Course Name-Code:AT 510 İNFRARED ABSORBER DYES					Programme Name:ADVANCED TECHNOLOGY				

Semester	Methods of Education and Teaching							Credits	
	Lecture	Recit.	Lab.	Practical Training	Project/Field Study	Others	Total	Credit	ECTS Credit
1-2	42	-	-	75	23	48	188	3	7.5

Language	Turkish
Compulsory / Elective	Elective
Prerequisites	None
Catalog Description	Chemical structures of Infrared Absorber Dyes. Comparison, production and characterization procedures of cyanines, phytalocyanines, quinones etc. dyes. Optical data storage systems, solar cells, photopolymerization, camouflage etc applications.
Course Objectives	**To study IR aborber dyes production and applications. To investigate chemical structures of IR absorber dyes**
Learning outcomes and competence	**To be informed about chemical structures of IR absorber dyes and applications.**
Text Book and/or References	1. , Masaru Matsuoka (Ed),, Infrared Absorbing Dyes Plenum Press; New York, 1992. 2. M. Matsuoka, Absorption Spectra of Dyes for Diode Lasers, Bunshin, Tokyo, 1990. 3. J. Fabian and H. Hartmann, Light Absorbing of Organic Colorants, Springer Verlag, Berlin, 1980. 4. H. Kressel and JK Butler Semiconductors Lasers and Heterejunction LEDs, , Academic Press, New York, 1977.

Assessment Criteria		Quantity	Percentage
	Midterm Exams	1	40
	Quizzes	-	-
	Homeworks	-	-
	Projects	-	-
	Term Paper	1	20
	Laboratory Work	-	-
	Other	-	-
	Final Exam	1	60

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Week	Subject
1-6	Chemical structures of Infrared Absorber Dyes. Comparison, production and characterization procedures of cyanines, phytalocyanines, quinones etc. dyes.
7-12	Optical data storage systems, solar cells, photopolymerization, camouflage etc applications.
13-14	Presentation