UMEÅ UNIVERSITY

Writing research proposals that get funded
Att skriva forskningsansökningar som beviljas

Credits: 3 ECTS
Course Code: 5DN005
Established: 2017-10-16
Established by: Committee for doctoral studies
Syllabus valid from: 2017-10-16
Responsible Department: Faculty of Medicine: Department of Radiation Sciences, Faculty of Science and Technology: Department of Physics
Main field of study: General science
Grading system: G pass, U Fail
Level of Education: Doctoral course

1. Eligibility Requirements
Eligible students have completed the doctoral course *Writing Science: How to write and publish scientific papers* or an equivalent course.

2. Learning Outcomes
After completing the course, students shall be able to:

Knowledge and understanding
- describe and explain the fundamental structure of research proposals
- describe a conceptual framework and associated techniques that together provide a systematic approach to research proposal writing
- explain how the proposal reviewing process works

Competence and skills
- write a research proposal that asks a good question, shows why this question is significant, and describes a convincing approach to answering it
- review research proposals with respect to question, significance, and approach

Judgement and approach
- evaluate and analyse research proposals from a writing-style perspective
- understand why a proposal was rejected and learn how to deal with it

3. Content
This course teaches how to write research proposals. The ability to write effective research proposals is a central skill and critical to the success of scientists. The overarching aim of this course is for students to receive the conceptual framework and tools necessary to become skilled research proposal writers. The course includes the four-step process of Why, Who, What, and How for writing successful

proposals by answering the two fundamental questions a reviewer is asking: What's in it for me or the funding agencies I represent? Can they actually deliver what they are promising?

First, we analyse the key elements of good research proposals, emphasizing the significance of the overall structure and exploring different strategies used to develop clear and interesting proposals. Here we will highlight why a proposal must contain a broad opening, key research questions, compelling aims, clear descriptions of the approach, and a succinct summary. We present different techniques and analyse how to ask a good research question, how to show why it is important, and how to show why the approach to answering it will work.

Each student works individually to refine his or her research proposal using the tools presented during the course. At each course meeting, students will work in small writing groups where they analyse and provide constructive criticism on each other's proposals. Students also engage with the broader group in larger discussions, sharing the successes and challenges from the daily exercises and the analytical work during the previous week. Examples of additional topics covered during the course include the importance of proposal writing for scientists, how to persuade reviewers, how to demonstrate credibility, how to write concise and compelling significance statements, and how to know where and when to apply for funding. Finally, students will meet and be able to ask questions to an experienced research proposal reviewer.

4. Instructions

We meet once a week for four weeks. Each meeting starts with a short lecture focused on research proposal writing in practice, based on experience with funding agencies, reviewers, etc. The optional readings will cover this part. We then introduce the writing session and divide the class into small writing groups of three to four students. Before each session, students have prepared a proposal, or have revised their proposal according to a specific exercise. Other students within the writing group comment on the new versions of their group members. Together, students analyse, discuss, and revise the proposals to improve them. Each of these weekly exercises derives from the book 4 Steps To Funding, which from chapter to chapter provides new tools to compel and convince reviewers. Each week we cover about 50 pages, and exercises that take two–three days to complete. We also read and analyse successful and unsuccessful proposals. At the end of each class period, we reunite to summarize and conclude the day's activities and present the exercise for the next meeting. Finally, at the end of the course, the instructors provide all students with individual feedback on his or her proposal.

We use Cambro to coordinate all exercises.

Importantly, we provide the first chapters of 4 Steps To Funding and announce the first exercise before the first meeting, so that students can prepare a draft of a short proposal (about one page).

5. Examination

To pass the course, the student must actively participate, and provide thorough feedback in writing groups. Further, the student must complete the various exercises to write, revise, and edit a proposal that reaches submission quality. Finally, the student must analyse and review two research proposals.

6. Other Directives

Academic credit transfers are always reviewed individually according to the University's set of rules and academic credit transfer regulations.

7. Course Literature

Main:

- Giddings, M. (2011) 4 Steps To Funding; How to *Avoid Rejection and Get Your Grant Funded on the Next Try With This Simple Four Step Formula*. Marketing Your Science LLC
- Schimel J. (2012) Writing Science: *How to write papers that get cited and proposals that get funded*. New York, New York: Oxford University Press

Optional but recommended:

- Friedland, A. and Folt, C.L. (2009) Writing Successful Science Proposals, Second Edition. Yale University Press.
- Heath, C. and Heath, D. (2007) Made to Stick: Why Some Ideas Survive and Others Die. Random House.

Research proposals distributed during the course