

# Teaching activities for PhD students

Best practice scenarios and training opportunities -  
Recommendations by the PhD Study Board of the  
Faculty of Health and Medical Sciences

December 2022

Dear PhD student at the Faculty of Health and Medical Sciences,

Your representatives in the PhD Study Board voiced that the teaching and training opportunities that may be available to PhD students are different across the faculty's several departments. Importantly, your representatives suggested that it would be beneficial to provide general guidelines and good practices regarding teaching and supervision activities, on-boarding of undergraduate students into projects and feedback on teaching.

Hence, the PhD study board decided to gather information in this document to

- outline the 'why and how' of embarking on teaching activities as a PhD student,
- provide recommendations and sketching best practice scenarios, and
- propose courses for teaching-competence development for PhD students.

We hope that you find this document useful when you discuss and plan your teaching activities with your supervisor or at your department, and that these discussions will contribute to an appreciative teaching culture at the faculty.

You can read the whole document or go directly to the teaching activity that is relevant to you – just jump to the respective chapter. Please send feedback or comments to the PhD Study Board.

Enjoy your teaching!

Your PhD Study Board

[Contact details and more information about the PhD Study Board](#)

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## Why engage in teaching activities?

### **“Today’s researchers require skills beyond their core competencies”**

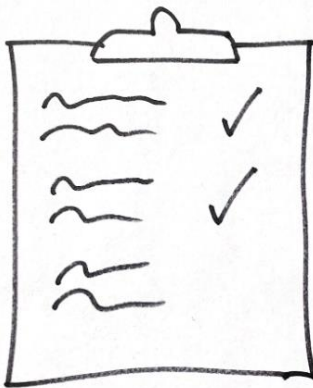
This sentence originates from an OECD report on transferable skills training for researchers (OECD 2012). Aiming at a definition of transferable skills, the European Science Foundation has proposed that “transferable skills are skills learned in one context (in this case, research) that are useful in another (for example, future employment whether in research, business, etc.) [...] such as communication and organizational skills.” (Scholz et al. 2010). Noteworthy, the European University Association found that companies were satisfied with the knowledge and research skills of European PhD graduates but saw room for improvement in communication skills (Borrell-Damián 2009).



### **Engaging in teaching activities is one way to obtain transferable communication skills**

As a teacher you need to adapt the dissemination of content to different target groups to get your message across. By teaching, you learn how to share evidence-based knowledge and can experiment with different formats for conveying content. These skills are transferable to your own work when, e.g., presenting results to colleagues, at conferences or to the public. Using activating teaching formats, you will foster students’ engagement in the learning process and support the development of their skills for life-long learning.

## The rules and regulations



### **The Ministerial Order**

According to the Ministerial Order on PhD Programmes (PhD Order BEK no. 1039 of 27/08/2013), the “PhD programme is a research programme aiming to train PhD students at an international level to undertake research, development and teaching assignments in the private and public sectors, for which a broad knowledge of research is required.” (Ministry for Higher Education and Science 2013).

Amongst others, the PhD fellow is expected to “gain experience of teaching activities or other form of knowledge dissemination which is related to the student's PhD project” (part 3, clause 7.2 (4)).

The institution may, on its own initiative or following an application from the PhD student offer the PhD student a teaching course (part 3, clause 8.2 (3,)) or teaching guidance (part 3, clause 8.2 (4)) (Ministry for Higher Education and Science 2013).

Within three months of the start of the PhD programme, the institution approves a research and study plan (the PhD plan) for the individual PhD student, which must, amongst others, contain a plan for teaching activities or other knowledge dissemination (Ministry for Higher Education and Science 2013).

### **How is this handled at the Faculty of Health and Medical Sciences?**

At the time of writing, the [current rules and regulations of the Graduate School of Health and Medical Sciences](#) specify that “the Deanery and the heads of department expect PhD students to be assigned to teach at maximum 100 teaching hours per year” irrespective of which collective agreement the PhD student is employed under.

The term “teaching hour” denotes the time spent on teaching (teaching activity, preparation and post-processing where applicable) and is defined in the [joint standards for academic staff in relation to teaching, supervision and exams at SUND](#) (requires login).

