

**Modules:**

physics700 **Elective Advanced Lectures**  
 physics720 **Applied Physics**

**Course:**

# **Environmental Physics & Energy Physics (A)**

**Course No.:** physics771

Category	Type	Language	Teaching hours	CP	Semester
Elective	Lecture	English	2	3	WT

**Requirements:****Preparation:**

Physik I-V (physik110-physik510)

**Form of Testing and Examination:**

Active contributions during term and written examination

**Length of Course:**

1 semester

**Aims of the Course:**

A deeper understanding of energy & environmental facts and problems from physics (and, if needed, nature or agricultural science) point of view

**Contents of the Course:**

After introduction into related laws of nature and after a review of supply and use of various resources like energy a detailed description on each field of use, use-improvement strategies and constraints and consequences for environment and/or human health & welfare are given.

**Recommended Literature:**

- Diekmann, B., Heinloth, K.: Physikalische Grundlagen der Energieerzeugung, Teubner 1997
- Hensing, I., Pfaffenberger, W., Ströbele, W.: Energiewirtschaft, Oldenbourg 1998
- Fricke, J., Borst, W., Energie, Oldenbourg 1986
- Bobin, J. L., Huffer, E., Nifenecker, H., L'Energie de Demain, EDP Sciences 2005
- Thorndyke, W., Energy and Environment, Addison Wesley 1976
- Schönwiese, C. D., Diekmann, B., Der Treibhauseffekt, DVA 1986
- Boeker, E., von Grondelle, R., Physik und Umwelt, Vieweg, 1997