



Course and Examination Fact Sheet: Spring Semester 2022

6,250: Democratic Choice and Social Welfare

ECTS credits: 3

Overview examination/s

(binding regulations see below)

Decentral - Written examination (with defined exam duration) (50%, 90 mins.)

Examination time: term time

Decentral - Group examination paper with presentation (all given the same grades) (50%)

Examination time: term time

Attached courses

Timetable -- Language -- Lecturer

[6.250.1.00 Democratic Choice and Social Welfare](#) -- Englisch -- [Hodler Roland](#)

Course information

Course prerequisites

None. (Microeconomics II recommended.)

Learning objectives

1. Understanding the key concepts of social choice
2. Being able to apply these concepts and to discuss real-world challenges to "fully" democratic decision-making
3. Development of presentation skills

Course content

How can democratic decision-making lead to socially desirable outcomes? And, importantly, how can we even evaluate whether the outcomes are socially desirable? For example, is majority voting socially desirable? Or should the votes of individuals from less populous regions have more weight (which may have contributed to Trump's victory in 2016)? Or should the votes of younger individuals have more weight (which may have changed the outcome of the Brexit referendum)? And should there be particular minority rights for, e.g., members of ethnic minorities or individuals with disabilities? More generally, what is the relation between democratic decision-making and individual liberties? Looking into the future, should we go for an algorithmic democracy that uses our traceable digital activities to compute the optimal collective decision?

Questions like these are best studied using the tools from social choice. Social choice offers a theoretical framework for the analysis of whether and how we can aggregate individual opinions, preferences, interests, or utility levels to reach a collective decision. It lies at the intersection of economics, philosophy, and political science. It has been shaped by the Nobel laureates Kenneth Arrow and Amartya Sen.

The course consists of two parts: The first part includes five lectures in which I introduce the social choice framework and discuss (i) the special appeal of majority voting, (ii) some voting paradoxes, (iii) Arrow's Impossibility Theorem, which is arguably the most important and disturbing result in the social sciences, (iv) the role of private information and the chances of it being truthfully revealed, and (v) the difficulty in finding collective decision rules that guarantee minimal individual liberties. Most results are established using mathematical logic (but there will be no mathematical operation beyond the secondary school level -- promised).

The second part consists of essays that students write and present in groups of 1-2 students. The idea is that students focus on more applied questions on democratic decision-making, such as those relating to minority protection or age-dependent voting weights mentioned above.



Course structure and indications of the learning and teaching design

Before the semester break, there are five lectures on social choice covering topics (i)-(v) listed above, and a short exam with essay-type questions.

After the semester break, students have time to write their essays. The essays are all presented and discussed on a single block day.

Course literature

Recommended reading:

Taylor A.D., Pacelli A.M., 2008. Mathematics and Politics: Strategy, Voting, Power and Proof (second edition). Springer.

Additional reading:

Nitzan S., 2010. Collective Preference and Choice. Cambridge University Press.

Sen A., 2017. Collective Choice and Social Welfare (expanded edition). Penguin Books.

Additional course information

In the case of the President's Board having to implement new directives due to the SARS-CoV-2 pandemic in SpS2022, the course information listed above will be changed as follows:

The course is conducted online via Zoom. The recordings of the course are available for 30 days. The lecturer informs via StudyNet on the changed implementation modalities of the course. The course content remains unchanged.

The examination information listed below would be changed as follows:

The written examination are conducted online. The allowed examination aids and further information are communicated via StudyNet.

Examination information

Examination sub part/s

1. Examination sub part (1/2)

Examination time and form

Decentral - Written examination (with defined exam duration) (50%, 90 mins.)

Examination time: term time

Remark

Two essay-type questions

Examination-aid rule

Extended Closed Book

The use of aids is limited; any additional aids permitted are exhaustively listed under "Supplementary aids". Basically, the following is applicable:

- At such examinations, all the pocket calculators of the Texas Instruments TI-30 series and mono- or bilingual dictionaries (no subject-specific dictionaries) without hand-written notes are admissible. Any other pocket calculator models and any electronic dictionaries are inadmissible.
- In addition, any type of communication, as well as any electronic devices that can be programmed and are capable of communication such as notebooks, tablets, mobile telephones and others, are inadmissible.
- Students are themselves responsible for the procurement of examination aids.

Supplementary aids

none

Examination languages



Question language: English

Answer language: English

2. Examination sub part (2/2)

Examination time and form

Decentral - Group examination paper with presentation (all given the same grades) (50%)

Examination time: term time

Remark

Groups of 1-3 students

Examination-aid rule

Term papers

Written work must be written without outside help according to the known citation standards, and a declaration of authorship must be attached, which is available as a template on the StudentWeb.

Documentation (quotations, bibliography, etc.) must be carried out universally and consistently according to the requirements of the chosen/specified citation standard such as e.g. APA or MLA.

The legal standard is recommended for legal work (cf. by way of example: FORSTMOSER, P., OGOREK R., SCHINDLER B., Juristisches Arbeiten: Eine Anleitung für Studierende (the latest edition in each case), or according to the recommendations of the Law School).

The reference sources of information (paraphrases, quotations, etc.) that has been taken over literally or in the sense of the original text must be integrated into the text in accordance with the requirements of the citation standard used. Informative and bibliographical notes must be included as footnotes (recommendations and standards e.g. in METZGER, C., Lern- und Arbeitsstrategien (latest edition)).

For all written work at the University of St.Gallen, the indication of page numbers is mandatory, regardless of the standard chosen. Where page numbers are missing in sources, the precise designation must be made differently: chapter or section title, section number, article, etc.

Supplementary aids

none

Examination languages

Question language: English

Answer language: English

Examination content

Topics (i)-(v) mentioned above. More specifically, May's Theorem, voting paradoxes, Arrow's Impossibility Theorem, Black's Majority Voting Theorem, Gibbard-Satterthwaite Theorem, and Sen's Theorem on the Impossibility of a paretian liberal.

Examination relevant literature

Slides.

Chapters 1 and 7 from: Taylor A.D., Pacelli A.M., 2008. Mathematics and Politics: Strategy, Voting, Power and Proof (second edition). Springer.



Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW21) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 12 are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 04 (Thursday, 27 January 2022);
- Examination information (regulations on aids, examination contents, examination literature) for decentralised examinations: in CW 12 (Monday, 21 March 2022);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 12 (Monday, 21 March 2022);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised examinations: two weeks before the end of the registration period in CW 15 (Monday, 11 April 2022).