

Waste Management (Viktor Grilc, Ph.D., Associate Prof.)

Subject code: WM

Academic year: 1.

Lectures: 45

Tutorials: 15

ECTS: 6

Aims of the course:

The students will know and understand the scope and the problem of generating and managing waste which is one of the key issues of environmental protection. They will be acquainted with technological principles and preferential methods of waste management, and this will allow them to be able to link regulatory requirements and technological possibilities to fulfil their tasks. Waste is considered as potential raw material and energy resources which are in an inappropriate form and in an inappropriate place. However, by using adequate methods of waste treatment (separate collection, sorting, handling and processing of waste) such waste can be available in a useful form for their further use. The focus is on preferential application of waste processing procedures to procedures of waste disposal and presentation of adverse effects of disposal procedures on different natural elements. We develop the abilities of critical assessment and selection of alternative ways of treating an individual waste type, and we encourage the use of various sources to acquire and evaluate the data from this particular field.

Subject content:

waste types and their characteristics, mechanical, chemical, biological, thermal procedures of waste processing and removal, waste disposal, use of secondary raw materials and fuels, treatment of municipal waste, hazardous waste New trends of waste management.

Teaching methods:

lectures, field work, seminar work

Study obligations:

written or oral exam, field work and seminar paper.

Literature

1. Gantar, A., 2008: Waste management Environmental Protection College, Velenje (internal study material - textbook).
2. Ignatowitz, E., 1996: Kemijska tehnika (*Chemistry techniques*), Jutro
3. Rhyner, C.R. et.al., 1995: Waste Management and Resource Recovery, CRC Press
4. Tölgyessy, J., 2001: Solid Waste Chemistry and Management, Matej Bel University
5. MOP and ARSO web pages (www.arso.gov.si)