

## **Course evaluation, MJ2516 Sustainability perspectives for assessing and designing research, projects and policies, 2023 edition**

The course "MJ2516 Sustainability perspectives for assessing and designing research, projects and policies," offered in its first edition at KTH, focused on the interplay between energy initiatives and the UN's sustainable development goals. It emphasized the latest scientific approaches for assessing sustainability in energy-related projects and policies. Students engaged in lectures and practical exercises, aimed at evaluating the sustainability impacts of energy projects. Learning outcomes included:

1. Give an account of different interpretations of sustainability and sustainable development in relation to the most important international agreements in the area
2. Give an account of relevant challenges for sustainable development in relation to specific research domains
3. Critically reflecting, give an account of how the student's own research field relates to Agenda 2030 and the United Nations' (UN's) global goals for sustainable development
4. Survey, explain and evaluate how an energy project relates to sustainability paradigms and contextualise this in terms of synergies and balances with the sustainability goals

The course culminated in a project and presentation, through which students demonstrated their mastery of the subject matter.

This document presents an analysis of the first edition of the course in 2023.

### **1. Description of the Course Evaluation Process**

The course evaluation process was designed with a focus on inclusivity and comprehensive feedback from all students. A continuous dialogue was maintained with the students throughout the course, facilitated through two anonymous surveys conducted via Menti and a final survey using the KTH format at the course's end. These methods ensured students could freely express their opinions, with particular attention paid to gender aspects and the inclusion of disabled students. After the course concluded, a meeting with the class student representative was held to collect additional feedback, further enriching the evaluation process.

### **2. Course Design**

The design of the course consisted of lectures, workshops, and a final student presentation. This approach ensured that the intended learning objectives, learning activities, and assessment methods were coherently linked, enhancing students' understanding and engagement. As this was the first edition of the course, the design and content were developed to provide a balanced and interactive learning environment from the outset.

### **3. Students' Workload**

The students were overall pleased with the workload, finding it appropriate for the course credits. However, a few students expressed a desire for more challenging content, particularly regarding the use of tools within the course. In response, enhancements are planned for the next edition to include more hands-on experiences with sustainability tools, aiming to meet the diverse expectations of the student body.

### **4. Students' Results on the Course**

This first offering of the course yielded broadly positive results, with students successfully meeting the learning objectives. The course's relevance to contemporary issues in sustainability and business contributed to its success, establishing a solid foundation for future iterations.

### **5. Students' Answers to Open Questions and Summary of Opinions**

Students highlighted the course's relevance, structure, and the clarity of its intended learning outcomes. The societal and business relevance was particularly appreciated, affirming the significance of sustainable development in the curriculum. Feedback for future courses included the need for more practical tool applications and challenges. Additionally, an overlap with another course was noted as an area for improvement.

### **6. Overall Impression**

The first edition of the course was very well received, attracting over 50 students and demonstrating effective engagement and participation. The positive reception from the students indicates a successful start, highlighting the course's potential to significantly impact the integration of sustainable development concepts in the energy masters program. As teachers we were very impressed by the quality of the final presentations of the students.

### **7. Analysis and Prioritized Course Development**

Given the limited number of survey responses, it is challenging to identify differences in experiences among demographic groups. For the next edition, the course will focus on integrating new analytical tools and inviting international sustainability project experts. These enhancements aim to provide students with a richer learning experience, incorporating more practical tools and global perspectives.

To address the feedback for more challenging content, the course will integrate practical tools such as SWAT analyses to align projects with the Sustainable Development Goals (SDGs). Guest lectures by international experts in sustainability are also planned, aiming to offer students diverse insights and expertise. These updates are expected to elevate the course's impact and relevance, equipping students to contribute effectively to sustainability initiatives in their future careers.

Also, we will work with other teachers in the master to avoid any repetition of concepts and material with other courses.