

Rational use of energy

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Subject code: RUE

Academic year: 2.

Module 5: Environment and spatial planning

Lectures: 20

Seminar work: 20

ECTS: 4

Aims of the subject:

Students learn about energy as a process and realize about its importance. They learn about energy resources and are able to separate the conventional and alternative resources. They can assess the energy consumption in differently developed areas and its concentration and dispersion. They learn about energy savings and rational use procedures and controlling the consumption of energy and its positive and negative consequences. They can assess the possibilities of replacing the energy with alternative sources and are able to analyze and forecast the energetic effects of using different sources of energy.

Subject content:

- ENERGY AS A PROCESS
- CONVERSION AND ENERGY CONSERVATION
- SITUATION AND ENERGY SOURCES
- ENERGY CONSUMPTION
- CONCENTRATION AND DISPERSION OF ENERGY
- ENERGY SAVINGS
- RATIONAL USE PROCEDURES
- REPLACING NON-CONVENTIONAL ENERGY SOURCES
- CLEAN ENERGY
- ENERGY FORECASTS

Teaching methods:

- frontal lecture
- visual display
- tours and fieldwork
- basic measurements
- teamwork on assignments

Student's obligations:

(written, oral examination, coursework, projects):

- at least 80 % class attendance
- 100 % fieldwork attendance
- Finished and positively graded assignment (term paper)

References

1. NOVAK, P. : Energetsko varčna gradnja, Gradbena založba Ljubljana, 2007;
2. BORUTA, A.: Energetska izkaznica zgradbe, TZS, Ljubljana, 2008;
3. SALOBIR, Boris. Warming with geothermal energy.. *Šolski center Velenje*, 2008.
4. SALOBIR, Boris. Consumption of Dry Geothermal Energy, -, *Krško, februar, 2009.*
5. SALOBIR, Boris. *Izraba geotermalne energije za ogrevanje : Primorje d.d. Ajdovščina.*, 2006.
6. SALOBIR, Boris. *Trajnostni in sonaravni razvoj: Šolski center Velenje*, 2007.