

Genetics

| Year and Campus: | 2010 | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|----------------|----------------------------|----------------|--|------------|-------|----------------------------|------------|-------|---------|----------------------------|----------------|--|------------|-------|--|------------|-------|--------------------------------------|------------|-------|------------------------------------|-------------------------------------|-------|
| Coordinator: | Professor Michael Hynes Department of Genetics | | | | | | | | | | | | | | | | | | | | | | | | |
| Contact: | mjhynes@unimelb.edu.au | | | | | | | | | | | | | | | | | | | | | | | | |
| Overview: | Major study in Genetics . | | | | | | | | | | | | | | | | | | | | | | | | |
| Objectives: | Students completing a Genetics major will be prepared for careers or advanced study which involve the application of fundamental genetics, genomics, evolutionary, population and ecological genetics to all areas of biology, biomedical sciences and biotechnology. Graduates will develop knowledge and skills in the theory of genetics and molecular biology, population genetics and evolution and in experimental design, data recording and analysis and scientific writing, which are essential preparation for roles in universities, research institutes, government departments, hospitals and in the biotechnology industry. This major will integrate knowledge across the breadth of genetics, including an integrated practical capstone subject in which the students develop an understanding of the application of experimental analysis to solving problems in biology. Students will gain experience preparing them for the workplace by participating in problem-solving, synthesis of information, written work, and independent as well as collaborative activities. The transferable skills developed in this major can be used in broad careers in science, including conservation, teaching, forensics, publishing, genetic counselling and research and in careers beyond the field of science. | | | | | | | | | | | | | | | | | | | | | | | | |
| Structure & Available Subjects: | In 2010 a number of new third year level subjects have been introduced, replacing or adding to subjects previously available within the major. Some previously offered subjects have been cancelled. The University is committed to ensuring that students are not disadvantaged by these changes and students may complete a major as defined by the current structure or a structure detailed in a previous year's handbook applicable to any year the student was enrolled in the course. Students completing third year level subjects across multiple years (e.g. in 2009 and 2010) should refer to advice within each subject entry on non-allowed subject combinations. Students unsure about the structure of their intended major should seek advice from the Science Student Centre. | | | | | | | | | | | | | | | | | | | | | | | | |
| Subject Options: | <p>Genetics major</p> <p>Completion of 50 points of study at third year level.</p> <p>Both of:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>GENE30002 Genes: Organisation and Function</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>GENE30004 Genetic Analysis</td> <td>Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p>Plus two of:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>GENE30001 Evolutionary Genetics and Genomics</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>CEDB30002 Concepts in Cell & Developmental Biology</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>GENE30005 Human and Medical Genetics</td> <td>Semester 2</td> <td>12.50</td> </tr> <tr> <td>SCIE30001 Science Research Project</td> <td>Summer Term, Semester 1, Semester 2</td> <td>12.50</td> </tr> </tbody> </table> <p># 652-303 Developmental and Cellular Genetics (Prior to 2010)</p> <p># 600-312 Research Project B (Prior to 2010)</p> <p>Please note that credit exclusions may apply. Check individual subject descriptions for further information.</p> | Subject | Study Period Commencement: | Credit Points: | GENE30002 Genes: Organisation and Function | Semester 1 | 12.50 | GENE30004 Genetic Analysis | Semester 2 | 12.50 | Subject | Study Period Commencement: | Credit Points: | GENE30001 Evolutionary Genetics and Genomics | Semester 1 | 12.50 | CEDB30002 Concepts in Cell & Developmental Biology | Semester 1 | 12.50 | GENE30005 Human and Medical Genetics | Semester 2 | 12.50 | SCIE30001 Science Research Project | Summer Term, Semester 1, Semester 2 | 12.50 |
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| GENE30002 Genes: Organisation and Function | Semester 1 | 12.50 | | | | | | | | | | | | | | | | | | | | | | | |
| GENE30004 Genetic Analysis | Semester 2 | 12.50 | | | | | | | | | | | | | | | | | | | | | | | |
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| GENE30001 Evolutionary Genetics and Genomics | Semester 1 | 12.50 | | | | | | | | | | | | | | | | | | | | | | | |
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| Notes: | The topic of the Research Project must be related to genetics. |
| Related Course(s): | Bachelor of Arts and Bachelor of Science Bachelor of Arts and Sciences Bachelor of Commerce and Bachelor of Science Bachelor of Science Bachelor of Science and Bachelor of Information Systems |