“Environment, Ecology, and Economies:
Conversations about Climate Change in English”

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I would like to present a focused course on Environmental English which has emerged out of my Bachelor’s course on sustainable digitalization and present it as a combination of a detailed language instruction course that we usually offer on campus for German students who study technical and business-related English.

Within this seminar, students will be able to combine a study of environmental topics (either Bachelor’s or postgrad level) with the acquisition of advanced English language skills in a foreign language classroom. This toolbox description includes some guidelines on how to successfully integrate listening and reading as well as writing and speaking exercises into a subject-specific course for engineers.

The course itself will integrate the following **topics** at the core of sustainability (see separate syllabus):

- sustainable cities, environmental terminology across the globe, distinctive histories of environmentalism (Germany, US and Britain, with additional group work on other countries)
- pros and cons of a cost-benefit analysis of climate change as well as discussions on the relationship between sustainability and digitalization, including industry 4.0 and 5.0
- relationship of environmentalism to specific consumerist and business concepts, e.g. vanity capital in Asia, sustainable employees and the quantification of the self at work
- current environmental projects across the globe, e.g. building projects and environmental protection in South America, Middle Eastern projects in the desert regions

The **language level** of students usually ranges from intermediate to advanced skills, which the course integrates with various communicative exercises, research projects, and grammar or vocabulary instruction.

The organization of the course is a digitalization topic per each lesson, which will then include questions on the **handouts** (which are uploaded) to give to students in small groups. Each of these is also designed as an inspiration for the final project.

The **final project** includes the following items in English:

- A summary of a chapter from one of the works on the bibliography of your choice. This should be approximately one page in length and either focus on a few aspects or terms of the chapter (as a language exercise) or - as a challenge - an analysis that includes how that chapter compares to how other authors treat this subject (an exercise in critical reading).

- In addition, there is an analysis of a certain country with regards to their ideas about sustainability, climate change, or pollution and industry. Students could, for instance, talk about the fashion industry in Bangladesh, the sustainability efforts of China, a description of how other cultures or languages understand and voice climate change vocabulary and efforts.
  This can be done not as a full text, but in columns or as a table in keywords.
- There should also be a short analysis of a recent TED talk or guest lecture (in person or online) regarding AI, digitalization, and the relationship of environment and technology.
- Other possibilities include an exercise in the new developments in the workplace regarding sustainability or a roadmap of changes that students create to predict important developments of the next few years and sort them into a timeframe with events from the previous years.

Very useful **grammar** topics for this course include:
- exercises on different tenses, for instance, the future or past tenses (e.g., predictions by the TIME magazine survey of what the world might look like in 100 years)
- a grammar task regarding conditionals (and their predictions for the environment or digitalization)
- an exercise on prepositions using, for instance, a graph of geoengineering efforts and a description of methods to deal with climate change

Potential **vocabulary** exercises:
- a vocabulary exercise on environmental terms and how they differ between countries (also with the aid of the vocabulary in this site's lexicon)
- terms that are often used in environmental and also economic terms, e.g. "economically sustainable employees" or stewardship
- an introduction to scientific vocabulary of how different power plants operate (see Powerpoint) and the different landscapes from an architectural, biological, or engineering standpoint

Writing exercises are primarily done as either short texts or an analytical writing piece on different bibliographic materials as well as their own internet research. It is thus useful to include a short lecture about how to research internet pages, navigate fake news and authentic websites, etc.

Reading exercises include newspaper articles in English (various levels of language mastery are possible and adjustable here, also available from online sites), chapters from textbooks, each other's texts for further analysis and correction, and current discussion sites and blogs.
They may also use texts in their own languages, but have to translate it for the other students into English, at least conversationally.

Listening exercises could be short interviews with experts or from the news, as well as textbook introductions to nature topics or engineering / science podcasts.

Speaking exercises vary from the specific questions on the handout (known before the seminar meeting) that could be prepared in advance, interactions with a partner in class or a group of three to four persons on that topic.
Students then have to present their findings together as either a short presentation of 3-4 minutes or - in turn - an overview of sentences or keywords (at different language levels) on the board or projector screen.

The course could be very well combined with the following **engineering or economic topics**:

- power plants, electricity, sustainability
- cityscapes, architecture, building construction, infrastructure
- IT and artificial intelligence, digitalization, smart homes
- cost-benefit analysis, marketing strategies, financial calculations

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