GENE10001 Genetics in the Media

Credit Points: 12.5

Level: 1 (Undergraduate)

Dates & Locations: 2015, Parkville
This subject commences in the following study period/s:
Semester 1, Parkville - Taught on campus.

Time Commitment: Contact Hours: 2 x 1 hour lectures 1 x 1 hour workshop/seminar/lecture per week Total Time Commitment: Estimated total time commitment of 170 hours

Prerequisites: None.

Corequisites: None.

Recommended Background Knowledge: None.

Non Allowed Subjects: Students who have passed the following subjects may not enrol into GENE10001 Genetics in the Media

<table>
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<tr>
<th>Subject</th>
<th>Study Period Commencement</th>
<th>Credit Points</th>
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<tbody>
<tr>
<td>BIOL10005 Genetics &amp; The Evolution of Life</td>
<td>Semester 2</td>
<td>12.50</td>
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<tr>
<td>BIOL10003 Genes and Environment</td>
<td>Semester 2</td>
<td>12.50</td>
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Core Participation Requirements: <p>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.</p> <p>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: <a href="http://services.unimelb.edu.au/disability">http://services.unimelb.edu.au/disability</a></p>

Coordinator: Assoc Prof Dawn Gleeson

Contact: Email: d.gleeson@unimelb.edu.au (mailto:d.gleeson@unimelb.edu.au)

Subject Overview: Genetics is a topic commonly discussed in the media. It may be an article in a newspaper or magazine, a TV news report or current affairs program, a TV series or a film. Topics include the discovery of genes associated with health such as cancer, genetic testing, recombinant DNA technology in agriculture, forensic analysis in crime, paternity cases, identification after a disaster, are commonly depicted in print, TV and film.

This subject will provide the background to understand and critically evaluate the claims made in the media. These references to genetics in the media will be used as the context to introduce principles of genetics such as correct genetic terminology; genes, alleles, chromosomes; patterns of inheritance such as constructing a pedigree; DNA, RNA and how genes are expressed, the influence of environmental factors on gene expression; and mutation leading to variation in the population. An introduction to basic genetic principles and techniques such as those described in the media will be discussed so that a student can evaluate the claims made in films and TV with respect to genetic analysis in crime and identification, in particular.

Learning Outcomes: At the end of this subject a student should have:

# a basic understanding of the terminology of genetics;
# a basic understanding of patterns of inheritance;
# a basic understanding of commonly used genetic techniques;
# the ability to review a media report about genetics critically;
# sufficient knowledge to access reliable information on-line and in print.

**Assessment:**
1 online test worth 10%, 2 written activities no more than 500 words each worth 10% due approximately weeks 3, 6 and 8 (30%); a written assignment of no more than 1000 words due approximately week 10 (20%); a 2-hour written examination during the examination period (50%)

**Prescribed Texts:** None.

**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/2015/B-ARTS)
- [Bachelor of Commerce](https://handbook.unimelb.edu.au/view/2015/B-COM)
- [Bachelor of Environments](https://handbook.unimelb.edu.au/view/2015/B-ENVS)
- [Bachelor of Music](https://handbook.unimelb.edu.au/view/2015/B-MUS)

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](http://enrolment.unimelb.edu.au/fees)

**Generic Skills:**
Students should develop generic skills in:
- critically evaluating a media report
- accessing information sources and discerning use of the internet

**Related Majors/Minors/ Specialisations:**
Science-credited subjects - new generation B-SCI and B-ENG.