

Course Name-Code:AT 520 LASER DYES AND APLICATIONS							Programme Name:ADVANCED TECHNOLOGY		
Semester	Methods of Education and Teaching							Credits	
	Lecture	Recit.	Lab.	Practical Training	Project/Field Study	Others	Total	Credit	ECTS Credit
<u>1-2</u>	<u>42</u>	-	-	<u>75</u>	<u>23</u>	<u>48</u>	<u>188</u>	<u>3</u>	<u>7.5</u>
<u>Language</u>	Turkish								
<u>Compulsory / Elective</u>	Elective								
<u>Prerequisites</u>	None								
<u>Catalog Description</u>	Laser types and applications. Classification and chemical structures of laser dyes. Properties of organic-dye laser. Manufacture of dyes and characterization procedures. Using of laser dyes.								
<u>Course Objectives</u>	To study laser and its dyes. To investigate their synthesis								
<u>Course Outcomes</u>	To be informed about laser and synthesis of laser dyes								
<u>Text Book and/or References</u>	1. J. Griffiths (Ed.) Developments in the chemistry and technology of organic dyes, , CIS, London, 1984 2. P. Gregory,High technology applications of organic colorants, Plenum Press, New York, 1988 3. R.J. Pressley (Ed.) Handbook of lasers, , Chemical Rubber Co., Ohio, 1971 4. F.P. Schafer, Dye lasers, Springer-Verlag, Berlin, 1977								
<u>Assessment Criteria</u>								<i>Quantity</i>	<i>Percentage</i>
	Midterm Exams							x	40
	Quizzes							-	-
	Homeworks							-	-
	Projects							-	-
	Term Paper							x	20
	Laboratory Work							-	-
	Other							-	-
	Final Exam							x	40
<u>Instructors</u>	Prof.Dr.Atilla MURATHAN								
<u>Week</u>	<u>Subject</u>								
<u>1-2</u>	Laser types and applications, Classification and chemical structures of laser dyes.								
<u>3</u>	Properties of organic-dye laser.								
<u>4-10</u>	Manufacture of dyes and characterization procedures.								
<u>11-12</u>	Using of laser dyes.								
<u>12-14</u>	Presentation								