

1.	Name of Course/Module	Legal, Moral & Ethical Issues in Life Sciences
2.	Course Code	HLP3019
3.	Status of Subject	Core for B. Sc Bioinformatics
4.	MQF Level/Stage	Bachelor Degree – MQF Level 6
5.	Version (state the date of the last Senate approval)	June 2012
6.	Requirement for Registration	None
7.	Name(s) of academic/teaching staff	Margaret Seldon Leila Hilout Ong Chia Sui
8.	Semester and Year offered	Trimester 1 (Delta level)
9.	Objective of the course/module in the programme :	
	1. To introduce students to the study of ethics 2. To provide insight into a number of legal, moral and ethical issues relevant to Life Science	
10.	Learning Outcomes :	
	At the completion of the subject, students should be able to: LO1: Explain the basic principles of ethics and basic legal knowledge (Cognitive, Level 2) LO2: Discuss and present the ethical issues using the basic principles (Cognitive, Level 2) LO3: Defend and debate the controversial issues in life sciences (Affective, Level 4) LO4: Practice good professional ethics in carrying out professional duties (Affective, Level 2)	
11.	Synopsis:	
	The course is designed to give an overview of ethical principles and the application of ethics in Life Science. Students will be introduced to the philosophy of ethics, professional conduct and ethics in the context of scientific research and legal aspects related to bioethics. Contemporary issues in bioethics will be used as a resource and platform for students to explore the principles taught, and to stimulate students to question, think, and learn to handle controversial subjects of ethical concern in a rational and balanced manner. Subjects covered include selective topics in genetics, medical ethics and reproduction.	
	Kursus ini direka dengan tujuan memberi gambaran mengenai prinsip etika dan aplikasi etika dalam Sains Kehidupan. Pelajar akan didedahkan mengenai falsafah etika, aspek asas konduk professional, dan etika di dalam aspek penyelidikan dan aspek undang-undang berkaitan etika biologi. Isu kontemporari dalam etika biologi akan didedahkan dan ia digunakan sebagai platform untuk pelajar mengkaji prinsip yang diajar, mengalakkan pelajar untuk berfikir dan membincangkan, serta belajar untuk mengendalikan isu sensitif secara waras. Subjek ini menjangkumi topik seperti genetik, etika perubatan, dan pembiakan.	
12.	Mapping of Subject to Programme Outcomes :	
	Programme Outcomes	% of Contribution
	PO1: Apply soft skills in work and career related activities	28.57
	PO2: Demonstrate knowledge and understanding of fundamental concepts, principles and best practices	57.14

	PO6: Relate moral and ethical values to the practice of a professional		14.29
13.	Assessment Methods and Types :		
	Method and Type	Description/Details	Percentage
	Test/Quiz		30%
	Assignment/Case Studies/Presentation	Report & Presentation	70%
14.	Details of Subject		
	Topics	Mode of Delivery	
		Lecture	Tutorial
	1. Introduction <ul style="list-style-type: none"> The Origin and Philosophy of Ethics Human rights and responsibilities 	2	-
	2. Ethical considerations and professional conduct in scientific research <ul style="list-style-type: none"> Data integrity and publication ethics Ethical statistics Ethical consideration of animal subjects and <i>in-vivo</i> studies 	2	-
	3. Ethical principles and considerations in clinical research	2	-
	4. Issues in Bioethics 4.1 Genetics 4.2 Environmental ethics 4.2 Medical ethics 4.4 Reproduction	5 1 2 2	-
	5. Telemedicine from the perspective of: <ul style="list-style-type: none"> Privacy and information security issues in telemedicine Accountability 	2	-
	6. Introduction to the Malaysian Legal System	3	-
	7. Patenting Laws in Malaysia	3	-
	1)	8. Case Studies, discussion, presentations, debates around issues in bioethics	16
	Total	24	-
15.	Tutorials		
	Not applicable		
16.	Total Student Learning Time (SLT)	Face to Face (Hour)	Total Guided and Independent Learning
	Lecture	24	24
	Case Studies	16	48

	Tests	1	5
	Quizzes (2)	2 times	2
	Assignment	-	10
	Sub Total	41	89
	Total SLT	$130/40 = 3.25 \Rightarrow 3$	
17.	Credit Value	3	
18.	Reading Materials :		
	Textbook	Reference Materials	
	1. Cambridge Textbook of Bioethics. Singer, Peter A & Viens, Adrian M. Cambridge University Press 2008.	1. Principles of Biomedical Ethics. Beauchamp, Tom & Childress, James. Oxford University Press 2001. 2. A Cross-cultural Introduction to Bioethics. Darryl RJ Macer. Eubios Ethics Institute 2006.	
19.	Appendix (to be compiled when submitting the complete syllabus for the programme) :		
	<ol style="list-style-type: none"> 1. Mission and Vision of the University and Faculty 2. Mapping of Programme Objectives to Vision and Mission of Faculty and University 3. Mapping of Programme Outcome to Programme Objectives 4. Programme Objective and Outcomes (Measurement and Descriptions) 		