

<b>Course Code:</b>	GEN404
<b>Course Name:</b>	BIOETHICS OF GENETICS AND GENOMICS
<b>Credit / ECTS:</b>	3 Credit/ 6 ECTS
<b>Catalogue Description:</b>	This course examines the ethical and scientific aspects of genomics in healthcare and research. It covers the latest genetic advancements and biotechnology while addressing the ethical, legal, and practical challenges faced by professionals in the field. Students will develop the skills to navigate ethical dilemmas and promote equitable practices in genomics.
<b>Course Objectives:</b>	Ethics in genomics healthcare and research help those working in the field to negotiate ethical issues, promote consistency of approach and, ultimately, create better, more equitable experiences for patients and research participants. The primary focus of this course is to discover genetics from two perspectives: the scientific and ethical approach. We will be alternating between learning the science behind genetics and biotechnological advances with a philosophical and practical discussion of the ethics of these technologies. In addition, with this course, the ability to cope with ethical and legal problems that may be encountered in professional life will be gained.
<b>Learning Outcome (s):</b>	<ol style="list-style-type: none"> <li>1- Learn about the ethical, legal and social dimensions of genetics and genomics from various perspectives</li> <li>2- Gain the ability to deal with ethical, confidentiality and legal issues</li> <li>3- Understand a range of initiatives involving case studies, genomic testing/screening or research on the link between genes and health</li> <li>4- Learn how to design research, clinical services or screening programs</li> <li>5- Learn about the development of professional, institutional or national policies, public engagement efforts, professional education and training, and individual patient case studies</li> </ol>
<b>Weekly Topics</b>	<ol style="list-style-type: none"> <li>1- Introduction to Genomics and Biotechnology</li> <li>2- Basic Ethical Principles in Healthcare and Research</li> <li>3- Informed Consent in Genomic Studies</li> <li>4- Ethical Issues in Genetic Testing</li> <li>5- Privacy and Data Sharing in Genomics</li> <li>6- Genetic Discrimination and Equity</li> <li>7- Gene Editing Ethics (e.g., CRISPR)</li> <li>8- Ethical Considerations in Genetic Counseling</li> <li>9- Stem Cell Research and Ethics</li> <li>10- Social Responsibility in Genomic Research</li> <li>11- Legal and Ethical Frameworks in Genomics</li> <li>12- Emerging Ethical Challenges in Genomics</li> </ol>