

Ethical and legal issues in Bioinformatics

Semester No	Code	Credit Hours
4/8	BI-432	2+1

Course description:

This course introduces the ethical and legal aspects related to bioinformatics practices and products.

Textbooks:

Latest editions of following books,

1. Katina Strauch and Bruce Strauch, "Legal and Ethical Issues in Acquisitions", Routledge.
2. Tom Forester and Perry Morrison, "Computer Ethics: Cautionary Tales and Ethical Dilemmas in Computing", The MIT Press.
3. Bruce A Rocheleau, "Public Management Information Systems", Idea Group Publishing.
4. Charles P. Pfleeger, Shari Lawrence Pfleeger and Jonathan Margulies, "Security in Computing", Prentice Hall.

Prerequisite:

None

Course Learning Outcomes:

To understand the ethical and legal aspects related to bioinformatics practices and products and its socio-economic effect.

ASSESSMENT SYSTEM:

Quizzes	10-15%
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Assignments	5-10%
MSE	30-40%
ESE	40-50%

Week wise Lecture Plan:

Week	Lecture Topic	Quizzes	Assignments
1	Social context of computing and biology		
2	Intellectual property		
3	Intellectual property filing process		
4	Privacy and civil liberties	1	
5	Economic issues in bioinformatics		
6	Monopolies and their economic implications		
7	Effect of skilled labor supply and demand on the quality of bioinformatics products	2	1
8	Quality assessment/ validation of bioinformatics products		
9	MIDTERMS		
10	Pricing strategies in the bioinformatics domain		
11	Differences in access to bioinformatics resources and the possible effects thereof		

12	Health, psychological and legal issues in GMOs		2
13	Biosafety and bio-security issues	3	3
14	Biosafety Levels		
15	Product marketing		
16	Post market monitoring		
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18	END SEMESTER EXAMINATION		