

FIRAT UNIVERSITY
FACULTY OF SCIENCES
DEPARTMENT OF BIOLOGY
GRADUATE COURSE LIST

SEMESTER I				
Course Code	Course Title	Course Category	T+A+L	ECTS
FBE503	Teaching of Physics in Science Lessons	Elective	2+2+0	6
FBE505	CHEMISTRY TEACHING IN SCIENCE COURSES	Elective	3+0+0	6
FBE507	National and International Science Education Programs	Elective	3+0+0	6
FBE509	TARGET ANALYSES AND TEST DEVELOPMENT IN SCIENCE TEACHING	Elective	3+0+0	6
FBE517	Computer-aided Science Education -I	Elective	2+2+0	6
FBE519	Special Teaching Methods in Science Education	Elective	3+0+0	6
FBE521	Some Chemistry Subjects in Science Education	Elective	3+0+0	6
FBE523	Significance of Science Laboratory-I	Elective	3+0+0	6
FBE525	Some Physics Subjects in Science Education	Elective	3+0+0	6
FBE531	RESEARCH METHODS AND DATA ANALYSIS IN SCIENCE EDUCATION	Elective	3+0+0	6
FBE535	Creativity Education and Technology and its Use in Science Teaching	Elective	3+0+0	6
FBE537	Biology Teaching in Science Courses	Elective	3+0+0	6
FBE539	DEVELOPMENT AND LEARNING BIOLOGY	Elective	3+0+0	6
FBE545	Research Methods in Science Teaching I	Elective	3+0+0	6
FBE547	Teaching and Learning in Science Courses I	Elective	3+0+0	6
FBE571	META ANALYSIS IN SCIENCE EDUCATION	Elective	3+0+0	6
FBE575	Historical Development of Basic Concepts in Science Education	Elective	3+0+0	6
FBE577	Computer-aided Data Analysis	Elective	2+2+0	6
FBE578	Computer Programming in Science and Technology Education	Elective	2+2+0	6
FBE579	Scientific Inquiry and Nature of Science	Elective	3+0+0	6
FBE580	International Approaches in Science Education	Elective	3+0+0	6

FBE582	Some Biology Subjects in Science Education	Elective	3+0+0	6
			Total ECTS	132
SEMESTER II				
Course Code	Course Title	Course Category	T+A+L	ECTS
EĞTENS702	SCIENTIFIC RESEARCH METHODS IN EDUCATION	Elective	3+0+0	6
FBE 533	Pedagogical Content Knowledge	Elective	3+0+0	6
FBE501	MASTER SEMINAR	Elective	0+0+0	6
FBE504	PROGRAM DEVELOPMENT AND EVA. IN SCI. ED. - II	Elective	3+0+0	6
FBE506	Environmental Education in Science	Elective	3+0+0	6
FBE508	Information Technologies and Its Practice in Science Education	Elective	2+2+0	6
FBE511	Administration and Supervision in Science Education	Elective	3+0+0	6
FBE512	Computer-aided Science Education -II	Elective	2+2+0	6
FBE513	Information Technologies and Its Practice in Science Education	Elective	2+0+0	6
FBE514	Teaching of Concepts in Science Education	Elective	3+0+0	6
FBE516	INVESTIGATION OF SCI. TEXTBOOK TO REVIEW THE CURRICU	Elective	3+0+0	6
FBE520	Advanced Chemistry in Science Education	Elective	3+0+0	6
FBE522	Effective Science Instruction	Elective	3+0+0	6
FBE524	AUTHENTIC AND PERFORMANCE ASSES. IN SCI. ED.	Elective	3+0+0	6
FBE526	SCINCE-TECH.-SOC.-ENV. APPROACH IN SCI. ED.: SCI AND TECH. LITE.	Elective	3+0+0	6
FBE528	Pedagogical Content Knowledge	Elective	3+0+0	6
FBE530	Environmental Science and Health in Elementary Education	Elective	3+0+0	6
FBE532	Nature and History of Science in Science Teaching	Elective	3+0+0	6
FBE534	Data Collection and Assessment Methods in Science Teaching	Elective	3+0+0	6
FBE536	Advance Physics in Science Teaching	Elective	3+0+0	6
FBE538	MULTIPLE INTELLIGENCES MODEL AND PRACTICES IN SCI. ED.	Elective	3+0+0	6
FBE540	COOPERATIVE LEARNING IN ELEMENTARY SCI. TEACH.	Elective	3+0+0	6
FBE542	Laboratory Practices in Science Education	Elective	3+0+0	6

FBE544	PROBLEM BASED LEARNING METHOD IN SCI. COURSES	Elective	3+0+0	6
FBE546	National and International Science Education Programs	Elective	3+0+0	6
FBE581	Research Methods in Science Teaching II	Elective	3+0+0	6
FBE599	MASTER THESIS	Elective	0+0+0	24
FBE601	SPECIAL STUDIES ON THESIS SUBJECT	Elective	6+0+0	6
EĞTENS701	STATISTICS APPLICATIONS IN EDUCATION	Elective	3+0+0	6
FBE565	Radioactive, Radiation and Environment in Science Education	Elective	3+0+0	6
FEB 601	Special Studies on Thesis Subject	Elective	3+0+0	6
FEB501	Masters Degree Seminar	Elective	0+0+0	6
FEB514	International Approaches in Science Education	Elective	3+0+0	6
FEB527	Effective Science Instruction	Elective	3+0+0	6
FEB534	Computer Programming in Science and Technology Education	Elective	3+0+0	6
FEB599	Graduate Degree Thesis	Elective	3+0+0	24
			Total ECTS	252