

Course Title	Bioethics and Scientific Integrity				
Course Code	BMS323				
Course Type	Compulsory				
Level	Bachelor (1st Cycle)				
Year / Semester	3 rd Year / 6 th Semester				
Teacher's Name	TBA				
ECTS	5	Lectures / week	2 Hours	Laboratories / week	None
Course Purpose and Objectives	<p>The main objective of this course is to introduce students to the concept of Bioethics and acquaint them with major developments in the field of Biomedical Sciences that need to be critically addressed and seen through the filter of Bioethics. The course will also familiarize the students with the current legislation in Cyprus, Europe and worldwide regarding major bioethical issues and debates. Finally, students will be exposed to pertinent case-studies related to scientific integrity, which will enable them to evolve to excellent scientists of high bioethical standards</p>				
Learning Outcomes	<p>Upon successful completion of this course the students will be able to:</p> <ul style="list-style-type: none"> • Recall key concepts in Bioethics and describe the main philosophical and ethical issues in modern Biomedical Sciences • Recall the legal framework, both international and national, governing bioethics, and describe the role of the Bioethics Committee in Cyprus • Summarize and describe the major contemporary bioethical considerations 				
Prerequisites	None	Co-requisites	None		
Course Content	<ul style="list-style-type: none"> • Introduction to Bioethics: Life, Ethics, Bioethics • The legal framework (international, European, National) • Modern Bioethical Considerations • The ethics behind topics such as: <ul style="list-style-type: none"> ➤ genetic engineering and genetically modified organisms (GMOs) ➤ reproductive cloning, human cloning ➤ therapeutic cloning ➤ mapping the human genome and gene therapy ➤ new generation of drugs and pharmacogenomics ➤ genetic redesign and children on demand ➤ prenatal and pre-implantation testing and gene editing 				

	<ul style="list-style-type: none"> ➤ embryonic stem cells ➤ in vitro fertilization ➤ euthanasia ➤ use of human subjects in research through clinical trials ➤ use of fetal tissue in research ➤ use of laboratory animals in research (pre-clinical studies) ➤ morality of modern technologies (artificial intelligence, misuse of nuclear energy, risk of particle acceleration experiments in environmental pollution - global warming, biological and chemical warfare) • Integrity in science, which includes the following topics: <ul style="list-style-type: none"> ➤ Scientific misconduct ➤ Moral reasoning in the conduct of science ➤ Scientific publication and authorship ➤ Peer review ➤ Patents ➤ Copyright ➤ Scientific (and laboratory) record keeping ➤ The issue of informed consent in studies involving human subjects ➤ Conflict of interest in conducting research ➤ Conflict of conscience ➤ Critical thinking and the case study approach 										
Teaching Methodology	Face- to- face										
Bibliography	Mepham B. Bioethics: an introduction for Biosciences Singer PA, and Viens AM. The Cambridge Textbook of Bioethics Beauchamp TL, Childress JF. Principles of Biomedical Ethics Macrina FL. Scientific Integrity: an introduction text with cases, Americal Society for Microbiology Press										
Assessment	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Mid – Term Examination</td> <td style="width: 30%; text-align: center;">30%</td> </tr> <tr> <td>Final Examination</td> <td style="text-align: center;">40%</td> </tr> <tr> <td>Assignments</td> <td style="text-align: center;">20%</td> </tr> <tr> <td>Class Participation</td> <td style="text-align: center;">10%</td> </tr> <tr> <td></td> <td style="text-align: center;">100%</td> </tr> </table>	Mid – Term Examination	30%	Final Examination	40%	Assignments	20%	Class Participation	10%		100%
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Language	English										