Note that the different departments at the Faculty of Health and Medical Sciences have different programmes and incentives for teaching and development of teaching skills, and the extent of teaching activities may vary amongst the departments. *Hence, it is important to align expectations locally at your workplace.* Most departments have coordinators for teaching activities (e.g. Vice Head of Department for Education, Teaching coordinator, Chairperson of departmental teaching committee or alike) whom you can contact in coordination with your supervisor.

## Teaching opportunities at the Faculty of Health and Medical Sciences

### General structure

The Faculty of Health and Medical Sciences offers a [large number of different undergraduate study programmes](#). Teachers support the students' learning by synchronous study activities such as lectures, seminars, practical assignments (lab work, clinical work), and other – synchronous or asynchronous – student engaging activities such as facilitating student presentations, moderating discussion fora, developing quizzes and providing feedback on the University learning platform (Canvas). Other activities include supervision of undergraduate students, often in the form of project-based work. Students are assessed following exams or active participation. In addition, some courses may require the successful completion of written, oral or practical assignments during the course.

Courses within the study programmes are organized within one department or across several departments. If your PhD supervisor is not familiar with current teaching opportunities at your department, you may get valuable advice from your department's teaching coordinator. While most bachelor programmes are taught primarily in Danish, teaching options in English can often be discussed with the respective course manager. Many Master programmes hold teaching opportunities in English.

### Teaching activities suited for PhD students

Depending on the departmental affiliation, PhD students typically participate in classroom teaching activities, supervision of undergraduate students (Bachelor- or Master thesis projects or ERASMUS programme students), supervision/sparring in clinical practice and activities designed for high-school students.



## Recommendations by the PhD study board

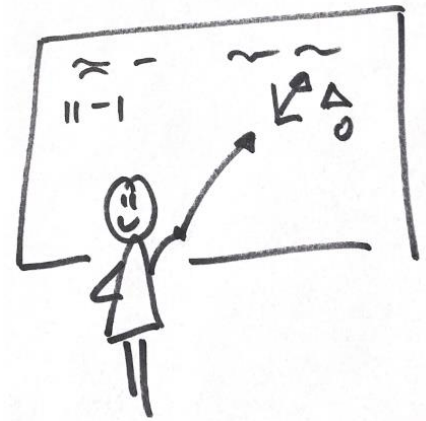
The 'best practice' sections describe – to the best of our knowledge and at the time of writing – ideal cases, where all parties, i.e. PhD students, supervisors, graduate programmes and departmental coordinators share the responsibility for the successful training and execution of the PhD student's teaching activities.

The 'best practice' sections should serve as inspiration and point of departure for your reflections over your own teaching practices. By no means should they be understood as checklist where each and any box must be ticked at any given time. Adapt to your local environment and your personal style.

Note that the list of training offers is not exhaustive – there are typically a variety of offers within communication skills in the Graduate School's course catalogue. You may want to ask fellow PhD students at your workplace or at your Graduate programme for further recommendations.

## Activities within student activating teaching formats (classroom teaching)

At the Faculty of Health and Medical Sciences, classroom teaching can comprise seminars (typically for 24-30 students) or lab classes (typically 12-15 students). In some contexts, the format is called 'student activating teaching (undervisning)' or 'SAU', but it can come with other names such as 'tutorial', 'theoretical exercises', 'class instructions', 'lab exercises' and alike. For most of the study programmes, student numbers are high, which means that several classes run in parallel.



