Vedlegg: Utkast til emnebeskrivelser

STV402X – Slutningslogikk og forskingsdesign i statsvitenskap

Kort om emnet

Hvordan kan vi studere politiske hendelser og prosesser på en vitenskapelig måte? Dette masteremnet tilbyr fordypning i slutningslogikk og forskningsdesign i statsvitenskap. Formålet er å kvalifisere mastergradsstudenter til å kritisk vurdere eksisterende forskningsarbeider og til å utforme et egnet forskningsopplegg for egne prosjekter, herunder masteroppgaven. Kurset er obligatorisk for alle mastergradsstudenter i statsvitenskap.

Emnet starter med å diskutere hvordan man identifiserer et godt forskningsspørsmål og forholdet mellom spørsmål, teori, og metode. Deretter gjennomgås sentrale ideer og begreper i empirisk forskning, inkludert validitet, kausalitet, operasjonalisering, utvalgsskjevhet og generalisering. Vi legger vekt på ulike typer slutninger – deskriptive, kausale, prediktive – og ulike typer slutningslogikker. Vi ser også på mulighetene for, og utfordringene ved, å trekke slutninger med ulike typer kvantitative og kvalitative forskingsopplegg. Her er fokus på valg av analyseenhet, avgrensning av studier i tid og rom, utvalgsstrategier, valg av datatyper, og generelt undersøkelsesopplegg. Vi runder av med å diskutere forskningsetiske spørsmål i empirisk statsvitenskapelig forskning, og posisjonere statsvitenskap som fagfelt i forhold til andre samfunnsvitenskapelige fag.

Hva lærer du?

Etter å ha fullført emnet, har studentene følgende kunnskaper, ferdigheter og generell kompetanse:

Kunnskaper

Du har:

- kjennskap til grunnleggende forskingsmetodiske ideer og begreper i statsvitenskap;
- innsikt i hvilke forskningsopplegg som passer til ulike typer forskningsspørsmål;
- forståelse for ulike typer slutninger og slutningslogikker;
- god oversikt over styrker og svakheter ved ulike typer forskningsdesign og data;
- kjennskap til etiske retningslinjer knyttet til statsvitenskapelig forskning.

Ferdigheter

Du kan:

- identifisere og diskutere ulike strategier for å trekke slutninger i statsvitenskapelig forskning;

- identifisere og håndtere problemer knyttet til validitet, utvalgsskjevhet og kausalitet;
- utvikle en selvstendig problemstilling med utgangspunkt i teori og tidligere forskning på feltet;
- utarbeide og begrunne et forskningsdesign for et forskningsprosjekt;
- kritisk vurdere forskningsarbeider med utgangspunkt i metodiske prinsipper og avveininger;
- reflektere rundt etiske spørsmål knyttet til egen forskning.

Generell kompetanse

Du får:

- et grunnlag for å skille vitenskapelig forankret kunnskap fra meningsytringer;
- evne til å tenke systematisk om slutninger i statsvitenskapelig forskning;
- innsikt i betydningen av systematikk, objektivitet, konsistens og etterprøvbarhet i samfunnsvitenskapelig forskning;
- erfaring i å både gi og ta imot konstruktiv tilbakemelding på alternative forskningsopplegg.

Opptak og adgangsregulering

Emnet er forbeholdt programstudenter på masterprogrammet i statsvitenskap.

Forkunnskaper

Anbefalte forkunnskaper

Grunnleggende kunnskap om forskningsdesign og -metode for samfunnsvitenskap/ statsvitenskap fra bachelornivå.

Undervisning

10 forelesninger og 6 seminarer.

Obligatorisk aktiviteter

- Skrive og presentere et utkast (1500-2000 ord) til hjemmeoppgaven
- Få godkjent eget utkast
- Å være kommentator på andres utkast

Eksamen

En times digital eksamen med flersvarsoppgaver pluss en hjemmeoppgave.

Hjemmeoppgaven innebærer å utforme, begrunne og drøfte et forskningsdesign for et selvvalgt tema:

- Oppgaven skal være på mellom 3000 og 4000 ord.
- Det gis en samlet karakter der hjemmeoppgaven teller 70%.

