION

This course serves as an introduction to statistical methodology and covers various statistical techniques for practical data analysis. Theoretical concepts are applied to real-world scenarios through concrete examples and case studies. The course culminates in a group assignment in which you analyse a case study using newly acquired statistical techniques.

LEARNING OBJECTIVES

Throughout the course, a different statistical theme is covered each week through short web lectures and computer exercises, using examples from medical and biological research. You will analyse datasets provided during the course using statistical software packages such as R and/or SPSS. Discussion forums will be available for you to discuss theory and practice exercises with staff and fellow participants. The Statistics Cafe will also serve as a virtual meeting place for discussing general statistical questions and connecting with peers to discuss your research.

TRAINER

The trainer is from the Julius Center, a knowledge center for Health Services and Primary Care at UMC Utrecht. Combination of web lectures, exercises, and test your knowledge applications. With the possibility to do extra exercises, and the possibility to practice with different statistical programmes

TARGET AUDIENCE

This course can best be followed in the first half of the PhD track. It helps you to identify the correct analyses for your research, carry out these analyses and interpret and report the results. The course is organised by the Julius Center, UMC Utrecht. There are 10 free spots for GSLS PhDs.

COURSE DESCRIPTION

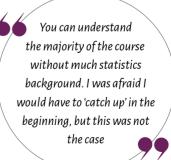
When you analyse data, it is crucial that you have a firm understanding of statistical methods to ensure reliable results and effectively answer research questions. In this online course, we provide statistical techniques for studying the association between (multiple) determinants and the occurrence of an outcome event. The course begins with an introduction to likelihood theory, utilising simple examples and a minimal amount of mathematical notation. Following this, we introduce the most important regression models commonly used in medical research.

LEARNING OBJECTIVES

Throughout the course, we explain the principles of various statistical analysis techniques, including model validation and regression diagnostics. Additionally, we describe the basic principles of longitudinal data analysis and apply all these techniques using common statistical packages. The course includes a blend of web lectures, group assignments, and group discussions. Asynchronous learning is employed, meaning there are no plenary sessions. Interim deadlines are provided, and the course concludes with an exam.

TRAINER

The trainer is from the Julius Center, a knowledge center for Health Services and Primary Care at UMC Utrecht.





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120

4.5

30

E-learning

Total time

investment

-0-0-0-0-0-

EC

Number of credits

Maximum number

of participants



Number of times the course is offered per year

Study Design in Etiologic Research

Courses offered by the Utrecht University Library



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EC

Number of credits

000

Maximum number

of participants

Number of times

the course is

offered per year

3.0

30

2

TARGET AUDIENCE

This course can best be followed in the first half of the PhD track. It helps participants to understand the principles, design and validity of different types of studies. The course is organised by the Julius Center, UMC Utrecht. There are 5 free spots for GSLS PhDs

COURSE DESCRIPTION

In this course, we aim to teach the fundamental principles and practical applications of cohort, case-control, and cross-sectional studies. The course covers various aspects of study design, such as data collection, outcome measures, and the advantages and disadvantages of different study designs. Our focus is on the application of study design in etiological research, including classical approaches and modern concepts and design options, such as case-cohort designs. We will discuss the specific aspects of study design in veterinary epidemiology in comparison to human epidemiology, and we will design appropriate studies to answer etiological research questions in different situations. Throughout the course, we will emphasize issues of validity in study design.

LEARNING OBJECTIVES

This online course is presented through web lectures, group assignments, and group discussions. The course follows an asynchronous learning approach, without any plenary sessions. The course includes interim deadlines, and it ends with an exam.

TRAINER

The trainer is from the Julius Center, a knowledge center for Health Services and Primary Care at UMC Utrecht.



Nowadays, the University Library is more than a building full of books. It is also a place to meet and exchange knowledge. Moreover, the Library supports the academic community with its expertise in scholarly information.

If you are searching for information or data, you will find an overview of the major search engines, databases and additional information. Sometimes all this information feels overwhelming. How can you find the information that you need? How do you know that your search covers all the documents that you are looking for? How to get the best out of your reference management? The University Library can help you answer these questions when navigating the scholarly information landscape.

Experts from the library provide you with support, workshops and sessions on the newest developments in Open Science, including topics such as Open Access publishing and Open Educational Resources. But also their expertise in how information is found and shared can help you improve your online presence.

Below you will find a few examples of workshops suited for early career researchers within the Life Sciences. Please check the calendar for new and current sessions and workshops. Next to live events the University Library also provides online modules you can access anywhere anytime.

Open Science – an introduction

Open access and FAIR (Findable, Accessible, Interoperable and Reusable) data are now common terms in all fields of research, but Open Science is so much more than that. Open Science can be applied throughout the entire research workflow in many ways. We will discuss and explore these and other aspects during this interactive workshop. You will explore ways to incorporate Open Science in your daily routine, find out what aspects of your work are already open, and what barriers and motivations you encounter. This workshop is open to all fields of research and all levels.

Improve your Online Presence

How visible are you and your research online? Is it easy for others to find and cite your publications and data? Is it possible to share your posters and presentations? How many online profiles do you need, and how do you keep them up-to-date? This and more will be discussed in this workshop. During the first part we will focus on

28

4.2 Competence area
Responsible Conduct of Science

frequently used profiles and platforms, their pros and cons and how to use them effectively. In the second part you will be set to work and choose what is the best way for you to improve your online presence. If you follow the short demo, you will leave the same day with your own website containing the information and links most important to you. This workshop is open to all disciplines and levels.

Searching Systematically

During this workshop you will learn how to set up a systematic search strategy. You will get information on where and how to search and how to apply this to your own research question. The systematic approach that is taught, works for all disciplines and for both short comprehensive projects and full systematic reviews. This workshop is open to Utrecht University/UMCU researchers, support staff and students who are interested in learning more about search strategies.



Utrecht University Library The responsible conduct of science is an essential aspect of academic research that involves adhering to ethical standards and principles to ensure the integrity, transparency, and reliability of scientific inquiry. This includes a wide range of practices and behaviors that promote the highest standards of professionalism and integrity in research.

At its core, responsible conduct of science involves that you maintain the **highest level of honesty, transparency, and accountability** in all aspects of research. This includes ensuring that your research is conducted in accordance with ethical standards and guidelines, such as obtaining informed consent from research participants, ensuring confidentiality of data, and avoiding conflicts of interest.

In addition, responsible conduct of science involves that you ensure the **accuracy and validity of research findings** through careful data collection, analysis, and reporting. This includes avoiding data manipulation or falsification, and properly documenting research procedures and results.

Another important aspect is ensuring that research is conducted in a manner that **respects the welfare and rights of research subjects**, as well as the wider community. This includes adhering to regulations and guidelines for the use of human or animal subjects, and considering the potential social, environmental, or other impacts of research.

Responsible conduct of science also involves ensuring that research is conducted in a manner that **promotes collaboration**, **openness**, **and transparency**. This includes that you share research data and findings with other researchers, participating in peer review processes, and adhering to guidelines for authorship and publication.

Overall, responsible conduct of science requires a commitment to ethical principles, a dedication to professionalism and integrity, and a willingness to engage in ongoing learning and professional development. By adhering to these principles and practices, you can contribute to the advancement of knowledge and the betterment of society as a whole.

This Thing Called Science

Responsible Conduct of Research Year 1

This is a compulsory course for all GSLS PhD candidates whose PhD tracks start

from 1 September 2020 onwards. This course is the first part in a series of four.



9

3

27

28

2.0

000

Number of sessions

Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-0-

EC

Number of credits

TARGET AUDIENCE

Anyone who not only wants to know more about the contents of scientific knowledge, but about its context as well.

COURSE DESCRIPTION

Sure, science is about facts: objective and observable facts that are gathered through research. Science is about experimentation. It is about testing your theories and hypotheses. But science is not only about the content of your research. Science is also about the context. For example, what is the basis for our belief in science? What sets it apart from common knowledge? Who should we trust in case two scientists disagree on a hotly debated issue? Is science a vocation or just another profession? Is scientific knowledge something special to be emulated, or is it 'just another opinion'? How does science really work? Are scientific facts discovered or rather socially constructed and considered 'true' only after fierce debate?