### Best practice

- In the ideal scenario, you have planned your teaching activities with your PhD supervisor and/or a departmental coordinator at the very beginning of your PhD studies. Together, you find a match with one of the courses (likely a course offered at your department) based on your competences/education and/or your PhD subject. Your PhD supervisor or departmental coordinator then puts you in contact with the course manager.
- You sign up for the PhD course 'Introduction to University Pedagogy (IUP)' (see training possibilities below) – and/or other courses or workshops you deem relevant for you. (This will depend on whether you have previous teaching experience and on your self-reflection. E.g., are you nervous when speaking in front of others? Then sign up for a course that helps you overcome nervousness.)
- You have a meeting with the course manager who introduces you to the course content, the relevant textbook or learning material, the course room in the e-learning management system (Absalon) and possibly shares course material with you.
- The course manager arranges a mentor for you, i.e., an experienced teacher who you can observe in the classroom at the earliest occasion. You observe the teaching session(s) and possibly discuss the session(s) afterwards with your mentor. You attend the IUP course.
- You embark on the teaching activity yourself (and yes, you will be dead nervous, feel unprepared even though you have been reading the book repeatedly, and impostor syndrome is hitting you – don't panic, that's how we all started...). Your mentor or course manager observes your teaching and provides you with constructive feedback afterwards.
- At the end of the course, your course manager invites all teachers to a debriefing meeting, where you share experiences and discuss whether/how the course could be improved. Your course manager shares and discusses specific comments to your teaching in the course evaluation with you, should there be any. You plan with the course manager for the rest of your PhD taking possible stays abroad into account (to the extent this is possible). So now both you and the course manager can plan ahead.
- You teach and learn. You figure out when you can observe other teachers for getting more inspiration and you invite other teachers to observe your own teaching for getting feedback. Once you feel ready for this, you may want to ask the students directly for feedback in one of your teaching sessions. The collegial sparring and the student feedback will help you develop your own teaching and will in addition train your communication skills.

### Training opportunities

- **PhD course: "Introduction to University Pedagogy (IUP)"**  
This course will equip you with research-based theory and terminology of teaching practice and practical skills to improve the quality of your own teaching. In addition, the course will strengthen your dissemination skills. Note that there are typically waiting lists.  
The course (5 days, 3 ECTS) runs regularly, approximately once a month. [Read more about the course and sign up.](#)

- PhD course: "Performance training - get ready for your teaching, presentations or PhD defense"  
 The aim of this course is to improve your oral communication capacity, so that you are better equipped for presentations, teaching activities, communication with peers, etc. You will learn tricks on how to manage your nerves. The course covers aspects such as the use of voice, body language, storytelling technique, dramaturgical methods for building a presentation, the use of visual instruments and structural tools. You will receive individual feedback.  
 The course is offered 4 to 6 times a year (1 day, 0.9 ECTS). Offered via the [Graduate School's course catalogue](#).
- Workshop: "Getting started as teacher"  
 Being new to teaching can be intimidating – with this workshop, we aim to help you kick-starting your teaching. You will receive some practical tools which you can use in your classroom.  
 This workshop takes place twice a year before semester starts (end of August, end of January), offered by the faculty's [Center for Online and Blended Learning](#) and should be understood as teaser for the PhD course "Introduction to Pedagogy" (IUP).
- Workshop "Apply visual and cognitive rules in PowerPoint for supporting your students' learning/PowerPoint lab"  
 Powerpoint can be an effective tool to communicate structure and technical points when teaching. If you build your slides in accordance with the visual and cognitive rules and guidelines behind the way we understand and learn complicated input, they also support understanding, memory and therefore learning. In this hands-on workshop, you will learn how to use the visual and cognitive rules and guidelines to combine, among others, images, graphs, diagrams, bullet points and simple animations. The appropriate combination will help your students engage with the teaching material, acquire new knowledge and remember it for a long time. You will learn techniques on how to create slides that improve the teaching and learning experience and at the same time make presenting and teaching more focused.  
 The workshop is offered 8-10 times a year (3 hours). Offered by the faculty's [Center for Online and Blended Learning](#).
- Workshops and webinars at SUND's Center for Online and Blended Learning  
 Check the [Center's event page for offers](#).

## Supervision of undergraduate students (Bachelor- and Master thesis projects)

Supervision of undergraduate students provides you with the opportunity to train mentoring and leadership skills. While PhD students cannot be main supervisors (rules for [bachelor](#) and [master](#) thesis supervision, login required), many PhD students get involved in supervision of undergraduate students, e.g., as practical/project supervisors of bachelor or Master thesis project students or visiting students in the ERASMUS programme. In this role, the PhD student often instructs, guides and advises the undergraduate students on several aspects of the projects, i.e., experimental techniques and experimental design (where applicable), literature mining, critical reading etc. In most study programmes offered at Faculty of Health and Medical Sciences, the undergraduate students need to submit a contract to the study administration that is signed by the main supervisor before project starts.