Du må ha bestått alle obligatoriske aktiviteter for å kunne gå opp til eksamen.

Ønsker du å forbedre karakteren krever dette at begge deleksamenene tas på nytt - samlet karakter beregnes ut ifra deleksamener avlagt i samme semester.

STV402X – Anvendt statistikk for statsvitenskap

Kort om emnet

Hvordan kan vi trekke forsvarlige konklusjoner fra kvantitative data? En sentral oppgave i statsvitenskapen er å identifisere årsakssammenhenger, og dette forutsetter både egnede forskningsdesign og forsvarlig statistisk modellering. Målet med dette masteremnet er å utvikle deltakernes ferdigheter på begge disse områdene, slik at de både kan forholde seg kritisk til eksisterende analyser og gjennomføre egne kvantitative studier.

Hovedfokuset i kurset ligger på regresjonsanalyse og generaliserte lineære modeller, og innholdet illustreres ved hjelp av konkrete eksempler. Kurset er obligatorisk for alle mastergradsstudenter i statsvitenskap.

Hva lærer du?

Etter å ha fullført emnet, har studentene følgende kunnskaper, ferdigheter og generell kompetanse:

Kunnskaper

Du skal:

- kunne vurdere styrker og svakheter ved utvalgte strategier for å identifisere årsakssammenhenger i kvantitative studier;
- kjenne til sentrale datastrukturer og hvilke problemer som kan oppstå hvis man bruker uegnede modeller til å analysere disse.

Ferdigheter

Du skal kunne:

- gjennomføre en forsvarlig regresjonsanalyse i statistikkprogrammet R;
- analysere diskrete utfall ved hjelp av generaliserte lineære modeller;
- diagnostisere – og om nødvendig forbedre – grunnleggende statistiske modeller;
- presentere og visualisere data og resultater på en hensiktsmessig måte.

Generell kompetanse

Du skal:

- ha et grunnlag for å vurdere styrken i årsaksmessige påstander;
- ha erfaring med databehandling og grunnleggende programmering;
- ha evne til å gjennomføre et begrenset kvantitativt forskningsprosjekt.

Opptak og adgangsregulering

Emnet er forbeholdt programstudenter på masterprogrammet i statsvitenskap.

Forkunnskaper

Anbefalte forkunnskaper

Kurset forutsetter grunnleggende forståelse av deskriptiv statistikk, inkludert målenivåer og mål for sentraltendens, spredning og samvariasjon. I tillegg forventes grunnleggende forståelse av statistisk generalisering og lineær regresjon, samt grunnleggende ferdigheter i statistikkprogrammet R.

Det anbefales også at man på forhånd har fullført kurset STV402X – Slutningslogikk og forskingsdesign i statsvitenskap.

Undervisning

Undervisningen består av 10 forelesninger og 5 seminarer. For å kunne delta i undervisingen må du ha egen bærbar datamaskin.

Obligatorisk aktiviteter

Ukentlig innlevering av oppgaver. Seminarene skal hjelpe deltakerne med å løse oppgavene.

Eksamen

Fire-timers eksamen bestående av oppgaver som ligner de obligatoriske oppgavene. Du må ha bestått de obligatoriske oppgavene for å kunne gå opp til eksamen.

PECOS402X – Analytic Perspectives on Peace and Conflict

Course content

This class examines fundamental principles of research methods and design in political science as applied to the field of peace and conflict research. It prepares students to design and conduct an independent research project of their own. This class also equips students to assess the validity and reliability of published research in political science and to reflect on ethical challenges pertaining to research in the field of peace and conflict. It is organized as a series of lectures on the following topics:

- Logics of inference in political science research
- Selecting and using data
- What are concepts and how to measure them
- Developing and testing theory
- Specific and general explanations
- Ethics and transparency in peace and conflict research
- Causal inference from process-tracing and congruence tests
- Research design and debates in the field of civil war research
- Research design and debates in the field of security studies
- Developing strategies to tackle challenges to inference

Learning outcomes

After having completed the course, the students have acquired the following knowledge, skills and general competencies:

Knowledge

Students learn:

- fundamental principles of research methods and research design in political science;
- how to assess the validity and reliability of inferences in research designs and published findings;
- how to discuss ethical problems and challenges in peace and conflict research.

