



## Course and Examination Fact Sheet:

### 5,139 Strategic Foresight - Autumn 2023 AY24

#### ECTS-Credits: 4

#### Overview examination/s

Group presentations in class – 50%

Class participation – 25%

Individual assignments – 25%

#### Instructors

5,139 Strategic Foresight – English – Tamara Carleton

5,139 Strategic Foresight – English – William Cockayne

## Course information

### Course prerequisites

Students are required to fully commit from week 1 in respect to those on the course wait list. Please note that this course 5,139 is highly recommended as preparation for the related capstone course in the spring semester.

### ECOL prerequisites

Previous ECOL students have stated that 5,139 is unlike anything they've experienced at their home institutions. To build the success of prior years, this year's ECOL offering will seek to enroll three students at each partner school.

### Learning objectives

1. Understand how to think about the future in an analytical way.
2. Develop the ability to use strategic foresight to incite action.
3. Learn a set of foresight tools and techniques for researching, analyzing, and developing radical solutions across multiple future horizons.
4. Work in teams using industry-leading techniques to find and develop a future opportunity.
5. Understand and analyze how several leading companies use roadmaps for future innovation strategy.

### Course content

In this course, students imagine and invent a better future using strategic foresight tools and methods to pursue radical innovation. Building on practices from Silicon Valley and courses taught at Stanford University, this course is hands-on and immersive. You learn by doing, practicing with teams, and sharing evolving project updates with your peers. Guest inventors and innovators will share their experience how using foresight informed their startup strategy,

technology invention, and leadership.

Key concepts and methods:

- Four horizon model
- Backcasting techniques
- Finding your future customers
- Developing future decision-making models
- Creating actionable scenarios
- Pre-testing your vision – being DARPA Hard
- Wargaming for business foresight

### Course structure

The course is delivered through a combination of lecture, guided discussion, team presentations, case studies, practical application, and small group activities. The course is a constant dialogue between the lecturers and all class participants, through which students develop their own ideas and understanding of strategic foresight in action. Students are encouraged to contact course alumni to see how this course experience compares to other HSG courses.

### Course literature

- *Playbook for Strategic Foresight and Innovation* by Carleton & Cockayne, available free under CC at <https://innovation.io/plabook/>
- *Building Moonshots: 50+ Ways for Turning Radical Ideas into Reality* by Carleton & Cockayne, available at <https://www.buildingmoonshots.com/>
- Weekly readings are drawn from the global business and technology press (Bloomberg, The Financial Times, IEEE Spectrum, Nature, The Economist, et al) to further our understanding of the teams who are delivering world-changing breakthroughs.

### Additional course information

This course will be team taught by Prof. Dr. Tamara Carleton and Dr. William Cockayne.

Prof. Dr. Tamara Carleton; Institute for Information Systems; [tamara.carleton@unisg.ch](mailto:tamara.carleton@unisg.ch)

Dr. William Cockayne; Institute for Information Systems; [william.cockayne@unisg.ch](mailto:william.cockayne@unisg.ch)

Tamara Carleton, Ph.D., is the CEO and founder of Innovation Leadership Group LLC, working with leading companies, such as Nestlé Purina Petcare (food), Airbus Group (aerospace), Volvo Group (manufacturing), Vinnova (public sector), and others. She is an International Professor in Innovation & Entrepreneurship at the EGADE Business School in Tecnológico de Monterrey in Mexico, and Associate Professor (Universitetslektor) at Blekinge Institute of Technology (BTH) in Sweden, and the co-director of Stanford's Foresight and Moonshots programs.

William Cockayne has spent his life building great teams who can imagine, invent, and deliver the future. A visionary technologist with a passion for understanding the latest breakthroughs, he has worked with world-changing teams in companies both big and small. In addition to his industry work, he spent the last two decades at the world's leading universities working alongside the next generation of genius leaders as a member of the faculty at Stanford University, the University of St. Gallen, Blekinge Institute of Technology, and the Osaka Institute of Technology. He holds a doctorate in mechanical engineering from

Stanford University and a master's degree in computer science.

## Examination information

### 1. Examination sub part (1/3)

Group presentations across the course = 50% of the final grade

#### Format

Group presentations are collaborative report outs given by your team to your peers, either in or outside class, to help show and explain your latest teamwork and thinking. Where appropriate and possible, we encourage teams that live nearby to meet in person as small groups, which will help to expediate and enrichen the online class lectures and virtual collaboration.

As part of the evaluation, teammates will complete a brief questionnaire about each other's contribution and self-contribution.

#### Examination language

English

### 2. Examination sub part (2/3)

Class participation = 25% of the final grade

#### Format

Class participation will be assessed in terms of the quality of inputs, not in terms of frequency of contribution. Inputs may be comments or questions and should enhance the overall group discussions and lectures. Participation includes feedback to other teams outside class.

#### Examination language

English

### 3. Examination sub part (3/3)

Individual assignments = 25% of the final grade

#### Format

Individual assignments comprise personal reading reflections and other homework.

#### Examination language

English

#### Examination Content

In the weekly one-page analyses, each student will answer a standard set of reflection questions that expand on the available readings and relevant in-class discussions. Each assignment is limited to one-page, double-spaced, and is used to assess a student's perspective on the readings as part of the class's ongoing dialogue, identify issues raised in the readings that the student would like to see explored in more depth (which helps to direct the in-class discussion), and note areas that the student wants to challenge based on further industry analysis.

There is also an individual assignment applying strategic foresight to oneself.

### Examination Relevant Literature

Weekly readings are drawn from award-winning books, public discussions, and presentations from the likes of venture capitalists Marc Andreessen and Mike Maples, Professor David Yoffie and Colonel Daniel Orišek, and innovators including Steve Jobs, Mark Zuckerberg, Bill Gross (idealab) and Yang Yuanqing.