LEARNING OBJECTIVES

In this course, we have invited national and international guest speakers to discuss these topics with you. Over nine Friday afternoon sessions (one each month), we will examine the historical, philosophical, sociological, commercial, ethical, political, and personal dimensions of the biomedical sciences. As a participant, you will take part in this debate. For each session, five students will be appointed as (collective) chair. Together, they will be responsible for the quality of the debate and the success of the meeting.

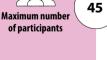
It was very nice to get

a fresh perspective on

science!

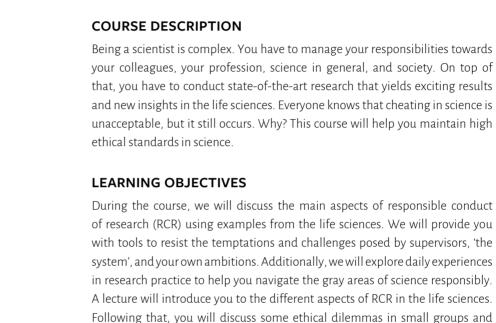
TRAINER

During each session two speakers, who are experts in their field, will set the scene for a highly interactive session.





Number of times the course is offered per year

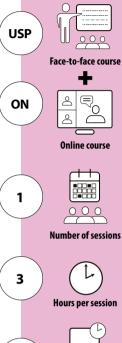


TARGET AUDIENCE

TRAINER

The course is coordinated by Marcel van der Heijden, associate professor in the department of Medical Physiology at the University Medical Center Utrecht. The course is taught by several trainers related to the UU or UMC Utrecht.

present your findings in a closing plenary session.





1 Total study time

0.15

50

8

-0-000000-EC Number of credits





Number of times the course is offered per year

32

The course is built on

real-life cases. Any PhD

candidate in the life sciences

may face such situations. So it is

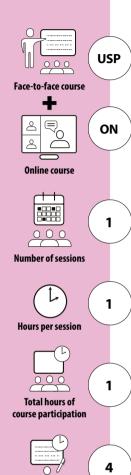
better to know in advance, how

to solve them while staving

responsible and honest

Responsible Conduct of Research Year 2

Responsible Conduct of Research Year 3



Total study time

-0-0-0-0-0-0-

EC

Number of credits

Maximum numbe

of participants

Number of times

the course is

offered per year

0.15

50

8

TARGET AUDIENCE

This is a compulsory course for all GSLS PhD candidates whose PhD tracks start from 1 September 2020 onwards. This course is the second part in a series of four.

COURSE DESCRIPTION

Responsible Conduct of Research is essential for good science. This course will focus on integrity in academic publication, specifically authorship and peer review. How do you report your research methodologies and results in an honest and accurate way? How do you credit each individual's contribution to a publication? How do you identify and avoid predatory journals? What are the common types of peer review?

LEARNING OBJECTIVES

The aim of this course is to raise awareness of relevant issues in academic publishing practice and provide strategies to address them. You will learn how to become a good author and fair reviewer, and gain insights to become a responsible researcher. The course consists of an e-module and a plenary session.

TRAINER

The course is coordinated by Marcel van der Heijden, associate professor in the department of Medical Physiology at the University Medical Center Utrecht. The course is taught by several trainers related to the UU or UMC Utrecht. To know more about misconduct in research and also to know what to expect when talking about authorship. It really helped me to know a better way to decide and discuss the authorship list

TARGET AUDIENCE

This is a compulsory course for all GSLS PhD candidates whose PhD tracks start from 1 September 2020 onwards. This course is the third part in a series of four.

COURSE DESCRIPTION

As a researcher, you have only one perspective on your project. When you collaborate, you gain different perspectives, more information, optimize resources and time, and bring new expertise to your lab. This course aims to teach you how and why collaboration, supervision, and mentoring are key ingredients to support Responsible Conduct of Research (RCR). You will be introduced to key challenges that you may face when collaborating with others during your PhD research. Furthermore, you will learn how to deal with expectations and responsibilities in supervision and mentoring.

LEARNING OBJECTIVES

How do you deal with culture, colleagues, and communication in your research practice? What are the expectations and responsibilities in supervision and mentoring? How does collaboration outside the research team work? Are there conflicts of interest or competition? You will develop insights that can help you on your route to becoming a responsible researcher. The course consists of an e-module and a plenary session.

TRAINER

The course is coordinated by Marcel van der Heijden, associate professor in the department of Medical Physiology at the University Medical Center Utrecht. The course is taught by several trainers related to the UU or UMC Utrecht. The online module was very nicely prepared. It encourages you to bring issues to discuss with your supervisors



USP

ON

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4

0.15

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8

Face-to-face course

Online course

Number of sessions

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Number of times the course is offered per year

Responsible Conduct of Research Year 4



Total hours of course participation

Total study time

-0-0-0-0-0-0-

EC

Number of credits

Maximum numbe

of participants

Number of times the course is offered per year 3

1

0.15

50

8

TARGET AUDIENCE

This is a compulsory course for all GSLS PhD candidates whose PhD tracks start from 1 September 2020 onwards. This course is the final part in a series of four.

COURSE DESCRIPTION

This is the final part of the Responsible Conduct of Research course series. At the time of writing this course guide, the course is still under development. We plan to launch the first edition in 2024. It will consist of a meeting that prepares you for your next steps in science. Please keep an eye on the agenda and website of the PhD Course Centre for any updates.

TRAINER

The course is coordinated by Marcel van der Heijden, associate professor in the department of Medical Physiology at the University Medical Center Utrecht. The course is taught by several trainers related to the UU or UMC Utrecht. Communication in science is a critical aspect of scientific inquiry and progress. It involves the exchange of ideas, information, and knowledge among scientists, as well as with broader audiences, such as policymakers, industry leaders, and the public.

At its core, communication in science involves conveying complex scientific concepts and findings in a **clear and concise manner**, while adhering to the principles of scientific rigor and integrity. This requires that you have a deep understanding of the scientific content, as well as the ability to **tailor communication strategies to different audiences and contexts**.

One key aspect of communication in science is **peer-reviewed publication** in scientific journals, which allows you to share your research findings with colleagues and the broader scientific community. This involves adhering to established standards for scientific reporting, including methods, results, and conclusions, as well as providing appropriate citations and references to other relevant research.

In addition, communication in science involves **presenting research findings** at scientific conferences and symposia, which provides opportunities for you to exchange ideas and receive feedback from your peers. This can help to refine research questions, improve research methods, and enhance the overall quality of scientific inquiry.

Another important aspect of communication in science is **engaging with broader audiences**, such as policymakers, industry leaders, and the public. This may involve communicating scientific information through various media channels, such as print or broadcast journalism, social media, or online platforms. Effective communication with these audiences requires a deep understanding of the issues and concerns that are relevant to these groups, as well as the ability to convey scientific information in a way that is relevant and accessible.

Overall, effective communication in science is essential for advancing scientific progress, promoting public understanding of science, and engaging diverse audiences in the scientific enterprise. By engaging in effective communication practices, you can help to bridge the gap between science and society, and ultimately contribute to the betterment of society as a whole.

Academic Writing 1 Composing an Excellent Academic Text

Academic Writing 2 Writing a Scientific Paper with Impact



Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-0-

EC

Number of credits

000

Maximum number

of participants

Number of times the course is

offered per year

1.5

7.5

36

1.5

12

10



This course is specially designed for PhD students in the natural and life sciences, and the provided examples will be from these fields. Therefore, it will feel different from general language courses that you may have taken before, and will be more applicable to your current needs as a scientist.

COURSE DESCRIPTION

Academic writing is one of the most important skills that any researcher should have. No matter how brilliant or innovative your research, it is of little value if you cannot communicate your insights clearly and convincingly in scientific articles, allowing peer researchers to both verify and build on it. They say that the best scientists are also the best writers. Fortunately, writing is a skill that you can learn, and the learning process can be enjoyable if you have the right tools.

