Foresight and Strategic Planning

1. Introductory note

Program author: Ozcan Saritas

General Description of the Program:
The course is delivered to master students of The National Research University - Higher School of Economics/HSE. It is delivered in modules. The course length is 216 academic hours in total of which 64 hours are class room hours for lectures and seminars and 152 hours are devoted to self study.
Academic control forms are one written exam and one presentation. The course contains 6 modules which are mutually exclusive but collectively exhaustive to cover the subject.

Pre-requisites
Attendance to the previous core courses including STI Policy, Strategies in STI Management and Methodology for Scientific Research is considered to be a must. Familiarity and knowledge in the areas below are considered to be beneficial:

- Economics and / or management
- Creative, critical and interactive thinking
- Policy and institutional analysis
- Understanding of the relationships between STI and socio-economic development
- Interdisciplinary and systemic thinking

Course Objective
This course aims to provide an overview of Foresight and Strategic Planning. The course introduces several key approaches used both in Foresight and Strategic Planning in a complementary stance, including methods for scanning environments, identifying trends and drivers of change with weak signals and wild cards, developing future scenarios and visions and making long, medium and short term strategic plans for identifying priorities and actions. During the course, innovative ways of decision-making and STI policy formulation; STI strategy- and priority-setting; and cooperation and networking with stakeholders will be introduced. Through seminars, students will also be provided with practical experience in designing Foresight and Strategic Planning processes for public and private organisations.

This course will be organized as a combination of lectures and seminars. Lectures will be both (i) informative with the aim of giving background information and raising awareness on the topic and (ii) participative and interactive with the aim of building capacity on how to implement the theory of Foresight in practice at the international, national, corporate and sectoral/thematic levels. During the lectures, students will have an opportunity to apply and practice what they learned through a hands-on practical exercise. Students will be given tasks during seminars, which will help them to gain an in depth knowledge on the topic. A final seminar session will
take place at the end of the course, where students will give oral presentations on their selected topic for the practical exercise to demonstrate the level of knowledge they gained throughout the course. The overall performance of students will be measured through seminars, and the level of their attendance and active participation in discussions.

**Course Language:** English.

**Abstract**

The course will consist of 2 basic streams – a lecture and a seminar. Lectures and seminars are based on recent academic work from different scientific perspectives; introduce case studies and state of the art approaches applied by practitioners. The combination of lectures and seminars enable participants to get much better insight into the fields of Foresight and Strategic Planning. Moreover seminars consist of introduction lectures followed by student’s self study to solve a predefined task by developing a applicable solution for applying and implementing science, technology and innovation measures in the Russian context. Eventually students will present their proposed solution in presence of invited foreign experts.

**Training Objectives**

This course aims to provide an overview of Foresight and Strategic Planning by discussing the theoretical underpinnings with a view of historical and epistemological development. The theoretical background will be supported with practical exercises and case studies throughout the course. The course introduces several key approaches used in Foresight and Strategic Planning, including methods for scanning environments, identifying trends and drivers of change with weak signals and wild cards, envisioning futures, and identifying priorities and action points. In keeping with this remit, the course will cover the lecture topics listed and described below.