### Best practice

- In the ideal scenario, you have discussed the opportunity to co-supervise undergraduate students with your PhD supervisor at the beginning of your PhD project. Together, you discuss which undergraduate student could be a good match with respect to your own training and competences, possibly supporting your own PhD project. You discuss your roles and agree on how to share the supervision. Also, you discuss how the main supervisor (i.e., your PhD supervisor) will provide you with feedback on your supervision ('train the trainer').
- You sign up for the PhD course 'Supervision of BSc and MSc students' – and/or other courses or workshops you deem relevant for you.
- You (or your PhD supervisor) recruit a student (e.g., through contact with students in the classroom setting, posting a project at the '[UCPH Projects and Jobs](#)' central career portal for students, announcements on blackboards, word of mouth, etc.).
- Request to be listed in the bachelor or master thesis contracts as co/project-supervisor if the form allows.
- You and the main supervisor have a meeting with the student before the project starts to discuss the science (the topic), the framework of the project (incl. the roles of main supervisor and project supervisor), and prerequisites and expectations towards the student's preparation (depending on the project e.g. participation in a workshop on literature search offered by the library, participation in the online courses for students such as research data management and data management plans, GDPR, lab safety, and alike).
- Before the project starts, you and the main supervisor coordinate the onboarding of the student (several departments have procedures and onboarding guides, check locally).
- In the first week of the project, you and the main supervisor (and other supervisors, if applicable) make an alignment of expectation. Several templates are available – [you could adapt the form you used yourself at the beginning of your PhD thesis](#). In addition to questions regarding the framework of supervision, you also discuss how you handle possible contributions to manuscripts and co-authorships.
- In some study programmes, two or more undergraduate students can jointly conduct a project. In these cases, encourage the students to make a group contract with each other. The [Danish Student Counselling Service](#) has developed a [useful guides and templates](#) (available in Danish).
- In the beginning of the project, the undergraduate student drafts a timeline and plan for writing the thesis and you coordinate the process and dates for submission of drafts and supervisor(s) feedback in the supervisor team.



- ❑ You have regular supervisor meetings with the student and the main supervisor according to the agreements based on your alignment of expectations.
- ❑ During the project, you receive formative feedback from your supervisor on your way of supervising.
- ❑ You conduct a midway evaluation of the supervision process and the project progression.
- ❑ After successful project completion, you conduct an evaluation meeting with the student with mutual feedback on project and supervision process.

### Training opportunities

- PhD course: “Supervision of BSc and MSc students”  
 The focus of the course is supervision of BSc and MSc students who are doing their bachelor’s project or Master’s thesis or other kinds of projects under supervision.  
 The supervisors will improve their skills to (1) acquire knowledge about the students’ experiences and interests through dialogue and small exercises, (2) provide feedback to the students’ written or oral presentations in a way that facilitate the students’ learning process, and (3) reflect on the importance of balancing the control exercised by the supervisor and the students’ own control of the process and the project, and techniques to adjust and evaluate this balance.  
 The course (2 days, 1 ECTS) is offered by the Dept. of Science Education and runs regularly, approximately twice a semester. [Read more about the course and sign up.](#)
- Workshop: Intercultural Communication Workshop  
 This interactive workshop focuses on interpersonal communication at an international workplace. The workshop is targeted to PhD students at the Faculty of Health and Medical Sciences, UCPH. All nationalities will benefit from sharing experiences and getting advice from the facilitators. At the workshop, you will work with UCPH working culture, unconscious bias, giving (or receiving) feedback according to local practice, language challenges, communication and context.  
 The workshop (0,5 day, no ECTS) is facilitated by UCPH’s International Staff Mobility Unit and offered via the [Graduate School's course catalogue](#).  
 Alternatively, you can find a similar course addressing all UCPH employees announced on the [UCPH HR course page](#).