LEARNING OBJECTIVES

This course is a comprehensive preparation for the writing task of the PhD candidate. You will learn how to identify the strengths and weaknesses in your writing process, optimize your writing strategies, and show personal growth as a writer. You will compose a writing plan and create a good overall structure in your scientific texts with an eye for storyline and argumentation. You will write in good academic style using correct English, with special attention to clarity and conciseness. You will apply the principles of cohesion in your writing to create a text that is perceived as high-standard.

TRAINER

This course will be taught by one of the teachers from the Utrecht University's Communication Skills Academy (a joint GSNS/GSLS initiative). These teachers have a strong linguistic background and substantial experience with academic writing in the natural and life sciences.

TARGET AUDIENCE

This course is specially designed for PhD students in the natural and life sciences, and the provided examples will be from natural and life sciences writing.

COURSE DESCRIPTION

The ability to write a scientific paper with impact is crucial for any researcher who aims to communicate their findings effectively and contribute to their field. In the world of science, the quality of research is not solely judged on the merits of the research itself, but also on how well it is communicated. A well-written paper not only ensures that the research is accessible to a wider audience, but it also has the potential to influence future research and shape the direction of a field.

LEARNING OBJECTIVES

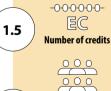
Writing a paper with impact requires more than just presenting data; it involves crafting a compelling narrative that connects the findings to existing research, emphasizes their significance, and conveys the broader implications. During the course you learn how to design a storyline and what publication strategies there are. You will learn how to write the individual sections, like methods, results, introduction, discussion, conclusion, and abstract & title. You will learn how to compose tables and figures, focus on readability and cohesion and apply techniques for academic doubt and uncertainty.

Online course

ON

TRAINER

This course will be taught by one of the teachers from the Utrecht University's Communication Skills Academy (a joint GSNS/GSLS initiative). These teachers have a strong linguistic background and substantial experience with academic writing in the natural and life sciences.



Total study time

36

12



Maximum number

Number of times the course is offered per year

Adobe Illustrator

Adobe Illustrator Scientific Artwork and Infographics



4

Number of sessions

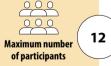






Total study time







Number of times the course is offered per year

TARGET AUDIENCE

This is an entry level course to make you more comfortable in Illustrator. If you grasp the basics, consider joining the course Adobe Illustrator – Scientific Artwork and Infographics.

COURSE DESCRIPTION

This course will teach you how to design and create scientific illustrations and diagrams using Adobe Illustrator. With this software, you can convert your concepts or sketches into professional-looking illustrations to be used in your presentations, posters, reports, theses, or other publications. You will be introduced to the basic principles of design and be guided through all the ins and outs of the Adobe Illustrator workspace.

LEARNING OBJECTIVES

You will learn how to start with a basic concept or a sketch and convert it into a beautiful illustration or diagram. You will be educated on the basic principles of color theory, typography, and design knowledge. After this course, you will have mastered Adobe Illustrator sufficiently to create professional-looking diagrams and illustrations and prepare them for print and digital use. Each session starts with a short lecture on theoretical design knowledge, and the rest of the session consists of an interactive workshop. Between sessions, you will practice with several exercises, depending on your own goals.

TRAINER

Vincent van der Vliet graduated in Chemistry at Utrecht University. After working in the bank industry he got a Graphic Designer certification. Since then, he is a self-employed designer. Vincent has been teaching design courses for over ten years, among others for the UU's Cultural Centre, Parnassos.

Amazing course! Well structured and a great tool to get started with Illustrator in a fast and professional way

TARGET AUDIENCE

This training is a follow-up to the course Adobe Illustrator, which will take you a step further in designing all your scientific artwork.

COURSE DESCRIPTION

This training will teach you the tools of Adobe Illustrator needed to create beautiful & functional icons/vector graphics/illustrations. You will learn to lay out and style an infographic based on simple design principles. You will appreciate the power of color and typography in your designs and learn to combine them. By the end of the training, you know why some designs look better and are easier to follow. You will receive a printed manual with the theory to refer to at any new design challenge.

LEARNING OBJECTIVES

You will learn to navigate Adobe Illustrator, draw illustrations, and develop infographics (figures, posters, etc.). In the first two sessions, the focus is on Adobe Illustrator. The last two sessions focus on the principles of good design and how to design powerful scientific artwork. You can work on your existing posters and figures in the course and improve them.

TRAINER

Iliana Boshoven-Gkini has two MSC degrees in Landscape Architecture and floriculture. She paints and follows courses for all her adult life. In 2012, she started working independently as a graphic designer. She focuses, among others, on helping PhD students design their PhD thesis and scientific artwork. From 2015, she has taught Adobe Illustrator, Infographics, Photoshop, and InDesign courses. She is a certified Adobe instructor.

Iliana makes you very motivated for both the design principles and the use of Adobe Illustrator. There is a very nice balance between informal, nonscientific exercises and focused scientific artwork

The topic is amazing, it was great to get so many examples and go over them together. Also, Iliana is great at breaking down all the elements and explaining it in a fun way







Number of sessions



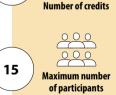
course participation

-0-0-0-0-0-

EC



1.8





Number of times the course is offered per year

Adobe InDesign

Adobe InDesign From Dissertation Lay out to Poster Design



4

3

12

8

0.8

12

2

000

Number of sessions

Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-

EC

Number of credits

000

Maximum number

of participants

Number of times

the course is

offered per year

TARGET AUDIENCE

This training is an entry-level course in Adobe InDesign. If you grasp the basics, consider joining the course Adobe InDesign - from Dissertation Layout to Poster Design.

COURSE DESCRIPTION

This course will teach you how to design and lay out an academic publication, such as a poster or thesis, using Adobe InDesign. You will be introduced to the basic principles of design and guided through all the ins and outs of the Adobe workspace.

LEARNING OBJECTIVES

During this course, you will learn how to set up and manage a publication file for a scientific poster, thesis, digital whitepaper, or report. You will place and manipulate images and text on a single or multiple pages. You will also learn about the basic principles of color theory, typography, and design. After completing this course, you will be able to use InDesign to lay out a publication of multiple pages and prepare your design work for print or digital publication. Each session will begin with a short lecture, followed by an interactive workshop. You will also practice with several exercises in between sessions.

TRAINER

Vincent van der Vliet graduated in Chemistry at Utrecht University. After working in the bank industry he got a Graphic Designer certification. Since then, he is a self-employed designer. Vincent has been teaching design courses for over ten years, among others for the UU's Cultural Centre, Parnassos. You don't just learn how to use Adobe InDesign but you actually learn something about making effective designs as well

TARGET AUDIENCE

This training is a follow-up to the course in Adobe InDesign. If you want to lay out your dissertation, poster, figure, and CV and draw simple vectors, this training is for you.

COURSE DESCRIPTION

LEARNING OBJECTIVES

TRAINER

You will explore the tools of Adobe InDesign needed to create attractive and functional lay outs, such as books, posters, resumes, and figures. You will be introduced to the program's workspace and work with tailor-made exercises. By the end of the training, you will know how to combine photos, illustrations, tables, and text easily. You will receive a printed manual with the theory to refer to at any new design challenge.

You will learn to work with text, images, and tables to create different lay out

formats. You will understand the use of parent pages (templates) and styles,

which are your base for creating complex lay outs. The first two sessions focus on

the Ph.D. dissertation lay out, while the last two cover the lay out of single-page

Iliana Boshoven-Gkini has two MSC degrees in Landscape Architecture and

floriculture. She paints and follows courses for all her adult life. In 2012, she

started working independently as a graphic designer. She focuses, among

others, on helping PhD students design their PhD thesis and scientific artwork.

From 2015, she has taught Adobe Illustrator, Infographics, Photoshop, and

4

Online course

ON

Number of sessions



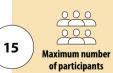
16 Total hours of

course participation

12

Total study time

1.1 -0000000-EC Number of credits



2

Number of times the course is offered per year

In this course, I learned in a small amount of time how to design my own lay-out of my PhD thesis and Iliana is a really enthusiastic teacher with a lot of knowledge on this subject

InDesign courses. She is a certified Adobe instructor.

documents, such as a figure, a poster, a CV, or a brochure.

