



UNIVERSITY OF SARAJEVO – FACULTY OF SCIENCE
SUBJECT DESCRIPTION

Form SP2

Page 1 of 2

Subject code: GE-566-4	Subject name: Renewable Energy Sources		
Study cycle: II	Year: I	Semester: I	ECTS credits: 6
Status: Mandatory		Contact hours: 60 Lectures: 30 Practical courses: 30	
Assigned professors and assistants:	Lecturers and assistants selected for the field to which the course belongs.		
Prerequisites:	/		
Subject objectives:	Introducing students to the principles and technologies of renewable energy sources. Familiarizing students with modern trends and innovations in the field of renewable energy.		
Teaching units:	1. Introductory Lecture 2. Definition and Importance of Renewable Energy Sources 3. Overview of Available Renewable Energy Sources: Solar, Wind, Water, Biomass, Geothermal Energy 4. Solar Energy 5. Wind Energy – Wind Farms and Wind Turbines 6. Wind Energy Storage Technologies 7. Water Energy 8. Concept and Types of Hydropower Plants. Environmental Impact of Hydropower Plants 9. Tidal Energy 10. Biomass and Biogas. Energy Production from Organic Materials 11. Geothermal Energy. Geothermal Power Plants. Economic and Environmental Aspects of Geothermal Energy 12. Renewable Energy Sources in the World 13. Renewable Energy Sources in Bosnia and Herzegovina 14. Legal Regulations in the Field of Renewable Energy 15. Analysis of Seminar Papers		
Learning outcomes:	Knowledge: • student understands the concept of renewable energy sources. • student understands the main characteristics of		



	renewable energy sources Skills: • Student independently analyzes available renewable energy sources and evaluates their suitability for utilization. Competencies: • student independently assesses technologies for the application of renewable energy sources in the context of sustainable development.																																																
Teaching methods:	Multimedia presentation and discussion (lectures); practical work, educational material analysis and discussion (practical courses).																																																
Knowledge testing methods with grading structure¹:	<table><tr><td></td><td colspan="2"><i>Points</i></td></tr><tr><td>Attendance</td><td>5</td><td>3</td></tr><tr><td>Participation on lectures</td><td>5</td><td>3</td></tr><tr><td>Tests</td><td>40</td><td>22</td></tr><tr><td>Seminar paper</td><td>10</td><td>6</td></tr><tr><td>Final exam</td><td>40</td><td>21</td></tr><tr><td colspan="3"> </td></tr><tr><td>TOTAL</td><td>100</td><td>55</td></tr></table> Assessment: <table><tr><td><i>Grade</i></td><td><i>ECTS grade</i></td><td><i>Points scale</i></td></tr><tr><td>10</td><td>(A) excellent</td><td>95 - 100</td></tr><tr><td>9</td><td>(B) very good</td><td>85 - 94</td></tr><tr><td>8</td><td>(C) good</td><td>75 - 84</td></tr><tr><td>7</td><td>(D) satisfactory</td><td>66 - 74</td></tr><tr><td>6</td><td>(E) sufficient</td><td>55 - 64</td></tr><tr><td colspan="3"> </td></tr><tr><td>5</td><td>(F, FX) insufficient</td><td>55</td></tr></table>		<i>Points</i>		Attendance	5	3	Participation on lectures	5	3	Tests	40	22	Seminar paper	10	6	Final exam	40	21				TOTAL	100	55	<i>Grade</i>	<i>ECTS grade</i>	<i>Points scale</i>	10	(A) excellent	95 - 100	9	(B) very good	85 - 94	8	(C) good	75 - 84	7	(D) satisfactory	66 - 74	6	(E) sufficient	55 - 64				5	(F, FX) insufficient	55
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Literature²:	Mandatory: Labudović, B. (2002) Obnovljivi izvori energije. Zagreb: Energetika marketing Recommended: Azapagic, A., Perdan, S., Clift, R. (2005) Sustainable Development in Practice. John Wiley & Sons																																																

¹ The structure of points and point criteria for each subject is determined by the Council of the organizational unit before the beginning of the academic year in which the subject is taught in accordance with Article 64, paragraph 6 of the Law on Higher Education of Sarajevo Canton

² The Senate of the higher education institution as an institution or a council of the organizational unit of the higher education institution as a public institution determines mandatory and recommended textbooks and manuals, as well as other recommended literature on the basis of which exams are prepared by a special act which is required to be published on its website before the beginning of the academic year in accordance with Article 56, paragraph 3 of the Law on Higher Education of the Sarajevo Canton.