UNIB20007 Genetics, Health, and Society

Credit Points:	12.50
Level:	2 (Undergraduate)
Dates & Locations:	This subject is not offered in 2014. lectures and tutorials
Time Commitment:	Contact Hours: 36 hours: 12 weeks of two 1-hour lectures per week (24hrs) plus one 1-hour small group discussion or workshop per week (12hrs). Total Time Commitment: 120 hours
Prerequisites:	N/A
Corequisites:	N/A
Recommended Background Knowledge:	There will be specific workshops offered within the timetable early in the semester to support those students who have not studied genetics recently or VCE level Biology however enrolment or concurrent enrolment in one of BIOL10003 Genes and Environment or BIOL10005 Genetics and the Evolution of Life OR GENE10004 Genetics in the Media, is **recommended**.
Non Allowed Subjects:	N/A
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
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Subject Overview:	The Human Genome Project has defined the blueprint of human life. This has enabled not only greater clarity and understanding of the science of genetics but also an awakening of the personal meaning of heredity, with ethical, spiritual, and cultural dimensions. Because each human being has a unique genome which can potentially be identified, it is not hard to imagine the delicate web of dilemmas that will arise from consideration of the human genome as a utility. For example, predictive testing for a late onset condition entails a complex set of problems; including a person's right to know or not to know facts that cannot be 'unknown'; ownership of the genes (are they owned by the individual or the family, an organisation or a country?); and difficult insurance and privacy concerns. Genomics is not contained within the boundaries of science, but crosses into many other disciplines and fields, including medicine, psychology, sociology, ethics, law, religion, spirituality, and society. This subject will provide students with a greater understanding of genomics and its ramifications, enabling collaboration and debate across many different disciplines and facets of society. The subject will comprise nine themes, each addressing a different area affected by recent genomic developments. The themes are: (1) Setting the scene: A hypothetical introducing the subject, and an overview of the milestones in human genetics. (2) Nature and nurture. What is the human genome, what does it contribute to who we are and how?

	(3) Reading the future. What can genes tell us about ourselves and our potential children, and what do we really want to know? Clinical and non-clinical uses of genetic testing. What are the ethical and psychosocial considerations of genetic testing? (4) Genetics and race. How does genetics interface with the concept of race? (5) Visible and invisible differences. Exploring the psychological ramifications for people with genetic disorders that cause differences in physical appearance. (6) Genetics and art. Exploring the influence and inspiration of genomics on various media. (7) Genetics and the law. Legal implications of genomics will be addressed including: genetics in solving crimes and paternity; ownership of DNA including patenting of genes; sharing of genetic information within families, issues of confidentiality and privacy, genetic testing of children; genetic discrimination in insurance and employment. (8) Genes and kinships. What connects families? How do we understand donor-assisted conception, paternity “fraud,” and complex “blended” families? (9) Ethics of reproductive choice. Ethical considerations of reproductive choices set against the background of the history of eugenics and the current emphasis on free and informed choice, including termination of pregnancy following genetic testing. Lecturers and tutors from different disciplines and faculties will be involved in teaching relevant themes.
Learning Outcomes:	On completion of the subject, students should: • Understand the science of human genomics and its role in forming who we are. • Have increased insight into the personal, familial, social, ethical, and legal ramifications of developments in human genomics. • Appreciate the ethical, legal, and societal dilemmas inherent in gene-related decisions, and be able to consider all of the relevant arguments.
Assessment:	(1) Three online multiple choice quizzes; first quiz worth 5%, second and third worth 10% each.Quizzes evenly spread throughout the semester (25%) (2) A wiki and class presentation (small group work) of 10-15 minutes duration on an allocated topic, presented toward the end of the semester (15%); and (3) Final written examination (2 hrs), during the examination period (60%)
Prescribed Texts:	Reading and reference material will be provided by lecturers or tutors at the commencement of each theme.
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Arts (https://handbook.unimelb.edu.au/view/2014/B-ARTS)** # **Bachelor of Biomedicine (https://handbook.unimelb.edu.au/view/2014/B-BMED)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2014/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2014/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2014/B-MUS)** # **Bachelor of Science (https://handbook.unimelb.edu.au/view/2014/B-SCI)** # **Bachelor of Engineering (https://handbook.unimelb.edu.au/view/2014/B-ENG)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	On completion of the subject, students should have developed the following skills: · Ability to integrate material from diverse disciplines and to discuss the effect of recent developments on different disciplines. · Ability to assess critically information from a range of sources including its quality and relevance to the question under consideration. · Ability to present a broad-based and reasoned discussion on a related topic.

Related Breadth Track(s):	Genetics and Society