Skills learned during this course are applicable to many different projects and endeavors. Highly recommend it

Analytic Storytelling

Breaking Science





Number of sessions







Total study time









4

Number of times the course is offered per year

TARGET AUDIENCE

This course is appropriate for PhD candidates at any point in their PhD process. It's only necessary that you know your research question.

COURSE DESCRIPTION

How can you effectively communicate the details of your research to your audience? How can you ensure that your work is understandable to others? And how can you make your complex topic tangible, so that others can understand the challenges and benefits of your project? In the Analytic Storytelling course, we provide you with a step-by-step method to organise your content into a clear and compelling story. This story can serve as a solid foundation for writing or presenting, from a paper to a grant application, a longer presentation to a pitch, to peers, interdisciplinary colleagues or laymen.

LEARNING OBJECTIVES

You will learn skills to tailor your story to your audience's goals, interests and level of knowledge. You will give your story a clear objective, which will help you to determine what information should be included and what should be left out. You will structure your information in a strong and logical way. Additionally, you will apply storytelling techniques to make your topic come to life for your audience. The course includes many exercises that allow you to put the theory into practice immediately. Throughout the course, you will work on a story about one of your own projects. You will receive extensive feedback from the instructor and fellow participants on this storyline.

TRAINER

All the trainers from the team of Analytic Storytelling combine sharp analytic skills with storytelling expertise. They bring their own personal background and expertise to the course; from scientific research, creative writing, analytic philosophy, science journalism and theatre. The course teaches a beautiful yet simple method to create texts and presentations with maximum impact, and the teacher was very good at finding the areas that could improve and suggesting ways to do so

TARGET AUDIENCE

This pitch competition is for early career researchers who would like to learn how to pitch a scientific concept in a comprehensive way. The course is organised by Public Engagement UU / breakingscience@uu.nl.



Breaking Science is an annual science communication competition for early career researchers (PhDs and postdocs). You have just three minutes to present your research or a scientific concept from your field of study to a panel of judges. Each heat the judges will select the best two participants based on three criteria: content, clarity, and charisma. The winners of the heat will then continue to the final.

LEARNING OBJECTIVES

It's a real challenge to explain something you have been unraveling for years in just three minutes! However, mastering the skill of pitching is very useful, for instance, for obtaining personal grants. Breaking Science offers an opportunity to learn and improve this skill. Before entering the contest, you will be trained by the professionals of Artesc. It's a unique experience during which you will learn how to design their pitch, how to deliver it on stage, and how to engage with the audience.

TRAINER

The course is taught by various Artesc trainers. Artesc is a group of Dutch artists, teachers and scientists who share one passion: improving your performance on stage and on the page with ideas from theatre and prose.

I managed to push myself way out of my comfort zone with big audiences and I believe that will help me a lot in future presentations and outreach activities













Number of times the course is offered per year

44

Science Communication: Relevant and Clear

The Art of Presenting Science



4

3.5

18

26

1.5

8

2

000

Number of sessions

Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-

EC

Number of credits

Maximum number

of participants

TARGET AUDIENCE

This course is especially useful for PhD candidates who have spent at least one year in their research.

COURSE DESCRIPTION

What is the added value of your research for society? How can you communicate your research to different audiences? And how can you present your work in a way that is also understandable for non-scientists? Following the principles of open science, the impact of research on society is becoming increasingly important. Funding agencies for scientific research often demand that the knowledge acquired has added value for society. As a result, scientists frequently encounter stakeholders, such as patients, farmers, entrepreneurs, or are asked to present in front of an audience of interested citizens.

LEARNING OBJECTIVES

In this course, you will acquire the skills for successful communication. You will learn how to write a popular text about your research, tailored to your audience, and give a presentation for laymen. You will design and plan a strategy for increasing the societal impact of your research. You will learn how to present your research and how to give and receive feedback. Every session of the course builds on the previous ones. Draft texts and presentations will be improved by peer feedback and feedback from the lecturer. Finally, you will give a presentation to laymen in a venue in or around Utrecht.

TRAINER

Frans van Dam is an experienced science communicator and skills trainer. He was head of communications at the Centre for Society and the Life Sciences at the Radboud University Nijmegen and now teaches science communication at Utrecht University. He is a trainer of popular and academic writing and oral presenting. In addition, he manages the innovation of education at the UU Teaching & Learning Lab.

I re-discovered my love for writing for and presenting to a layman's audience

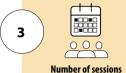
TARGET AUDIENCE

It is best to follow this course in your second year, so you already have something to present, and ample opportunity afterwards to put the skills to practice.



When you are giving a presentation, you expect your audience to remain attentive throughout the talk. Unfortunately, this is rarely the case. We often blame this on a short attention span, but why can the same audience watch movies for hours on end? Apparently, actors and playwrights have found a way to engage their audience. So, why not use their tools to learn how to present better? In this course, you will learn how to engage your audience with theatrical skills and shape your content with storytelling and style tools. Master your performance skills and let your content take center stage!









18

1.4

7

course participation

Total study time

-0-0-0-0-0-

EC

Number of credits

LEARNING OBJECTIVES

During this course, you will learn the fifteen signals necessary for effective communication. You will learn how to grab the audience's attention at the start of your presentations and keep them engaged by using style and transitions. You will design a presentation using story tools and supportive slides that allow you to be the main act on the stage, and you will learn how to respond to questions effectively. Various methods will be applied, such as theater exercises, individual presenting exercises, group discussion, peer review, story design exercises, and interactive lecturing.

TRAINER

The course is taught by various Artesc trainers. Artesc is a group of Dutch artists, teachers and scientists who share one passion: improving your performance on stage and on the page with ideas from theatre and prose.







Number of times the course is offered per year



Public Speaking



4

4.5

17.5

8

000

Number of sessions

Hours per session

Total hours of

course participation

Total study time

TARGET AUDIENCE

This course is for anyone who wants to become a more confident and engaging public speaker. This course will help you to reach a next level in your way of presenting yourself and your work.

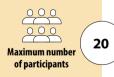
COURSE DESCRIPTION

Nonetheless of how good you are in presenting, as soon as you step in front of an audience something inside you tends to change. It seems like you're not completely yourself: your brain is not as quick as you would like it to be, you lack control, are unfocussed at times and/or start to talk faster without pausing. In this course we will help you to reframe your approach to public speaking.

LEARNING OBJECTIVES

We look at prioritising and structuring the content of your presentation. We will learn you how to deal with nerves, obligation and boredom. We also look at how to employ principles of ethos, pathos and logos to engage your audience. And how to design and interact with slides or other aids. Public speaking is about engaging your audience imagination through visuals, hand gestures, silence and questions. You will practice with this as well. Just as responding to your audience using eye-contact, questions and body positioning.

-0-0-0-0-0-0-0.9 EC Number of credits







Teaching is an essential component of academic work, providing an avenue for sharing knowledge, promoting critical thinking, and cultivating intellectual curiosity and growth. Effective teaching requires a deep understanding of the subject matter, as well as an ability to engage and motivate students.

At its core, teaching involves **designing and delivering learning experiences** that help you achieve learning outcomes. This may involve developing and selecting appropriate course content, designing effective assessments, and facilitating discussions and interactions that promote active learning.

One important aspect of teaching is that you **adapt instructional strategies** to meet the needs of diverse learners. This may involve using a range of teaching methods, such as lectures, discussions, case studies, problem-based learning, or experiential learning, to engage students with different learning styles and preferences.

In addition, effective teaching involves creating a positive and inclusive learning environment that promotes mutual respect, diversity, and intellectual inquiry. This requires a commitment to equity and inclusion, as well as a willingness to address biases and stereotypes that may impact student learning.

Another important aspect of teaching is that you **provide constructive feedback** and support to students to help them achieve their learning goals. This involves providing timely and meaningful feedback on student work, as well as offering additional support and resources to help students succeed.