**Target audience**

- Masters students
### 2. Thematic Plan

a) Lectures

<table>
<thead>
<tr>
<th>Module</th>
<th>Topic</th>
<th>Total academic hours</th>
<th>Lectures (class hours)</th>
<th>Self study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Basics of Foresight and Strategic Planning</td>
<td>Introduction to Foresight and Strategic Planning</td>
<td>8</td>
<td>2</td>
<td>6</td>
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<tr>
<td></td>
<td>Rationales of Foresight and Strategic Planning</td>
<td>8</td>
<td>2</td>
<td>6</td>
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<tr>
<td></td>
<td>Key concepts and approaches in Foresight and Strategic Planning</td>
<td>8</td>
<td>2</td>
<td>6</td>
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<tr>
<td></td>
<td><strong>total</strong></td>
<td><strong>24</strong></td>
<td><strong>6</strong></td>
<td><strong>18</strong></td>
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<tr>
<td>2. Objectives and Processes of Foresight and Strategic Planning</td>
<td>Uses of Foresight and Strategic Planning</td>
<td>6</td>
<td>2</td>
<td>4</td>
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<tr>
<td></td>
<td>Foresight in the STI policy processes</td>
<td>12</td>
<td>4</td>
<td>8</td>
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<tr>
<td></td>
<td>Strategic Planning in corporate management processes</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Key functions and roles of Foresight and Strategic Planning</td>
<td>6</td>
<td>2</td>
<td>4</td>
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<tr>
<td></td>
<td><strong>total</strong></td>
<td><strong>30</strong></td>
<td><strong>10</strong></td>
<td><strong>20</strong></td>
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<tr>
<td>3. Methodology for Foresight and Strategic Planning</td>
<td>Methodology for STI Policy Foresight and Strategic Planning</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Quantitative and qualitative methods in Foresight and Strategic Planning</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Key methods for Foresight and Strategic Planning</td>
<td>12</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Engaging experts and establishing networks for Foresight and Strategic Planning</td>
<td>12</td>
<td>4</td>
<td>8</td>
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<tr>
<td></td>
<td><strong>total</strong></td>
<td><strong>36</strong></td>
<td><strong>12</strong></td>
<td><strong>24</strong></td>
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<tr>
<td>4. Scenarios technique</td>
<td>Scenario and vision development</td>
<td>6</td>
<td>2</td>
<td>4</td>
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<tr>
<td></td>
<td>Positioning of scenarios in STI strategy and policy making processes</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>total</strong></td>
<td><strong>12</strong></td>
<td><strong>4</strong></td>
<td><strong>8</strong></td>
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<tr>
<td>5. Translating Foresight into strategy</td>
<td>Roadmapping as an instrument for Strategic Planning</td>
<td>12</td>
<td>4</td>
<td>8</td>
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<tr>
<td></td>
<td>Foresight in Russia</td>
<td>12</td>
<td>4</td>
<td>8</td>
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<td></td>
<td>Assessment and prioritization of alternative STI strategies</td>
<td>6</td>
<td>2</td>
<td>4</td>
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<tr>
<td></td>
<td><strong>total</strong></td>
<td><strong>30</strong></td>
<td><strong>10</strong></td>
<td><strong>20</strong></td>
</tr>
<tr>
<td>6. Embedding Foresight and Strategic Planning into organisations</td>
<td>Evaluating Foresight and Strategic Planning</td>
<td>6</td>
<td>2</td>
<td>4</td>
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<tr>
<td></td>
<td>Linking Foresight to decisions, strategies and policies</td>
<td>12</td>
<td>4</td>
<td>8</td>
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</table>
b) seminars

The seminar consists of an introductory session which highlights the phenomena in discussion, introduces the theoretical background and practical applicability. Supervision of students will be offered using a mid-term interim presentation of additional information and facts by the supervisor and individual consultations during the seminar. Following these introductory session students will develop a practical applicable concept for a given problem which is based on sound scientific grounds. The session ends with the introduction of core themes for which the students are asked to prepare a presentation. Finally these concepts are introduced in a concluding session which is devoted to presentations of concepts developed by students and a concluding discussion of these concepts from both a scientific and a practical view. Students will develop concepts in teams and be supervised during development of their concepts.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Total academic hours</th>
<th>Class hours</th>
<th>Self study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory presentation</td>
<td>12</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Interim presentation / individual consultations</td>
<td>26</td>
<td>4</td>
<td>22</td>
</tr>
<tr>
<td>Presentations</td>
<td>18</td>
<td>6</td>
<td>12</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>56</strong></td>
<td><strong>14</strong></td>
<td><strong>42</strong></td>
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</tbody>
</table>
2. **Basic literature**


3. **Education control forms**

Final control (F): written exam (30 minutes multiple choice exam)
Seminar (S): Oral presentation at the end of the seminar.

The overall course grade (10-point scale) is calculated as a sum of

\[ G = 0.5 \times F + 0.5 \times S \]

The overall course grade \( G \) (10-point scale) includes results achieved by students in their exam \( F \), seminar \( S \); it is rounded up to an integer number of points.
Summary Table: Ten-point system marks

<table>
<thead>
<tr>
<th>Ten-point scale [10]</th>
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</thead>
<tbody>
<tr>
<td>1 – unsatisfactory</td>
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<tr>
<td>2 – very bad</td>
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<tr>
<td>3 – bad</td>
</tr>
<tr>
<td>4 – satisfactory</td>
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<tr>
<td>5 – quite satisfactory</td>
</tr>
<tr>
<td>6 – good</td>
</tr>
<tr>
<td>7 – very good</td>
</tr>
<tr>
<td>8 – nearly excellent</td>
</tr>
<tr>
<td>9 – excellent</td>
</tr>
<tr>
<td>10 – brilliant</td>
</tr>
</tbody>
</table>

Programme Contents

Module 1- Basics of Foresight and Strategic Planning

Topic 1    Introduction to Foresight and Strategic Planning

Topic outline:
- Definition of Foresight
- Background and emergence of futures thinking
- Evolution of practice across time

Main references/books/reading:

Topic 2    Rationales of Foresight and Strategic Planning

Topic outline:
- Introduction to key concepts: Futures, Forecasting, Foresight
- Introduction to the key concepts of Strategic Planning

Main references/books/reading:
Topic 3  Key concepts and approaches in Foresight and Strategic Planning

Topic outline:
- Key motivations and objectives for Foresight
- Key motivations and objectives for Strategic Planning

Main references/books/reading:

