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Formal courses on teaching and advising

Two day course on advising PhD students, January 2012.
Half day courses on holding MUS with PhD students, September 2013 November 2019.
Half day course on advising assistant professors on teaching, January 2014.

Administration related to teaching

Member of the Natural Sciences PhD Study Board (and chairman of the local PhD committee), University of Southern Denmark, 2005-2007 and 2014-2017. Observer 2008-2009.

Member of the Natural Sciences Study Board, University of Southern Denmark, 2000-2002.

Member of the College Council of the University of Chicago, 1986-89.

Some courses I have taught

Undergraduate:

Introduction to Information Technology I, Introduction to Computer Science, Introduction to Computer Programming I and II, Data Structures, Advanced Data Structures, Discrete Mathematics, Languages and Models, Theory of Algorithms, Graph Theory, Algorithms and Complexity, Algorithms and Probability, Complexity and Computability, Theory of Computation I, Cryptology, Computer Security, Network Security.

Graduate:

On-Line Algorithms, Cryptology, Cryptography and Complexity, Cryptographic Protocol Theory, Zero-Knowledge Seminar, Structural Complexity, Randomized Algorithms, Geometry and Linear Programming, Combinatorial Optimization, Algorithmic Number Theory.

For all of these courses, teaching involved primary responsibility for the course, including evaluating the students to give grades. Most of these are courses I developed myself.

Advising

12 PhD students completed.

31 speciale students completed.

22 bachelor students completed.

3 assistant professors during their pedagogical course.

Methods and materials

My teaching is usually a combination of lectures and discussion sections, about 50-50. It is important to me to have contact with my students and make sure they are following my teaching. Thus, I ask them questions, ask them to ask me questions when I can see there is a problem but do not know where it is, and encourage comments and questions, also in my lectures. I do not force students who do not want to present something to do so, but encourage others to.

In my recent courses, there have always been some assignments the students should turn in before the exam, to help prepare them for the exam, but also to give them experience in trying use what they have learned in a way that cannot be tested in an exam.

The assignments and lecture notes, plus announcements, are available through my course homepage, which is available from Blackboard or directly from my personal homepage.

When teaching Introduction to IT and Introduction to Computer Science, I prepared computer laboratory activities. Instructions for these are still available from my homepages for these past courses.

Pedagogical development projects

I was involved in some of the original planning of the first year projects for students in the Natural Sciences.

Censor experience (external examiner at other universities)

I was a member of the Computer Science censorcorps for many years, plus other censorcops.