Environmental Physics & Energy Physics (A) - physics771

Degree - M.Sc. in Physics (PO von 2014)

Module	**Elective Advanced Lectures: Applied Physics**
Module No.	physics70b

Course	**Environmental Physics & Energy Physics (A)**
Course No.	physics771

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

Requirements for Participation:

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, Oldenbourg1998

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