Skills

After taking this class students can:

- identify and discuss different strategies for inference in political science research;
- distinguish between different kinds of research questions and strategies for inference;
- identify and tackle bias problems in political science research;
- design and implement a research design in the field of peace and conflict studies.

General competencies

Students learn:

- how to create and improve a research design suited to answer their research question;
- how to think systematically about measurement, inferences and explanation in political science research;
- how to engage in constructive assessment of research design choices and strategies for inference, especially in issue areas with limited or biased data;
- how to provide constructive feedback on research design to others and how to integrate such feedback into their own projects.

Admission

The course is reserved for students enrolled in the master programme Peace and conflict studies.

Prerequisites

Recommended prerequisite knowledge

Basic knowledge of research design and research methods in social sciences/political science.

Teaching

10 lectures and 6 seminars.

Compulsory activities:

- There will be a multiple-choice qualification test mid-term.
- Short paper: present draft (1000 words) of the term paper and provide feedback to other students in a structured setting (pass/fail).

Examination

Students will prepare and submit a term paper (3000-4000 words excluding references) on challenges to inference on a topic of their choice in the field of peace and conflict studies.

PECOS4022 – Applied Statistics for Peace and Conflict Studies

Course content

The course introduces students to various statistical techniques widely used in the peace and conflict literature. The main focus is on:

- Ordinary Least Squares (OLS) regression
- Count and limited dependent variable models
- Different data structures and levels of measurement

The course is mandatory for the PECOS-students and will provide them with tools to read and critically evaluate existing statistical research on peace and conflict topics, as well as conducting their own statistical studies.

Learning outcomes

After having completed the course, the students have acquired the following knowledge, skills and general competencies:

Knowledge

Students will:

- obtain a good grasp of various statistical concepts and measures;
- be well acquainted with different types of data structures and the differences between them, including cross-sectional data, time-series data, and panel data;
- be well acquainted with various criteria for "good" estimators;
- know the ordinary least squares estimator, and under which conditions it functions properly;
- know models appropriate for limited and count dependent variables, and have introductory knowledge of multilevel models;
- be well acquainted with various transformations of variables, such as logarithmic transformations, and understand what a variable's level of measurement is;
- learn how to interpret interaction terms and discuss interaction effects;
- obtain some standard types of robustness checks for statistical analysis;
- learn how to read and present statistical material visually in tables and figures.

Skills

Students will:

- be able to critically read and evaluate existing statistical studies on peace and conflict topics;
- be able to handle data sets using R, including coding new variables and transforming existing variables in the data set;

- be able to apply the various statistical models mentioned above to data sets, and learn how to properly test hypotheses, interpret results, and draw careful conclusions;
- be able to replicate statistical studies in peace and conflict research, and to conduct independent statistical studies on peace and conflict topics.

General competences

Students will:

- enhance their capabilities in carrying out thorough, independent and critical analysis of complex questions;
- enhance their capabilities in critically evaluating empirical research;
- enhance their understanding of various elements of the scientific process, including aspects of the relationship between theory and empirical evidence and between concepts and measures.

Admission

The course is reserved for students enrolled in the master programme Peace and conflict studies.

Prerequisites

Recommended prerequisite knowledge

- Basic concepts in descriptive statistics related to:
    - Measures of central tendency (e.g. mean and median), dispersion (e.g. standard deviation, range),
    - Measures of association and correlation (e.g. percentage difference and Pearson's r correlation coefficient).
- Furthermore, basic knowledge of inferential statistics and of OLS regression (bivariate and multivariate) is required.

We also recommend that the course PECOS402X Analytic Perspectives on Peace and Conflict is completed before students attend PECOS4022.

Teaching

Lectures and seminars.

The seminars are not compulsory, but we recommend you to follow them.

Examination

3-hour written examination and term paper.

The term paper must:

- Be between 3500-5000 words.

- Be an empirical analysis, either in the form of an original study or a replication study.
- Meet the formal requirements for submission of written assignments

The written examination and the term paper each counts for approximately 50 percent of the final grade. You receive one overall grade. You must pass the term paper and the written examination in the same semester.