Module 2- Objectives and Processes of Foresight and Strategic Planning

Topic 1  Uses of Foresight and Strategic Planning

Topic outline:
- Types of Foresight and Strategic Planning
- Uses and benefits of Foresight and Strategic Planning at international national, regional and corporate level
- Steps involved in organizing, managing and implementing Foresight exercises

Main references/books/reading:

Topic 2  Foresight in the STI policy processes
**Topic outline:**
- Positioning Foresight in the STI policy processes
- Key functions of Foresight in STI policy

**Main references/books/reading:**

**Topic 3** Strategic Planning in the corporate management processes

**Topic outline:**
- Positioning Strategic Planning in the STI policy processes

**Main references/books/reading:**

**Topic 4** Key function and role of Foresight and Strategic Planning

**Topic outline:**
- How Foresight is used in the STI policy processes
- How the Strategic Planning is used in the STI policy processes

**Main references/books/reading:**

**Module 3- Methodology for Foresight and Strategic Planning**

**Topic 1** Methodology for STI Policy Foresight and Strategic Planning

**Topic outline:**
- The role and use of methods in Foresight for extracting and compiling knowledge
- Qualitative and Quantitative methods in Foresight
- Approaches in ordering and combining methods
• The role and use of methods in Strategic Planning for extracting and compiling knowledge
• Qualitative and Quantitative methods in Foresight and Strategic Planning
• Approaches in ordering and combining methods

**Main references/books/reading:**


**Topic 2** Quantitative and qualitative methods in Foresight and Strategic Planning

**Topic outline:**

- Typologies for Foresight and Strategic Planning methods
- Ways of combining different methods in Foresight and Strategic Planning

**Main references/books/reading:**

- Saritas, O. (2011). “Integration of Quantitative and Qualitative methods within the concept of the Systemic Foresight Methodology”, A research note produced for Higher School of Economics, ISSEK.

**Topic 3** Key methods for Foresight and Strategic Planning

**Topic outline:**

- Introduction to frequently used methods for Foresight
- Introduction to frequently used methods for Strategic Planning
- Description of pros and cons of different methods used depending on the objectives

**Main references/books/reading:**

- Saritas, O. (2011). “Integration of Quantitative and Qualitative methods within the concept of the Systemic Foresight Methodology”, A research note produced for Higher School of Economics, ISSEK.


**Topic 4** 
Engaging experts and establishing networks for Foresight and Strategic Planning

**Topic outline:**
- Role of experts and expert networks in Foresight and Strategic Planning
- Key strategies of establishing expert’s commitment during Foresight
- Main mistakes and key lessons in dealing with experts

**Main references/books/reading:**

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**Module 4- Scenarios technique**

**Topic 1** 
Scenario and vision development

**Topic outline:**
- Definition of scenarios and visions
- Development of alternative scenarios for the future
- Ways and processes of developing scenarios
- How to articulate visions from scenarios

**Main references/books/reading:**

**Topic 2** 
Positioning of scenarios in STI strategy and policy making processes

**Topic outline:**
- Demonstration of processes and contents of scenarios through selected case studies
- Scenario analysis for strategy formulation
Main references/books/reading:


Module 5- Translating Foresight into strategy

Topic 1 Roadmapping as an instrument for Strategic Planning

Topic outline:

- Role of a roadmap in Foresight and Strategic Planning
- Methods for connecting the future with the present: how to build a roadmap
- The process and tools for generating roadmaps

Main references/books/reading:


Topic 2 Foresight in Russia

Topic outline:

- Main stages of Foresight development in Russia
- S&T Foresight 2030: methodology, results and lessons
- Future directions for Foresight in Russia – a representative example for emerging economies?

Main references/books/reading:

- Sokolov A, Chulok A. (2012) Long-term forecast of S&T development in Russia to 2030: key
Topic 3  
Assessment and prioritization of alternative STI strategies

Topic outline:
- Strategic priority setting
- Assessment of strategies
- Designing and implementing the process of prioritisation
- Methods for prioritisation

Main references/books/reading:

Module 6 - Embedding Foresight and Strategic Planning into organisations

Topic 1  
Evaluation of Foresight and Strategic Planning

Topic outline:
- Ways of implementing recommendations from Foresight and Strategic Planning
- Achieving impact through strategies
- Key indicators for evaluation of Foresight and Strategic Planning
- Approaches for measuring the impacts of Foresight and Strategic Planning

Main references/books/reading:

**Topic 2  Linking Foresight to decisions, strategies and policies**

**Topic outline:**
- Analytical frameworks for the integration of the results of Foresight and Strategic Planning into the process of R&D planning
- Key skills and functions in organizations for Foresight and Strategic Planning

**Main references/books/reading:**

**Topic 3  Creating a culture of Foresight and Strategic Planning**

**Topic outline:**
- Ensuring the continuity of Foresight and Strategic Planning activities

**Main references/books/reading:**