## Clinical instruction

Training in clinical competences is instrumental in some study programmes such as medicine, veterinary medicine, and odontology. Clinical instruction or bed/chair-side teaching normally involves smaller groups of students (2-8) in a teaching hospital/clinic setting. In this role, the PhD students often instruct and guide the students, i.e., obtain a relevant medical history, perform a physical examination, make a list of differential diagnoses and provide a diagnostic and therapeutic plan for the patient. In such settings, supervision is done while the subject or their accompanying person is on site, which requires special communication strategies. As a teacher, you not only communicate with the student in focus and the students within the group, but also with the patient and next of kin.



The PhD student should provide a structured, balanced and safe learning environment for undergraduate students to develop the necessary competences of a health professional. Another important aspect is to learn how to provide constructive feedback to students about their clinical work and development.

## Best practice

- In the ideal scenario, you have discussed the opportunity with your PhD supervisor at the beginning of your PhD study. Together, you discuss which type of clinical teaching could be a good match with respect to your own training and competences, possibly supporting your own PhD study. Your PhD supervisor or departmental coordinator puts you in contact with the course manager.
- You sign up for the PhD course 'Introduction to University Pedagogy (IUP)' – and/or other courses or workshops you deem relevant for you. (This will depend on whether you have previous teaching experience and on your self-reflection.)
- You have a meeting with the course manager who introduces you to the course, the learning objectives, the relevant textbook or other material, and the course room in the e-learning management system (Absalon) and possibly shares course material with you.
- The course manager arranges a mentor for you, i.e., an experienced teacher who you can observe in the clinic at the earliest occasion. You observe the teaching session(s) and possibly discuss the session(s) afterwards with your mentor. Also, you discuss how the mentor will provide feedback on your supervision ('peer to peer training'). You agree on who to contact if you have any questions or doubts regarding the clinical decision making.
- You attend the IUP course.
- You embark on the clinical instruction yourself. Your mentor or course manager observes your instruction and provides you with constructive feedback afterwards.
- You teach and learn. You figure out when you can observe other clinical instructors for getting more inspiration and you invite others to observe you and give you feedback. Once you feel ready for this, you may want to ask the students directly for feedback in one of your teaching sessions. The collegial sparring and the student feedback will help you develop your own style and communication skills.
- At the end of the course, your course manager invites all teachers to a debriefing meeting, where you share experiences and discuss whether/how the course could be improved. Your course manager shares and discusses specific comments to your teaching in the course evaluation with you, should there be any. You make a plan with the course manager for the rest of your PhD taking possible stays abroad into account (to the extent this is possible). So now both you and the course manager can plan ahead.

## Training opportunities and resources

- PhD course: “Introduction to University Pedagogy (IUP)”  
This course will equip you with research-based theory and terminology of teaching practice and practical skills to improve the quality of your own teaching. In addition, the course will strengthen your dissemination skills. Note that there are typically waiting lists.  
The course (5 days, 3 ECTS) runs regularly, approximately once a month. [Read more about the course and sign up.](#)
- Course in clinical decision making (Kursus i klinisk beslutningslære)  
This course is offered in Danish. It is held for students in medicine and veterinary medicine at the Master level (2,5 ECTS), but offered at the faculty’s page for Continuing and Professional Education. [Read more about the course and find out your options by contacting the course secretary.](#)
- Collegial sparring  
Following a more experienced colleague (“Følording”) in the appropriate clinical setting can help prepare you for your own clinical teaching (Secomb 2008). Ask your PhD supervisor or course coordinator to help make a contact to the relevant colleague.  
Also, systematic sparring with peers at the same level (i.e., other PhD students) is a valuable approach for developing your communicative skills. You can find inspiration and guides for how to approach collegial sparring at [UCPH’s Teacher Portal](#) (requires login).
- Guides and relevant reading
  - AMEE, the international association for health professions education, [offers relevant courses on a regular basis](#), e.g., a course in “Essential Skills in Medical Education Clinical Teaching” and concise guides on teaching in the clinical environment (Ramani and Leinster 2008; Ramani et al. 2016).
  - Article – “Feedback in clinical medical education” (Ende 1983)
  - Article – “The ABCs of pedagogy for clinical teachers” (McLeod et al. 2003)
  - Book chapter – “The Role of Pedagogy in Clinical Education” (Tredinnick-Rowe 2018)
  - Book chapter – “Teaching Clinical Skills” (Riddle 2014)
- E-learning courses  
There exist a number of international online courses. These courses are rather extensive and hence likely beyond the scope of PhD studies, yet we list them for those with special interest in the subject.
  - [Teaching and learning in clinical practice](#) (Edge Hill University, UK)
  - [Theory and practice of clinical education](#) (University of Auckland, NZ)
  - [Postgraduate Certificate Learning and Teaching in Clinical Practice](#), (Education for Health, UK)

