

Course and Examination Fact Sheet: Autumn Semester 2020

5,260: Climate and Income Differences

ECTS credits: 6

## Overview examination/s

(binding regulations see below)
Decentral - Written examination (100%, 120 mins.)
Examination time: term time

### Attached courses

Timetable -- Language -- Lecturer 5,260,1.00 Climate and Income Differences -- Englisch -- Boppart Timo

#### Course information

# Course prerequisites

Basic macroeconomic knowledge (material taught in the mandatory undergraduate courses), working knowledge of mathematics and empirical methods for economists.

# Learning objectives

**Goal of the course**: This course seeks to acquaint the student with long-run macroeconomic facts and the empirical growth literature analyzing and comparing growth outcomes over time in given countries and across countries. In a second part of the course we study the interaction between the economy and the climate, i.e., the integrated assessment framework.

**Learning objectives**: Knowledge of the main empirical facts about cross-country income differences and whether and how neoclassical macroeconomic theory can quantitatively explain them. Understanding of how the interrelation of climate and economic activity can be modeled and studied and used to guide policy.

## Course content

Can standard macroeconomic theory predict the large income differences observed across countries? We will study the scale of differences in average GDP per capita around the world and to what extent they can be explained by differences in human and physical capital. In a second part of the course we study the interaction between the economy and the climate. How does the level of economic activity determine the level of CO2 emission and how does the CO2 concentration in the atmosphere influence the economy. We analyze the integrated assessment model and how it can be used to guide policy.

#### Course structure

Lectures combined with exercises and student presentations.

### Course literature

Slides and problem sets.

Additional reading:

- Acemoglu D. (2009) ``Introduction to Modern Economic Growth'', Princeton University Press, Princeton NJ.
- Aghion P. and P. Howitt (2009) The Economics of Growth", MIT Press, Cambridge, MA.



#### Additional course information

The course will primarily be taught face-to-face. In case circumstances will change, the lecturer will inform about any changes by e-mail.

In the case of the President's Board having to implement new directives or in-person instruction by the lecturer is not possible due to the SARS-CoV-2 pandemic in AS2020, the course information listed above will be changed as follows:

- The course is conducted online via the platform "Zoom"
- No recordings of the course will be saved
- The lecturer informs via e-mail on the changed implementation modalities of the course.

The examination information listed below would be changed as follows:

- The written examination is conducted online
- Further information is communicated via e-mail.

# **Examination information**

# Examination sub part/s

# 1. Examination sub part (1/1)

Examination time and form

Decentral - Written examination (100%, 120 mins.)

Examination time: term time

Remark

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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.
- $\bullet\;$  Students are themselves responsible for the procurement of examination aids.

Supplementary aids

see above, no further aids allowed.

Examination languages Question language: English Answer language: English

#### **Examination content**

Material covered in class, i.e., lecture notes and problem sets. Knowledge of empirical facts as discussed during the lectures. Theoretical tool covered by the lecture notes and applied in the problem sets.



### Examination relevant literature

Chapters of the textbooks that are covered in the lecture notes and articles discussed in the lecture notes or in the problem sets.

### Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are is 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 (CW51) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 42 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 34 (Thursday, 20 August 2020);
- Examination information (regulations on aids, examination contents, examination literature) for decentralised examinations: in CW 42 (Monday, 12 October 2020);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 42 (Monday, 12 October 2020);
- Examination information (regulations on aids, examination contents, examination literature) for centrally
  organised examinations: two weeks before the end of the registration period in CW 44 (Thursday, 29 October 2020).