STV40XX – Advanced Statistics for Political Science

Course content

A central task for political scientists is to draw valid causal inferences, which requires both appropriate research designs and careful statistical modeling. This course goes into more depth in both of these areas, enabling students to carry out advanced quantitative research projects. In particular, the course examines key strategies for dealing with unobserved confounders and for modeling complicated data structures.

This is an elective course in advanced statistical analysis for MA students in Political science and Peace and conflict studies. It builds on the compulsory methods courses in the master programs for political science and Peace and conflict studies (STV402X, STV4020X, PECOS402X and PECOS4022).

Learning outcomes

After having completed the course, the students have acquired the following knowledge, skills and general competencies:

Knowledge

You will:

- know the preconditions for employing key strategies for drawing causal inferences;
- understand key aspects of Bayesian and frequentist inference.

Skills

You will learn to:

- employ key research designs for drawing causal inferences with observational data;
- fit Bayesian models using Markov chain Monte Carlo approaches;
- analyze a variety of data structures using appropriate models;
- diagnose and improve advanced quantitative models.

Competences

You will:

- be able to carefully assess the strengths and weaknesses of research designs that are intended to capture causal effects;
- become more familiar statistical programming and relevant software packages;
- be able to carry out a variety of advanced quantitative research projects.

Examination and other particulars

TBD

STV40XX – Advanced Field Research for Political Science

Course content

This elective specialized methods course introduces graduate students to the politics, ethics, practice and challenges of field research. It is open to students who plan to use qualitative methods (e.g. interviews, participant observation) or quantitative methods (e.g. surveys, field experiments) in the context of fieldwork. We will discuss field research in the discipline of political science, with particular emphasis on fieldwork in conflict-affected settings. The course will cover methodological as well as practical aspects of fieldwork. These include how research design, inference and evidence link to questions of research ethics, respect for human subjects, and fieldwork practice. The course also covers many practical matters, such as fieldwork planning, logistics, ethics approval, access, emotions in the field, and digital security. We will engage with debates about the ethics of fieldwork and engagement with vulnerable populations, analyzing fieldwork findings and ethical obligations beyond the immediate research trip. The course prepares students to design and conduct fieldwork for their MA thesis project. It builds on the compulsory methods courses in the master programs for Political science and Peace and conflict studies (STV402X, STV4020X, PECOS402X and PECOS4022).

Learning outcomes

After having completed the course, the students have acquired the following knowledge, skills and general competencies:

Knowledge

Students learn:

- ethical principles of human subjects' research and engagement with vulnerable populations;
- how to design, plan, and execute field research for their own research projects;
- how to navigate ethical and practical dilemmas and analyze fieldwork findings.

Skills

After taking this class students can:

- design and implement a field research project on their own;
- discuss the ethical challenges and limitations of their proposed research;
- finalize an application for ethics approval of their fieldwork plan.

General competencies

Students learn:

- how to think systematically about ethics and research engagement with human subjects;
- analyze field research findings and present them with an appropriate level of triangulation and transparency;

- how to provide constructive assessment of field research plans and strategies of inferences and integrate such feedback into their research projects.

Examination and other particulars

TBC

STV402X – Digital Data in Political Science

Course content

In this course, you will learn to use modern computational tools to collect, organize, analyze, and visualize political science data in an efficient and effective manner. You will learn best practice for documenting all stages of the process, making your results fully reproducible. Moreover, you will be introduced to relevant data-protection regulation, ethical aspects concerning political data science, and the steps you need to take in order to ensure that your research is in compliance and ethically sound. Over the course, you will learn how to search for documents online, download and merge existing datasets, scrape websites for relevant data, interact with APIs, extract text from pdfs, use OCR on historical document collections, organize and summarize large corpuses of text, produce tailored maps and visually represent networks.

Learning outcomes

After having completed the course, the students have acquired the following knowledge, skills and general competencies:

Knowledge

You will:

- be able to identify potential digital data-sources and develop strategies for collecting these;
- learn best practices for documenting the data-collection process;
- learn how to make your research fully reproducible;
- be aware of data-protection regulations and how to comply with it.

