

# TIK9023 RESEARCH, INNOVATION & IMPACT

This course description applies to the academic year 2017/2018. The course is part of the Norwegian Researcher School in Innovation Studies (NORSI) and it is organised by TIK Centre for Technology, Innovation and Culture and part of the activities of the Oslo Institute for Research on the Impact of Science (OSIRIS). [Need to get course number confirmed]

## RESPONSIBLE FOR THE COURSE

Magnus Gulbrandsen, TIK Centre for Technology, Innovation and Culture, University of Oslo

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Administrative support: Lene Angelskår, TIK

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## PRACTICALITIES

The lecture part of the course is held in its entirety at the University of Oslo.

The course is free of charge and candidates will get all lunches and one dinner covered. NORSI enrolled candidates will also get their travel and accommodation costs reimbursed by NORSI. Reservations will be made for arriving participants in Oslo. Lene Angelskår from the TIK administration will be in touch upon admission to the course to inform you of the practicalities.

## TIME AND PLACE

Oslo, TIK Centre for Technology, Innovation and Culture, 27 November – 1 December 2017

Room number to be confirmed

## ECTS CREDITS

8 credits

## LANGUAGE OF INSTRUCTION

English

## ADMISSION/PREREQUISITES

Admission to a PhD programme is required for participation in this course, preferably in one of the NORSI partner institutions. Other candidates can be accepted by application to the course coordinator. It will also be

possible for practitioners from science policy agencies and similar to attend parts of the course. Please contact the course coordinator for more details.

Applicants are to submit the application form along with a short outline of their PhD project and a letter of confirmation regarding candidacy within a PhD programme.

Please submit your application via email to: [lene.angelskar@tik.uio.no](mailto:lene.angelskar@tik.uio.no)

Deadline for application: November 1<sup>st</sup>, 2017

## INTRODUCTION

In the late 1970s it became apparent that new high technology firms seemed to cluster around leading research universities such as MIT and Stanford in the US and Cambridge in the UK. Research in such organisations as well as in public labs seemed to be a major force in the electronics and ICT revolutions. The OECD became interested and published an influential report, *Industry and University* in 1984, urging universities to get engaged in science parks, technology transfer and industry collaboration more broadly.

Since then the interest in how research organisations contribute to innovation and other forms of societal impacts has exploded. Policymakers have pushed for increased commercialisation from science and improved linkages between universities and industry, and they have called upon public research to contribute to solving society's grand challenges.

Although the interest in the utility of public science may be as old as science policy itself, the last decades represent a stronger belief in building a support structure around utility value and making this a more explicit demand to publicly funded research. Empirical investigations, particularly on academic entrepreneurship and university-industry linkages, have emerged hand in hand with the policy interests in these topics; they have become increasingly sophisticated and inspired new theoretical approaches and introduced theoretical concepts from neighbouring fields into research, technology and innovation studies.

This course will look more closely at different aspects of how public research contributes to innovation and the broader societal impacts of investment in scientific knowledge. What do we mean when we talk about public research? How and why does it matter for innovation and impact in industry and in society? How can this be studied empirically? Is there a way to resolve the many contested issues emerging at the intersection between entrepreneurship, science and innovation policy?

## LEARNING OUTCOMES

The students will become acquainted with classic and recent perspectives on the relationship between research and innovation. The course will also address theoretical and empirical perspectives on academic entrepreneurship, university-industry linkages and research impact studies. We will design the course as a combination of traditional lectures, exercises, student presentations and group discussions.

The aim is furthermore that the course should encompass perspectives and theories that can be useful as frameworks and methodological reflections for PhD work. We do not assume that students are specialists in the area, but that their PhD topic may include an element of the link between research and innovation.

## COURSE OUTLINE

Each day should have a mixture of theoretical lectures, discussions, student presentations and possibly some link with practice or some exercises oriented at doing a small-scale empirical work, writing a short blog post or similar.

## LEARNING PROCESS AND WORKLOAD

All students will be expected to read the course literature before attending. They will also be required to present one article/book chapter/contribution each, and to participate actively in group discussions.

8 credit points correspond to 8 work weeks, which includes preparation, reading and writing of exam essay.

## EXAMINATION

A term paper of 15 to 25 pages is required in addition to active participation in the lecture week. The evaluation will be based on participation in the seminar and the quality of the term paper.

Grade: pass/fail. Paper will be due after the winter break (most likely end of January 2018).

Transcript from the course is attainable through studentweb at the University of Oslo website. All candidates accepted for admission will be registered as guest students at UiO. Studentweb is then accessible with your date of birth and Norwegian ID-number and a PIN-code issued at your admission to the course. Please contact Lene Angelskår with any practical questions regarding admission and transcripts.

## TENTATIVE COURSE OUTLINE

Each day: lecture in the morning, topic for discussion, lunch, short second lecture, involvement with practice (empirical work, visit from policymakers, TTO etc.), student presentations of things from their own work related to the topic. Possibly more flexibility and each day could be slightly different.

### MONDAY NOVEMBER 27<sup>TH</sup>: PERSPECTIVES ON THE RELATIONSHIP BETWEEN RESEARCH AND INNOVATION

Lecturers: Magnus Gulbrandsen (MG) and Taran Thune (TT)

Differences between types of public research organisations, various perspectives highlighting public-private partnerships, the linear and reverse linear models, normative versus descriptive viewpoints etc.

### TUESDAY NOVEMBER 28<sup>TH</sup>: STUDYING UNIVERSITY-INDUSTRY RELATIONS

Lecturers: Pablo d'Este and MG/TT

Emphasis on empirical work and on possible theoretical perspectives.

### WEDNESDAY NOVEMBER 29<sup>TH</sup>: ACADEMIC ENTREPRENEURSHIP

Lecturers: Lene Foss and MG

Emphasis on empirical work and on the role of the researcher in promoting entrepreneurship versus studying it from a distance.

### THURSDAY NOVEMBER 30<sup>TH</sup>: SCIENCE POLICY AND INNOVATION POLICY

Lecturers: To be confirmed

Emphasis on how to study policy, framing/governance/expertise etc.

## FRIDAY DECEMBER 1<sup>ST</sup>: THE IMPACT AGENDA

Lecturers: Ismael Rafols and more to be confirmed

Impact, evaluation, funding and priority setting, indicators/metrics, altmetrics.