GRADING GUIDE – HUMAN GEOGRAPHY (bachelor SGO and master HGO)

Course code and semester-year: SGO2250 spring 2026
Type of examination: *[underline the option that applies]*
Written school exam / take-home exam / term paper given topic / term paper self-chosen topic

About exams at SGO/HGO: A good examination paper contains solid knowledge, logical and coherent reasoning and a systematic structure. The answer to a discussion question/task must examine, analyze, and connect different parts of the curriculum.

1. The answer responds to the question/task given in a precise and exhaustive way.
2. The answer demonstrates knowledge.
3. The answer must be well-written: coherent and using good academic language.
4. Key concepts – those at the core of the answer – must be defined.
5. The answer demonstrates analytical capacity and reflection.

About this exam
Six-hour school exam. The students are to answer all three questions. The three answers weigh equally in the final grade. If relevant, feel free to use illustrative examples and/or make references between answers to the different questions.

Question 1

Define what is meant by innovation. Proceed to critically assess how innovations can contribute to speed up sustainability transitions, and what possible roles that government policies can have in this respect.

This is a broad assignment. Many of the readings on the curriculum can be mobilized here, and creativity with respect to how they are used should be rewarded. Fagerberg (2006) presents Schumpeter and introduces the literature on innovation. Silvestre & Tirca (2019) distinguish between traditional innovation, social innovation, green innovation and sustainable innovations. Discussions of these distinctions draw in the direction of a higher marking. Sustainable innovation systems are discussed by Altenburg & Pegels (2012), while Coenen et al (2012) discusses the geography of sustainability transitions and innovation. Regarding policy, references to the distinction by Weber & Rochracher (2012) between market failures, structural system failures and transformational system failures with related types of policy intervention and the discussion in Kanger et al (2020) of intervention points draw in the direction of a high marking.

Question 2

Innovations can be studied at the level of broad techno-economic paradigms shaping long waves of economic development and structural change, at the level of sociotechnical systems (such as energy or transportation), and at the level of specific technologies, products, and practices. Present and discuss the key components of (i) techno-economic paradigms, (ii) the multilevel perspective, and (iii) the technological innovation systems approach, in any order you choose, with particular attention to how these frameworks complement each other in explaining the factors that hinder or enable large-scale societal transformations.

Another broad assignment, where creativity with respect to using the curriculum should be awarded. Note that the distinction between systems and regimes that is unclear in the MLP literature is not of importance here. The main idea is that innovation processes can be understood across three interrelated levels: broad techno-economic paradigms, sociotechnical systems (e.g. energy production, transportation), and specific technologies (broadly defined to include products, processes, practices). Candidates who explain how these perspectives combined link macro-level structural change to meso-level system dynamics and micro-level technology development should be awarded with a high marking. Techno-economic paradigms capture long-term structural shifts in the economy and society, shaping overarching opportunities and constraints for change (e.g. Perez; Schot & Kanger on the reading list). Within these, sociotechnical systems can be analysed using the multilevel perspective (MLP), which conceptualizes transitions as interactions between landscape pressures, systems/regimes with built-in stabilizing forces, and emerging niches (cf. Geels). At the level of specific technologies and thus niches, the technological innovation systems (TIS) approach (Bergek et al., 2008) explains how new technologies develop and diffuse through the performance of key system functions, emphasizing the balance between inducement and blocking mechanisms. For grading, understanding this overall functional logic is more important than listing all individual functions.

Question 3

There is increasing awareness of how innovations can have so-called 'Darker Sides'. Discuss the dimensions according to which innovations may become harmful, and different types of harm. Part particular attention to implications for sustainability transitions.

Coad et al (2021) identifies several mechanisms through which innovations can become harmful: scaling effects, where widespread adoption transforms benign practices into systemic problems; end-of-life impacts such as waste and pollution; revenge effects, where technologies provoke counterproductive system responses; unanticipated or unintended side effects; and innovation designed to evade regulation. These mechanisms can produce long-term public health risks, environmental degradation, social harms like inequality and privacy loss, and economic distortions from monopoly power. A systematic discussion of these issues draws in the direction of a higher marking. Candidates who engage with debates on rebound effects (e.g., Vivanco et al.) demonstrate awareness of the need (in the context of sustainability transformations) for broader, system-level assessments of innovation's complex and uncertain impacts and should be awarded. Although not mandatory, higher marks should be awarded to students who critically assess the feasibility of Green Growth and Circular Economy strategies considering the potential negative effects of the innovations on which these strategies rely (drawing, for example, on Hicks & Kallis (2020) and Hobson (2021)).