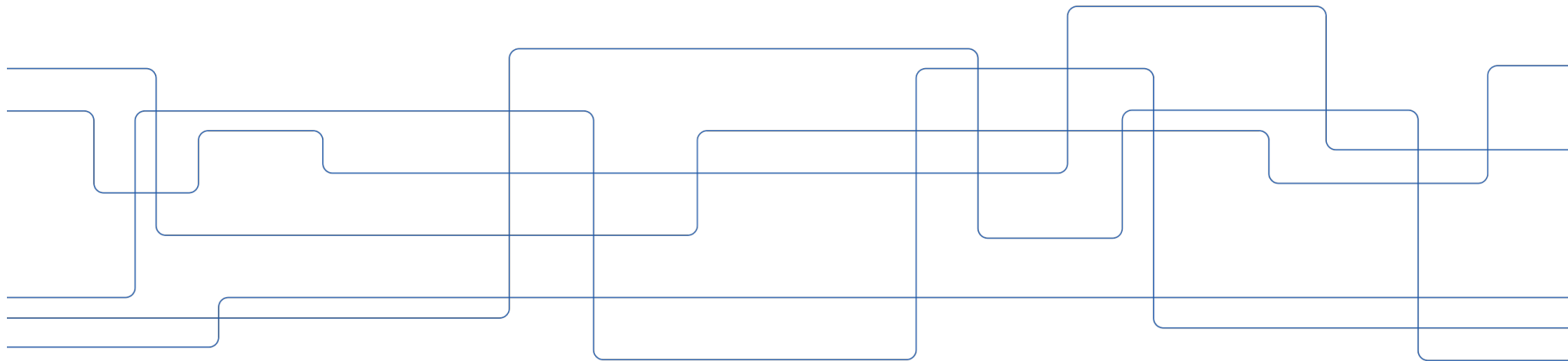# FAH3460 Topics in Transport Science Part 1

Introduction

Erik Jenelius, 23 November 2022

Course Objective

The course helps doctoral students to situate themselves in the broad field of transport science

The students obtain broad knowledge through overview lectures and interact on more detailed topics in seminars, taking various roles (presenter, opponent, listener)

Contents

- Overview lectures covering the broad field of transport science
- Participation in scientific seminars within transport science offered by KTH
- Participation in national and international conferences

Examination

- 1.0 ECTS through participation in eight overview lectures
- 2.5 ECTS through seminar participation
- Each of the following roles can be adopted:
  - Presenter (at least once)
  - Attendant (at least once)
  - Opponent (desirable)

Lecture questions

- Each teacher will pose a question for you to analyze or reflect on based on the contents of the lecture

- Hand in short written text (< 1 page) on Canvas

- Required as proof of participation

Schedule

Venue

Room K409, Division of Transport Planning, Brinellvägen 23, 4th floor.

Schedule

Wednesday	23 Nov	10-11	Qian Wang	When passenger transport meets with freight transport
Wednesday	23 Nov	11-12	Mohammad Maghrour Zefreh	Demand forecasting: from time series to causal and machine learning methods
Thursday	01 Dec	10-11	Athina Tympakianaki (online)	Simulation-based impact assessment of autonomous vehicles in urban networks
Thursday	01 Dec	11-12	Oded Cats (online)	Ingredients for Formulating Problems and Developing Solutions for (Passenger) Transport Systems
Thursday	08 Dec	10-11	Michele Simoni	
Thursday	08 Dec	11-12	Oskar Fröidh	Rail/järnväg: Applied science in a systems perspective
Tentative Wednesday	14 Dec	10-11	Fariya Sharmeen	Smart and sustainable transport: implementation challenges and planning bias
Tentative Wednesday	14 Dec	11-12	Erik Jenelius	The pros and cons of crowding

Seminar Participation

- Division of Transport Planning seminars, Division of Systems Analysis and Economics seminars, approved external seminars
  - 0.75 ECTS as presenter
  - 0.75 ECTS as opponent
  - 0.35 ECTS as attendant

- National conferences
  - 1.00 ECTS as presenter
  - 0.35 ECTS as attendant (only if no presentation)

- International conferences
  - 1.25 ECTS as presenter
  - 0.75 ECTS as attendant (only if no presentation)

Bookkeeping

- You need written confirmation of seminar attendance

- At seminars: Copy of participation list or similar

- At (inter)national conferences, other proof is available
  - Conference program (if speaker)
  - Participation confirmation (at registration desk)

- Once you have fulfilled the course requirements
  1. Make a list indicating how you collected your results
  2. Add your attendance proofs to that list
  3. Send this to the course examiner (Erik)

Outlook: Part 2 (FAH3462)

- Is continuously offered (no fixed meeting times)

- Worth 4.0 ECTS

- Course responsible and examiner: Erik

Outlook: Course objective of Part 2

Doctoral students get exposed to, become visible in, and familiarize themselves with the international research landscape in transport science

Outlook: Course contents of Part 2

The student selects together with her/his supervisor activities leading to a fulfillment of the course objectives

Recommendations are:

- participation in international summer schools,

- visits to international research groups outside of KTH,

- refereeing activities for international journals and/or conferences,

- participation in the organization of international scientific events,

- international conference participation for which no credit is given in FAH3460 or any other course

Alternative activities are possible and should be agreed upon with the examiner

Outlook: Examination in Part 2

Participation in instances of the international activities indicated above

The student's supervisor judges when a participation level equivalent to 4 ECTS has been reached and submits a recommendation to the examiner, indicating at least the type and extent of each activity