Overall, effective teaching requires a combination of subject matter expertise, pedagogical knowledge, and interpersonal skills. By engaging in effective teaching practices, academics can help to inspire and educate the next generation of scholars, professionals, and citizens, and contribute to the advancement of knowledge and society as a whole.



TRAINER

While studying applied physics at the TU-Delft, Gerben Tuin also practiced the art of theatre. He finished his studies in 2010 and then decided to become a professional actor. By combining the knowledge he gained in theatre with the world of presenting he developed his own methods. Currently Gerben works as an actor director, (script-)writer and presentation trainer.

The GSLS offers various courses for supervising MSc students

Supervising MSc Students Starter Kit

Which supervising course fits me best?

The Supervising MSc Students: Starter Kit is designed for PhD candidates who have little or no experience with supervision. The course can be taken shortly before starting supervising students or during the first few months of supervising the first student. A detailed course description can be found on the course page.

Supervising Research of MSc Students is intended for PhD candidates who have at least a few months of experience in supervising a student. It is required that you supervise an MSc student during the course. A detailed course description can be found on the course page.

If the Starter Kit course suits you best at the moment, but you would like to delve deeper after completing that course, you are welcome to take the Supervising Research of MSc Students course as well. The best scenario is to take the followup course 6 months or more after completing the Starter Kit course, but at least 3 months after it and only if you are supervising new students. Taking both courses at the same time may result in some overlap. The follow-up course is not mandatory if you have completed the Starter Kit course.

If you need advice on which course to take, please contact the PhD Course Centre at pcc@uu.nl.

TARGET AUDIENCE

GSLS PhD candidates that have little or no experience with supervision. The course can be followed shortly before you start with supervision of students or during the first months of supervising your first student

COURSE DESCRIPTION

Supervising scientific research can be challenging, especially if you have little or no experience in supervising MSc students. Of course, you can draw on your own experiences of being supervised, but how do you gain a better insight into what good supervision entails and what skills are needed? How do you apply these skills in your current or future supervision practice? What are some common scenarios that you may encounter as a supervisor, and what could be your own coaching style?

USP Face-to-face course





LEARNING OBJECTIVES

In this course, we will provide you with useful skills and theories. You will receive course assignments, and both the trainer and other participants will give you feedback. There is a strong focus on exchanging experiences and putting insights into practice. By the end of the course, you will be well-equipped to start supervising students.

TRAINER

All trainers are related to the department of Educational Development and Training at the UU. ED&T train (educational) professionals over the entire duration of their career and offer custom solutions for educational problems.









course participation



-0-0-0-0-0-0.4 EC Number of credits

12 of participants



Number of times the course is offered per year

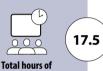
Start to Teach



5

Number of sessions

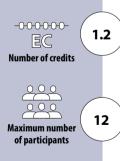








Total study time





Number of times the course is offered per year

TARGET AUDIENCE

GSLS PhD candidates that have a least several months experience with supervising a student. It is a requirement that you are supervising a MSc student during the time period of the course.

COURSE DESCRIPTION

The best way to supervise a student depends on many factors: the abilities of the student, the type of research, the phase of the research, but also the abilities of the supervisor. In this course, supervisors will work on expanding their own repertoire and gaining more insight into their own coaching style. We offer tools and guidelines that you can use in your daily supervision practice. You will gain more insight into your coaching and conversation skills, your assessment skills, and giving feedback. Additionally, you will reflect on your own role and how to develop a personal supervision plan.

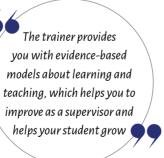
LEARNING OBJECTIVES

During the course, your own day-to-day experience as a supervisor will be the main focus. What is your supervision style? What are your strengths and weaknesses? How do you deal with challenging situations during your supervision? How can you optimize your practice to meet the needs of the student?

52

TRAINER

All trainers are related to the department Educational Development and Training at the UU. ED&T train (educational) professionals over the entire duration of their career and offer custom solutions for educational problems.



TARGET AUDIENCE

Start to Teach is open to all members of staff with little or no teaching experience. PhD candidates who have teaching duties can also take part during the period of their first teaching assignment. The conditions are that you teach during the period in which you take part in Start to Teach and that you attend the course days. This course is organised by the Centre for Academic Learning & Teaching.

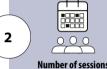
Start to Teach is a course for Utrecht University employees who are starting

to provide education. It is recommended to enroll in the education training

during your first teaching assignment. It is important to start teaching while

participating in Start to Teach in order to optimally benefit from the course.





LEARNING OBJECTIVES

COURSE DESCRIPTION

The programme consists of three days of training: a kick-off day just before the start of the educational period, a follow-up day during the period (morning training and optional intervision in the afternoon), and a final morning at the end of the period. The course also includes attention to online teaching.



TRAINER

The trainer is from the Centre for Academic Learning & Teaching.



Number of times the course is offered per year

Leadership and management are critical components of academic institutions, providing the framework for achieving organisational goals, promoting innovation and excellence, and supporting the development of individuals and teams.

At its core, leadership involves **providing a vision for the future**, inspiring and motivating individuals to work towards that vision, and cultivating a culture of innovation and excellence. Effective academic leaders have a deep understanding of the mission and goals of their institutions, as well as the broader societal context in which they operate.

In addition, effective academic leaders have strong **interpersonal skills**, such as effective communication, collaboration, and conflict resolution. They are able to engage with diverse stakeholders, build consensus around shared goals, and manage complex relationships and networks.

Management, on the other hand, involves the day-to-day operations of an academic institution, including budgeting, resource allocation, and personnel management. Effective academic managers have a deep **understanding of the institutional and regulatory frameworks** that govern their organisations, as well as the technical skills and expertise required to manage complex projects and processes.

One important aspect of leadership and management in academic institutions is that you **promote diversity, equity, and inclusion**. This requires a commitment to creating a culture that is welcoming and inclusive of individuals from diverse backgrounds and perspectives, as well as a willingness to address systemic barriers and biases that may impact underrepresented groups.

Another important aspect of leadership and management in academic institutions is **promoting research and scholarship**. This involves fostering a culture of inquiry and innovation, supporting the development of new ideas and approaches, and providing the resources and support necessary for individuals and teams to pursue their research goals.

Overall, effective leadership and management are essential for academic institutions to achieve their missions, promote excellence and innovation, and contribute to the advancement of knowledge and society as a whole. By cultivating strong leadership and management practices, academic institutions can create a culture of excellence and innovation that inspires individuals and teams to achieve their full potential.

Research Planning and Time Management

4.6 Competence area Personal Effectiveness





1

3

3

13

0.5

10

6

000

Number of sessions

Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-0-

EC

Number of credits

000

000

Maximum number

of participants

Number of times the course is offered per year

TARGET AUDIENCE

Anyone who wants to improve their planning and time management skills.

COURSE DESCRIPTION

PhD candidates are expected to manage research, administrative, and teaching obligations. In practice, these demands can make it hard to balance research with other duties, and to find focus and set priorities. This course, which consists of a workshop and an individual meeting, will help you improve your planning and time management skills. Related topics such as working style, causes of stress, procrastination, and the relationship with your supervisor may also be addressed.

LEARNING OBJECTIVES

During the workshop, you will learn how to make long-term and short-term plans for your research. You will discover how to monitor the progress and quality of your research, and how to set priorities. You will also find out what personal time-management and self-management skills you need to carry out your plans. There will be several assignments, both as preparation for the workshop and during the session. You will have the opportunity to share experiences and ideas with the other participants. In a follow-up individual meeting, we will discuss personal topics and your research plans.

TRAINER

Angela Markenhof works as a trainer and educational consultant at Educational Development & Training. She trains students and PhD candidates in academic and research skills and their supervisors in mentoring skills. She also advises study programmes on how to implement academic and professional skills in their curriculum. Planning, self-management strategies and motivation have her special interest.

Great to get direct feedback on your own situation, plus insights in how to directly improve your own situation Personal effectiveness is a critical aspect of academic success, involving the ability to manage one's time, resources, and priorities to achieve desired outcomes. It requires a combination of self-awareness, self-discipline, and goal-setting.

