DRUG DELIVERY SYSTEMS

1	Course Title:	DRUG DELIVERY SYSTEMS
2	Course Code:	BYM6003
3	Type of Course:	Optional
4	Level of Course:	Third Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	6.00
8	Theoretical (hour/week):	3.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. GÖKHAN GÖKTALAY
15	Course Lecturers:	Prof. Dr. M. Sertaç Yılmaz Dr. Öğr. üyesi. Şebnem Düzyer Gebizli
16	Contact information of the Course Coordinator:	Prof. Dr. Gökhan Göktalay BUÜ Tıp Fak. Tıbbi Farmakoloji AD. Email:goktalay@uludag.edu.tr Tel Dahili: 53567
17	Website:	
18	Objective of the Course:	To teach basic concepts and approaches in drug delivery systems, to teach controlled drug delivery systems and polymer-based delivery systems.
19	Contribution of the Course to Professional Development:	To learn the general principles of drug transport and release, to learn about nanotechnological and other systems in drug delivery, to learn the types of nanocarriers and the applications of the drug transport system of nanoparticles.
20	Learning Outcomes:	
	1	To learn the general principles of drug transport and release
	2	To learn the types of nanocarriers and the applications of the drug transport system of nanoparticles.
	3	To have knowledge about electrospining method
	4	To have knowledge about targeted drug delivery systems
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21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Introduction to drug delivery systems	
2	Drug administration routes and basic pharmacological principles	

3	Nanofibers and their main properties	
4	Drug loadings on nonofibers	
5	Inotroduction to controled release systems	
6	Biyodegredable polymers	
7	Based on bioerosion polymers and drug transport	
8	Vesicular sytems	
9	Osmotic systems	
10	Targeted drug delivery	
11	Discussion through articles I	
12	Discussion through articles II	
13	Discussion through articles III	
14	Discussion through articles IV	

22	Textbooks, References and/or Other Materials:	Tıbbi Farmakoloji, Oğuz Kayaalp Drug Delivery Systems, Vasant V. Ranade and Mannfred A. Hollinger
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	0	0.00
Quiz	0	0.00
Contribution of Term (Year) Learning Activities to Success Grade		20.00
Contribution of Final Exam to Success Grade		80.00
Measurement and Evaluation Techniques Used in the Undergraduate Education		Measurement and evaluation are performed according to

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	6	8.00	48.00
Homeworks	2	40.00	80.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	0	0.00	0.00
24 ECTS / WORK LOAD TABLE			
Others	0	0.00	0.00
Final Exams	1	10.00	10.00
Total Work Load			180.00
Total work load/ 30 hr			6.00
ECTS Credit of the Course			6.00

25	**CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS**															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High