## Other teaching and dissemination activities

Other relevant dissemination activities may be relevant to you and the research group. Although dissemination of your project’s results happens routinely in scientific meetings, other types of dissemination in the form of interviews for newspapers, radio or television, lectures for schoolchildren or relevant stakeholder groups (e.g., patients, funding bodies), or sharing your results in cultural events (e.g., Culture Night - KulturNatten) will provide you with the opportunity to train targeting different audience. In such activities you will benefit from the abovementioned pedagogical training.

## References

- Borrell-Damián, Lidia. 2009. "Collaborative Doctoral Education University-Industry Partnerships for Enhancing Knowledge Exchange." European University Association asbl. <https://www.eua.eu/component/attachments/attachments.html?id=749>.
- Ende, J. 1983. "Feedback in Clinical Medical Education." *JAMA* 250 (6): 777–81.
- McLeod, Peter J., Yvonne Steinert, Tim Meagher, and Audrey McLeod. 2003. "The ABCs of Pedagogy for Clinical Teachers." *Medical Education* 37 (7): 638–44. <https://doi.org/10.1046/j.1365-2923.2003.01559.x>.
- Ministry for Higher Education and Science. 2013. *Bekendtgørelse Om Ph.d.-Uddannelsen Ved Universiteterne Og Visse Kunstneriske Uddannelsesinstitutioner (Ph.d.-Bekendtgørelsen)*. Vol. BEK nr 1039 af 27/08/2013. <https://www.retsinformation.dk/eli/lt/2013/1039>.
- OECD. 2012. *Transferable Skills Training for Researchers: Supporting Career Development and Research*. Paris: Organisation for Economic Co-operation and Development. [https://www.oecd-ilibrary.org/science-and-technology/transferable-skills-training-for-researchers\\_9789264179721-en](https://www.oecd-ilibrary.org/science-and-technology/transferable-skills-training-for-researchers_9789264179721-en).
- Ramani, Subha, and Sam Leinster. 2008. "AMEE Guide No. 34: Teaching in the Clinical Environment." *Medical Teacher* 30 (4): 347–64. <https://doi.org/10.1080/01421590802061613>.
- Ramani, Subha, Karen Mann, David Taylor, and Harish Thampy. 2016. "Residents as Teachers: Near Peer Learning in Clinical Work Settings: AMEE Guide No. 106." *Medical Teacher* 38 (7): 642–55. <https://doi.org/10.3109/0142159X.2016.1147540>.
- Riddle, Janet M. 2014. "Teaching Clinical Skills." In *An Introduction to Medical Teaching*, edited by Kathryn N. Huggett and William B. Jeffries, 77–91. Dordrecht: Springer Netherlands. [https://doi.org/10.1007/978-94-017-9066-6\\_7](https://doi.org/10.1007/978-94-017-9066-6_7).
- Scholz, Beate, Eero Vuorio, Susanne Matuschek, and Iain Cameron. 2010. "Research Careers in Europe Landscape and Horizons. A Report by the ESF Member Organisation Forum on Research Careers." European Science Foundation. [https://www.esf.org/fileadmin/user\\_upload/esf/MO\\_research\\_careers2010.pdf](https://www.esf.org/fileadmin/user_upload/esf/MO_research_careers2010.pdf).
- Secomb, Jacinta. 2008. "A Systematic Review of Peer Teaching and Learning in Clinical Education." *Journal of Clinical Nursing* 17 (6): 703–16. <https://doi.org/10.1111/j.1365-2702.2007.01954.x>.
- Tredinnick-Rowe, John. 2018. *The Role of Pedagogy in Clinical Education. New Pedagogical Challenges in the 21st Century - Contributions of Research in Education*. IntechOpen. <https://doi.org/10.5772/intechopen.74960>.