At its core, personal effectiveness involves **setting clear goals and priorities**, and then developing and implementing strategies to achieve those goals. This may involve developing effective time-management strategies, setting realistic expectations, and identifying and leveraging one's strengths and weaknesses.

One important aspect of personal effectiveness is that you **develop a growth mindset**, which involves a belief in your ability to learn and grow, and a willingness to embrace your challenges and setbacks as opportunities for learning and improvement. This requires a willingness to take risks, experiment with new approaches, and seek out feedback from others.

In addition, personal effectiveness involves cultivating **strong interpersonal skills**, such as effective communication, collaboration, and conflict resolution. This requires a willingness to listen to others, be open to diverse perspectives, and work effectively with others to achieve shared goals.

Another important aspect of personal effectiveness is that you **maintain your physical and mental well-being**. This may involve engaging in regular exercise, eating a healthy diet, getting enough sleep, and seeking out support and resources to manage stress and maintain overall health and well-being.

Overall, personal effectiveness is essential for academic success, as well as personal and professional growth. By developing and cultivating effective personal effectiveness strategies and habits, individuals can achieve their goals, maximize their potential, and contribute to the advancement of knowledge and society as a whole.

56

Balance – Coping with Stress and Pressure

Autonomy – Increase your Resilience



000

Number of sessions

Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-

EC

Number of credits

Maximum number

of participants

Number of times

the course is

offered per year

2

6

1

0.2

12

3

TARGET AUDIENCE

Anyone who wants to learn to cope better with external pressure from work life or private life.

COURSE DESCRIPTION

The aim of this course is to enhance your work life and private life balance. It is about deeper understanding of stress, and increasing your self-awareness by understanding what is really important and valuable in your life. You will learn to cope better with external pressure from work life or private life (like criticism of supervisors or family/friends/partners, conflicts within your team, too high expectations of supervisors, department, funding agencies, collaborators). You also learn to cope better with internal pressure that could be driven by too high internal standards like perfectionism, imposter syndrome, or not keeping your boundaries.

LEARNING OBJECTIVES

The course provides a balance between sharing experiences (the opportunity to reflect on your personal development), observation and reflection (self-tests and discussion), theoretical background (stress theory) and skills training (assertiveness). it is required that you are willing to share some personal insights, values and experiences.

TRAINER

Paula Meesters is the PhD psychologist of the UU.

Less is more. find your own balance

TARGET AUDIENCE

Anyone who wants to be able to show your resilience, self-awareness, assertive behaviour, and skills strengths.

COURSE DESCRIPTION

How can you develop a balanced, more stable identity? How do you show behaviour as an autonomous professional/researcher? Self-awareness is an important tool to reach this. Well-developed self-awareness, flexibility and autonomy will support you in demonstrating to your supervisory team that you are willing to learn and you have knowledge, intrinsic motivation, responsibility and integrity. After this course you are able to show your resilience, selfawareness, assertive behaviour, and skills strengths.

LEARNING OBJECTIVES

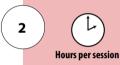
The course provides a balance between sharing experiences (the opportunity to reflect on your personal development), observation and reflection (self-tests and discussion), theoretical background and skills training. It is required that you are willing to share some personal insights, values and experiences.

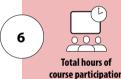
TRAINER

Paula Meesters is the PhD psychologist of the UU













12 Maximum numbe of participants

2

Number of times the course is offered per year

Coping with Delay and Procrastination

Mindfulness



Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-0-

EC

Number of credits

Maximum number

of participants

Number of times

the course is

offered per year

2

6

1

0.2

8

2

TARGET AUDIENCE

Anyone who finds it difficult to find a balance between expected high standards and the reality that things often turn out different than expected.

COURSE DESCRIPTION

The aim of this course is to enhance skills to be able to keep your PhD-process ongoing. Skills like prioritise tasks, set and agree on deadlines and achieve outcomes on time and within given constraints (such as budget). Many PhD candidates find it difficult to find a balance between expected high standards and the reality that things often turn out different than expected. To find this balance, we will focus on your responsiveness to changes, new circumstances, inevitable delays, and challenges. It helps to understand that perfectionism - a drive of many scientists - can lead to fear of failure and this can lead to procrastination or controlling behaviour.

LEARNING OBJECTIVES

This course provides a balance between sharing experiences (the opportunity to reflect on your personal development), observation and reflection (self-tests and discussion), theoretical background (like cognitive behavioural approach and learning styles) and skills training (planning strategies). It is required that you are willing to share some personal insights, values and experiences.

TRAINER

Paula Meesters is the PhD psychologist of the UU.

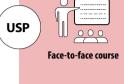
Great to dig deeper into learning styles and the learning styles of your supervisor(s), and the interplay between that

TARGET AUDIENCE

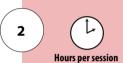
Anyone who wants to develop full awareness, gain a more balanced lifestyle, and who wants to enhance your level of concentration and motivation.

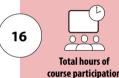
COURSE DESCRIPTION

The aim of this course is to develop full awareness, regain a more balanced lifestyle, enhance your level of concentration and motivation, and reduce high stress levels. You will practice fully comprehending the "just-ness" of experiences – "a bodily sensation is just a bodily sensation, an emotion is just an emotion, a negative thought is just a negative thought, a sound is just a sound." This will help you to allow any difficulty to appear in your awareness instead of resisting or avoiding it. The mindfulness approach is about pure, here-and-now awareness and, most importantly, non-judgmental acceptance.









14

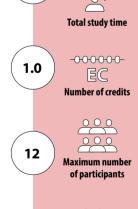
LEARNING OBJECTIVES

The course provides an equal balance between sharing experiences, observation and reflection, theoretical background (on mindfulness, stress reduction, and mindful cognitive approach), and skills training.

TRAINER

Paula Meesters is the PhD psychologist of the UU.

The course was very helpful to help me cope with stressful situations, not only PhD/work related, but also in my personal life

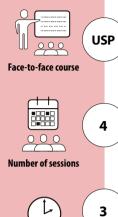


4

Number of times the course is offered per year

Psychological Flexibility

Focus Like a Pro



Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-0-

EC

Number of credits

Maximum number

of participants

Number of times

the course is

offered per year

12

14

1.0

12

2

TARGET AUDIENCE

Anyone who wants to stay motivated, perform at it's best and handle difficult thoughts.

COURSE DESCRIPTION

To achieve optimal performance and excel at the highest level, (elite) athletes need to learn how to handle pressure to get results, cope with adversity or setbacks, and deal with criticism or fatigue. Obtaining a PhD is much like performing as an elite athlete. It requires dealing with setbacks, slow progress, and taking courage. Like an elite athlete, being 'psychologically flexible' is a key requirement for staying motivated and focused during your PhD and handling difficult thoughts and emotions. This personal development course will help you develop psychological flexibility for life.

LEARNING OBJECTIVES

You will gain insight into how your thoughts and emotions affect your behavior and performance and acquire skills to deal with them effectively. You will work on your mental skills to stay focused and avoid distraction by concerns. You will assess your self-valued behavior regarding your PhD activities and other areas of life. This course consists of an individual intake and outtake and several group meetings. The group sessions serve to create self-awareness through education, small exercises, and peer discussions. Experiential learning through homework assignments is also an essential part of the learning process.

TRAINER

Martijn Ruitenburg obtained his degree from the Amsterdam Medical Centre. He studied and developed a job-specific worker's health surveillance for hospital physicians. He has a background in Human Movement Sciences and completed a postmaster programme to become an applied sport psychologist at Exposz / VU University. This course helped me to become aware of negative thoughts and feelings, and how to deal with these in difficult situations

TARGET AUDIENCE

This personal development course is for anyone who wants to improve focus for better performance, more energy and more satisfaction.

COURSE DESCRIPTION

Notifications, colleagues, a busy head or feelings of stress and anxiety: focusing for a longer period of time on one task is pretty difficult with all these distractions. And that comes with a cost. Feeling more stress, less energy and less satisfaction are the result of continuous task interruptions. Improving your focus is the key ingredient to better performance, less stress and more satisfaction.