Skills

You will:

- master several different digital data-collection techniques;
- know how to organize and document large quantities of data;
- be able to write R-code to automate all relevant stages of the research process;
- be able to create effective visualizations of the results for your analysis.

General competencies

You will:

- become equipped to reflect upon ethical dilemmas arising in political data science;
- be able to design digital research projects that are in compliance with data-protection regulations;
- learn how to effectively collect, manage, analyze, and visualize digitally collected data.

Teaching

Hackathon-style seminars where students may cooperate to solve a political data science challenge. Ahead of the seminar, you will be exposed to a combination of short video-lectures, online tutorials and readings in order to be prepared to attempt the weekly challenge.

Compulsory activity

All participants will submit a working and documented proposal for a solution to the weekly challenge and comment on two other proposed solutions to the weekly challenge.

Examination

Take-home exam. All of the compulsory activities must be approved in order to take the exam. In the exam, you will be asked to use modern computational tools to collect, organize, analyze, and visualize political science data in a reproducible manner. The course will be graded as Pass/Fail.

STV402X – Qualitative Data in Political Science

Course content

In this course, students will learn more about how to collect qualitative data, mainly through qualitative interviews, participant observation and by collecting various types of documents. The general aim is to prepare master students to select and use such data collection strategies in their own research projects. How can we enable measurement of the concepts our research questions imply? The part on interviews highlights semi-structured interviews, and covers sampling of respondents, design of interview guides, the interview itself and transcription of interview recordings. The part on documents covers collection and documentation of text material, with a particular emphasis on collection and use of archival data. The course will also address research ethics, data protection and digital security during fieldwork. Students will be trained in assessing the reliability and validity of various data sources, including how to identify and address different types of bias in the data. Moreover, students will learn how to store and organize qualitative data. Finally, the course will provide an overview of relevant strategies for analyzing qualitative data. We encourage participants to explore different kinds of qualitative data, and think carefully about the purpose of such data in their forthcoming master projects.

Learning outcomes

After having completed the course, the students have acquired the following knowledge, skills and general competencies:

Knowledge

Students learn:

- how to sample sources in an appropriate manner;
- how to design and carry out interview-based and observational research to ensure validity and reliability;
- how to get access to archives;
- how to assess the reliability and validity of various data sources;
- how to tackle and discuss the various methodological challenges of formulating and asking questions;
- how to process different kinds of qualitative text data;
- how to analyze and integrate different kinds of qualitative text data;
- to address challenges of research ethics and data protection.

Skills

Students will:

- enhance their repertoire of qualitative data collection methods;
- be trained in conducting interviews and participatory observation;
- be able to critically assess the purpose and role of qualitative data in research designs:

- be able to discuss challenges of measurement and operationalization in their own research projects;
- enhance their skills in qualitative analysis;
- be able to reflect on methodological and ethical challenges associated with fieldwork.

General competencies

Students will:

- get more experience in applying methodological knowledge in practice;
- get training in planning key aspects of a qualitative study;
- develop their ability to read existing qualitative research publications critically.

Teaching

Lectures and seminars. Seminars will clarify possible solutions to tasks discussed in individual written memos handed in advance of seminars. A workshop in the software NVivo will also be offered during the course.

Compulsory activities

Students hand in two written memos in advance of seminars (2500-3000 words). Each memo is associated with a specific seminar in which students, on voluntarily basis, present their work and where the seminar leader explains how underlying tasks can be solved using the course literature. The two written memos serve as exam preparation and qualification tasks that must be approved before students can take the home exam.

Examination

Home exam (paper of 3000-4000 words). Students will get one week to design and discuss the data collection strategy for a self-selected topic. The course will be graded as Pass/Fail.

STV 402X – Survey Data in Political Science

Course content

This course introduces students to the science and practice of designing surveys. It covers key aspects of survey design, including definition of a population, sampling of respondents, design of survey questions, response alternatives, the overall survey structure, and research ethics. The course discusses both the design of new "primary" survey data as well as the use of already existing comparative, national, and local surveys. Finally, while this is not a course in statistical analysis, it emphasizes how one can plan ahead for such analysis.