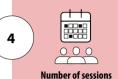
LEARNING OBJECTIVES

During this course you will learn what focus is. You will gain insight in how focus affects energy, performance and satisfaction. You will understand why continuous task interruptions are detrimental to delivering high quality of work and managing your energy and well-being. You will learn to manage focus and improve your concentration. These measures consist of managing your environment and taking care of your own energy level. In addition, you will learn how to manage your tasks and responsibilities to have a clear mind. And you will learn how to improve your focus muscle: the skill to regain focus when you are distracted.

TRAINER

Pepijn Lochtenberg and Martijn Ruitenburg are co-owners of Focus like a Pro, a company that provides high-level and long term focus and performance services.







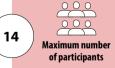


course participation





EC Number of credits



3

Number of times the course is offered per year Employees of the UU (including PhDs) are given the opportunity to follow courses and training. The Development Guide offers a lot of possibilities to employees to enjoy work and learn new skills.

The Development Guide is not only open for PhD candidates from the UU, but also for all the GSLS PhDs at the Utrecht Science Park. You need however, to apply for a Solis-ID.



A few of the courses on personal effectiveness that are on offer can be found below:

Workshop Communication skills for difficult conversations

Are you perhaps someone who keeps postponing a conversation with a colleague or manager you should be having? Are you supervising a Master's student you are dissatisfied with? Are there things you would like to say but don't know how to? Do you dread certain conversations because you're afraid of the response? Or is there something you would like to know but are afraid to ask? Utrecht University offers this communication skills workshop session to help improve your conversation skills.

The goal of this training session is to provide you with the requisite tools for having a better conversation when engaged in a difficult one. The session focuses on practical situations, using conversations and situations proposed by the participants to practise with.

Working in a diverse environment – dealing with differences at work

Every human being is unique and that also holds true at work. Unconscious bias is the way in which our brains compensate for overload. However, biases can also hamper collaboration, hinder performance and lead to poor decision-making.

In this module, you will learn about your own unconscious bias and what you can do about it. You will get insight into the impact of our brain on bias. You will get greater insight into your own unconscious biases. You will get more knowledge about which biases are most common in teams. And you receive some practical tools and resources for making bias a subject of discussion.

64

PLEASE NOTE: the set of courses of the Development Guide are under review at the time of writing of this guide. So content and courses might change in the course of 2024.



Development Guide's courses Professional development is a critical aspect of academic work, involving the ongoing development of knowledge, skills, and expertise necessary to achieve individual and institutional goals. It includes a range of activities designed to enhance professional competencies, such as attending conferences and workshops, engaging in mentorship and coaching, pursuing advanced degrees or certifications, and engaging in scholarly activities.

At its core, professional development involves that you **commit to lifelong learning**, **curiosity**, **and intellectual growth**. It requires that you will be proactive in seeking out new learning opportunities and reflecting on your experiences to identify areas for growth and improvement.

One important aspect of professional development is **staying up-to-date with new developments and best practices** in your field. This requires that you engage in ongoing reading and research, attend conferences and workshops, and network with colleagues to share knowledge and expertise.

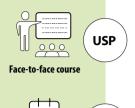
Another important aspect of professional development is **building and maintaining strong relationships with mentors and colleagues** who can provide guidance, support, and feedback. This requires that you are open to feedback and willing to learn from others, as well as to seek out opportunities to provide mentorship and support to others.

In addition, professional development involves **taking a strategic approach to career planning and development**. This includes identifying long-term career goals, developing a plan to achieve those goals, and regularly reflecting on progress and making adjustments as needed.

Overall, professional development is essential for academic success, as well as personal and professional growth. By engaging in ongoing learning and development activities, you can enhance your skills, knowledge, and expertise, and contribute to the advancement of knowledge and society as a whole.

Your Personal Development during your PhD Track

Courses offered by Career services



Number of sessions

Hours per session

Total hours of

course participation

Total study time

-0-0-0-0-0-0-

EC

Number of credits

000

Maximum numbe

of participants

1

4

4

1

0.2

12

3

TARGET AUDIENCE

This course is for first year or early second year PhD candidates.

COURSE DESCRIPTION

Doing a PhD is a wonderful learning opportunity, as it allows you to become an independent researcher. However, the amount of work can be overwhelming, resulting in low prioritization of personal skill development. A clear set of competencies that are believed to benefit PhD candidates in their future careers has been established. In this workshop, you will work with the PhD Competence Model to plan your personal development and equip yourself optimally during and after your PhD.

LEARNING OBJECTIVES

During this course, you will gain insight into the competencies required during your PhD and identify opportunities to develop them. You will learn how to deal with challenges that arise during your PhD journey by reflecting on your own personality and building trust in your future. The workshop includes a mix of practical and reflective exercises.

TRAINER

Simone Schut graduated as a behavioral biologist. After working as a consultant for a few years, she spent 10 years teaching soft skills and self-awareness to students of Biology and Biomedical Sciences in Amsterdam and Utrecht. During this time, she became a coach and trainer, helping individuals with their personal development and leadership skills.

Hearing that personal development is not about hitting the maximum for all elements in the rubric, but choosing areas to develop Career Services ensures that every PhD candidate is well prepared for a career in or outside academia. They offer tailor-made workshops, personal coaching sessions, several events, and CV checks.

Their services are for all PhDs, regardless of their Graduate School, type of contract, or the year of their PhD contract. PhDs who recently finished their PhD are also welcome.

Career Services offers various workshops, both digitally and on location. Below are a few of these workshops highlighted:

Self-Analysis for Career Orientation

If you are unclear about what kind of job will suit you, what you are passionate about, or where your strengths lie, this workshop will help you explore these questions to find out what is in your wheelhouse. By consciously and actively engaging with these themes, you will find out what it is you really want and what you find most important.

Exploring the Job Market & Networking

The job market offers innumerable possibilities. Do you know how to find organisations and jobs that suit your profile? Or how an employer searches for suitable candidates and what possibilities you have to increase job opportunities? In this workshop, you will learn how to get a better understanding of organisations. Furthermore, you will also learn how to use and improve the network you belong to.

Preparing for a Job Interview

This workshop will help you understand the employer's perspective during a job interview and how to play into their needs effectively. It focuses on the interview that you need to do to get a job or internship.



Career Services

Number of times the course is offered per year choosing o

TARGET AUDIENCE

The Summer and Winter School is offered by Hyphen Projects.

COURSE DESCRIPTION

The BioBusiness Summer & Winter School is a multi-day course for academics who are considering a career switch to the industry and young professionals in their first industry jobs. During the programme, you will learn the basic knowledge of main business topics, such as product development, intellectual property rights, business models, and finance.

LEARNING OBJECTIVES

You will also gain insight into the world of Life Sciences companies, hear from leading business people, and exchange with like-minded (inter)national participants. Networking is a key component of this course, allowing you to meet leaders and experts from the industry and build a strong network of talented peers. The sense of belonging to a group of high performers goes beyond the classroom, and many participants have formed bonds with peers that last for years to come.



Biobusiness Summer & Winter School

TARGET AUDIENCE

This course is most valuable for PhD candidates in the middle or at the end of their PhD track, as they will apply what they learn during the course to the results and skills they have acquired during their own PhD track. Postdocs, (senior) researchers, and anyone who is involved or interested in creating more impact with research are also welcome. This course is offered by UtrechtInC.

COURSE DESCRIPTION

Have you ever thought about how you could make an impact with your research by starting a company? Utrechtlnc offers a four-week, free, online evening course for researchers in Utrecht to get a sneak peek into the entrepreneurial world.

LEARNING OBJECTIVES

You don't need to have your own startup idea to join this course. It's enough if you are curious about commercialising your research. However, we do ask you to keep a research project in mind to use as a thought experiment for the exercises.



05 Even<mark>ts</mark>

Introduction for GSLS PhD candidates

Are you a new PhD candidate at GSLS and interested in learning more about the PhD journey that awaits you? During the introduction meeting, the GSLS PhD team will provide you with the most important information, including educational opportunities and the Training and Supervision Agreement (TSA), the roles of your supervisors and independent advisors/mentors, and the Annual PhD Progress Meeting. Additionally, a member of the GSLS PhD council will share their experiences with you, and there will be ample time for questions.

This meeting complements the introduction to GSLS PhD programmes. Please contact your PhD programme coordinator for more information about the programme's introduction.

GSLS PhD Day

Once a year, the PhD council and the PhD team of the GSLS join forces to organise an interesting and interactive afternoon with plenary sessions and interactive workshops around a specific theme. Themes from the last few years included "Skilling me Softly," "Communication in Science," "When Creativity Meets Science," and "Transparent Science." The day ends with dinner in the beautiful setting of the Botanical Gardens. Get inspired, meet your peers, and enjoy food and drinks!



Interested to become part of the organising committee? Contact the GSLS PhD Council.

GSLS PhD & Postdocs Career Days

To find out what's there for you behind the PhD-horizon the Graduate School of Life Sciences is organising the Life Sciences PhD & Postdoc Career Days. With workshops, a career fair and speed dates with alumni.

In May 2023 the Career Days were offered for the first time. Participants could join workshops on Career Opportunities, Exploring the Job Market, Transferable Skills and Self Analysis. In addition, the PhD programmes organised a part related to their specific research field. For example speed dates and interactive sessions with alumni of the programme.



We are planning to develop the Career Days further over the coming years. Keep an eye on the website!

PhACE

Many PhD candidates start their research thinking to continue with a career in academia, whereas only relatively few PhD candidates end up in longterm academic careers. Because of that, Utrecht University organises the PhD Activating Career Event (PhACE), a two-day event that aims to help you to think about your future career. Target group are in the penultimate (usually third) year of their PhD track.



During presentations and workshops, you can explore different career options that the Dutch labour market has to offer. Do you want to stay in academia or not? What are the alternative possibilities and how do your current skills and competences fit in these new career choices? You will reflect on your own skills and areas for development, while getting more insight in how these are transferable to the labour market. Moreover, you get the opportunity to exand your network.

PhACE is scheduled three times a year and is free for PhD candidates.

BCF Career Event

BCF Career Event is the largest Life Sciences career event in Europe. It is organised by Hyphen Project and takes place once a year in Utrecht. It is the meeting place for everyone who is or wants to be active in Bio/Life Sciences, Chemistry, Food or Pharma.



BCF Career Event offers you the opportunity to get into direct contact with a broad range of employers in the sector, but also with other organisations that can help you further in your career. The event hosts more than 100 organisations and offers you an exhibition floor, presentations, workshops and career support services. Explore your career opportunities in Life Sciences and meet your next employer at BCF Career Event. You can join the event for free.

BCF Career Event

70

Science for Life events

ThestrategicthemeLifeSciencesofUtrechtUniversitycombinesinterdisciplinary research of Utrecht University's Faculty of Science, Faculty of Veterinary Medicine and Faculty of Medicine (UMC Utrecht). One of the research pillars of the strategic theme is Science for Life, a collaboration of research groups from Utrecht University and the UMC Utrecht, in the fields of molecular, cellular and pharmaceutical sciences as well as plant biology. Science for Life operates in close interaction with the Hubrecht Institute and Princess Máxima Center and aims to build a campus-wide community for fundamental life scientists, fostering high-level interdisciplinary research.



Science for Life events

Science for Life Conference

Since 2015, Science for Life organises the Science for Life Conference, a conference that shows high-level interdisciplinary research in fundamental Life Sciences. Almost 500 Utrecht scientists, students, policy makers and entrepreneurs in the different collaborating research fields interact during this event. Outstanding international keynote speakers share their latest work and insights. You have the opportunity to present your work during the Poster Session and Parallel Sessions. A great way to expand your network at the campus!

Science for Life Cafés

The Science for Life Cafés are an attractive meeting place for new and established scientists from the community. Typically, a Science for Life Café hosts two presentations with speakers from different backgrounds, presenting and discussing their latest research on related scientific topics. This offers you the chance to meet new people within the community and to get inspired by ongoing research and technologies. The science part is followed by drinks and bites. An inspiring and fun place to start new collaborations!

Science for Life is often abbreviated by S4L.

Utrecht Science Week

The Utrecht Science Park is thriving. Through scientific achievements and successful cooperation between knowledge and care institutions and specialised companies. And by the arrival of new parties. In the process, established names and start-ups go hand in hand in their great ambitions and love for innovation. At the Utrecht Science Park, everyone works together towards a healthy and sustainable society.

Utrecht Science Week is initiated by the Utrecht Science Park Foundation to make the value and progress of all this work even more visible to a wide audience of stakeholders and interested parties. This is done by a highly varied programme including lectures, debates, tours, and creative competitions for devising solutions to issues of sustainability and healthy living. Established events such as the Betweter Festival, the Weekend of Science and the Day of Sustainability are part of the multifaceted offering. All this takes place at various locations in the Utrecht Science Park, and sometimes in the city of Utrecht.

As a researcher at Utrecht Science Park, you can contribute to this event. Are you closely involved and/or interested in developments in the field of sustainability and healthy living? Then participating in the Utrecht Science Week is definitely something for you.



06 **Practical information**

How do I register for courses?

Before you can register for courses, you have to create a login at our course portal. (QR code)

You can only do this when you are a:

- PhD candidate registered with the Graduate School of Life Sciences (GSLS) via MyPhD. You 1. can only request a login when you have received the Decision on registration e-mail from MyPhD.
- 2. (Co-)Supervisor of a GSLS PhD candidate. You can register for the course 'Supervising PhD Candidates at the Graduate School of Life Sciences'. You can only request a login when you have received the Decision on registration of your GSLS PhD candidate e-mail from MyPhD.

At the course portal you can only register for courses organised by the PhD Course Centre of the GSLS. The course portal includes only short course descriptions and a list of course editions that are open for registration. The full course description is available at our website.

If the course is organised by another organisation, you can find more details about the registration on the course page in this Course Guide or in the course agenda on the website. If courses are organised by one of the GSLS PhD programmes, you can ask the programme coordinator for more information. Courses of the PhD programmes are not included in this Course Guide (QR code)

Are all courses for free?

Our goal is to facilitate the development of a PhD candidate into an independent scientist by training and coaching as well as by providing the desired environment and structure. All courses that we offer are therefore free of charge. Of course, you need to consult your supervisor to discuss what training is of most use for your development.

However: free of charge does not mean free of responsibility. Once you have signed up for a course, we expect you to attend. For every late cancellation or no-show, we have had to disappoint others who would have liked to attend. So please read our policy before registration. You will find the policy at our website.

Of course, you are free to follow courses organised by other universities, institutes of organisations. You can include those in your Individual Training Plan of your TSA. However, we will not pay for these courses. Please consult your supervisor if there is budget available to follow external courses.

When can I register for a course?

We plan courses twice a year (from January till July; from August till December). You can find a course schedule on our website twice a year. The schedule is published several months before the period start, together with the course pages of these courses in the course agenda of the website.



Registrations open two months before the start (first session) of a course. We want to avoid that PhD candidates register way ahead of time, and then need to cancel in the end because of conflicts in their agenda. If you would like to follow a specific course that start in more than two months, please mark your agenda when registration opens.

If you would like to be informed when a specific course opens for registration, you can register for the interest list of the course at the course portal. Whenever a new edition opens for registration, you will receive an e-mail. If the edition doesn't fit into your schedule, you can wait for another opportunity.



PhD Update

Another way to be informed about the courses, is to register for the PhD Update. This is a two-weekly newsletter with updates on courses and events from the GSLS, but also with workshops and events from other organisations or useful information for PhD candidates

Do I need a Solis-id to join courses?

You can join most courses without a Solis-id. However, more and more courses require a Solis-id. For example, if you want to join courses from the Development Guide of Utrecht University or the new Academic Writing courses, you can only access those with your Solis-id.

PhD candidates of Utrecht University automatically get a Solis-id. If you work at the UMC Utrecht, Prinsess Máxima Center, Hubrecht Institute, or if you don't work at one of the institutes at Utrecht Science Park, you can apply for a Solis-id.



Apply for a Solis-id