An important development is the increasing use of *"survey-embedded" experiments*. Such experiments randomly assign *different* questions, alternatives, or information to different groups of respondents. Survey-embedded experiments have long been used for methodological purposes, such as gauging the impact of question wording. But now they are increasingly used to answer a variety of substantive questions about politics, policy, and democracy; examples range from the impact of political rhetoric to assessing public policy designs. By engaging with the literature on survey experiments students learn about survey design as well as about key issues of substantive interest to political scientists.

The course is practically oriented in that students learn to design their own surveys and survey experiments, while communicate with others about concrete examples. At the same time, much emphasis is put on learning and applying general insights from the large research field on how design decisions affect empirical results.

The course should be generally useful for most students given the increasing use of surveys and questionnaires in settings where political scientists make a living (the examples include public administration, journalism, non-governmental organisations, and political parties). Also, the course is of immediate relevance for students planning to design new, or use already existing, surveys in their master thesis.

Learning outcomes

After having completed the course, the students have acquired the following knowledge, skills and general competencies:

Knowledge

Students learn:

- the "state-of-the-art" in the research literature on survey design and survey experiments;
- numerous political science examples and applications present in the literature.

Skills

Students learn:

- how to design their own surveys;
- how to design survey experiments in order to answer both methodological and substantive political science research problems;

- to identify and improve research design choices relevant for various research problems;
- to make design choices while planning ahead for data analysis later in the research process.

General competencies

Students improve:

- their communications skills, in particularly in issues related to survey design;
- their skills in giving constructive feedback on research design choices;
- their academic writing skills, particularly in issues related to survey design.

Teaching

Lectures and seminars. Seminars will clarify possible solutions to tasks discussed in individual written memos handed in advance of seminars.

Compulsory activities

Students hand in two written memos in advance of seminars (2500-3000 words). Each memo is associated with a specific seminar in which (some) students present their work and where the seminar leader explains how underlying tasks can be solved using the course literature. Importantly, the tasks directly resemble those of the home exam. The two written memos serve as qualification tasks that must be approved before students can participate in the home exam.

Examination

Examination is based on a home exam where students have one week to solve concrete and cased-oriented survey design tasks of the kind they practiced before and during seminars (scope 3000-4000 words). The course will be graded as Pass/Fail.

STV491X Master Thesis - Research Design and Project Management

Course content

Research design is essential for valid research. In this course, organized as a seminar series, students are introduced to strategies for improving the design of their master thesis project as well as being made aware of common pitfalls. Theoretical knowledge from the previous methods courses will be applied to show how different types of research projects are developed in practice. Students will be offered general instruction in research ethics and data protection and management. Moreover, they will receive additional training in presentation of data and empirical results and advice on how to manage their research project and write up their thesis in an efficient manner.

The seminar series will be divided into three main parts: 1) research question and research design, 2) planning and preparation of different types of studies, 3) other aspects of project planning and management. During the seminar period, students will read literature on their chosen topic and work on developing the relevant aspects of their research plan for the master thesis. They will submit notes on their project every second week and submit complete a project plan at the end of the seminar period. STV491X is an integrated, compulsory part of the master thesis in political science and in Peace and conflict studies.

Learning outcomes

After having completed the course, the students have acquired the following knowledge, skills and general competencies:

Knowledge

You will:

- Know what the common pitfalls of designing a research project are
- Know well-established strategies for avoiding such pitfalls

Skills

You can:

- Develop and specify a research question at an advanced level
- Situate the research question in scholarly literature
- Identify key concepts, relevant theory and the appropriate logic of inference
- Justify a general choice of research design
- Develop a suitable research plan for case selection, time frame, data collection and choice of methods
- Develop an ethically responsible research project
- Draft a data management plan in line with EU's General Data Protection Regulation (GDPR)

General competencies

You can:

- Present a research plan to a group of peers
- Participate in academic discussion of research designs
- Reflect on your own research and writing process
- Plan a large-scale project for successful completion
- Deal with data protection and management issues in a responsible manner

Teaching

Lectures and seminars

Examination

The week after the final sessions students submit their final MA research plan/pre-analysis plan. The plans are evaluated by the seminar leaders within a week (pass/fail).