

207-310 Horticultural Reproduction Technology

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| Credit Points: | 12.50 |
| Level: | 3 (Undergraduate) |
| Dates & Locations: | This subject is not offered in 2009. |
| Time Commitment: | Contact Hours: 24 hours lectures and 24 hours practicals/tutorials Total Time Commitment: Not available |
| Prerequisites: | 202-103 Biology for Land and Food Resources. |
| Corequisites: | None |
| Recommended Background Knowledge: | None |
| Non Allowed Subjects: | None |
| Core Participation Requirements: | <p><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: http://services.unimelb.edu.au/disability</p></p> |
| Subject Overview: | <p>The objective of this subject is to extend the participant's ability to:</p> <ul style="list-style-type: none"> # understand and research the reproductive biology of horticultural plants; # describe the major biological and environmental factors affecting a plants capacity to produce, dispose and regenerate from seed; # understand floral morphology and cyto genetics as appropriate to plant breeding; # apply Mendelian genetics to plant breeding; # describe and demonstrate the theory of plant incon patibility systems; # describe and demonstrate specified seed testing procedures; and # recommend and describe effective techniques for germinating seed and establishing plants from seed under nursery, field and revegetation conditions. <p>The content includes:</p> <ul style="list-style-type: none"> # evolution of genes and plant genomes; # breeding systems and strategies of angiosperms; # Mendelian inheritance; # incompatibility systems in plants; # F1 and pedigree breeding systems; # pollen: stigma interactions; # cytogenetics and cytogenetic techniques important in plant breeding; # seed development, dispersal germination and establishment and environmental influences on these processes; |

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| | <ul style="list-style-type: none"> # the technology applicable to commercial seed production; # seed testing; and # effective techniques for sowing, germinating and establishing seed. |
| Assessment: | A two-hour examination (45%), a mid-semester test (25%), and two practical reports equivalent to 2000 words (each worth 15%). |
| Prescribed Texts: | None |
| Recommended Texts: | <ul style="list-style-type: none"> # Plant Propagation: Principles and Practices (H T Hartmann, D E Kester, F T Davies and P L Geneve), 6th Edition, Prentice Hall International, Upper Saddle River, 1997 # Plant Breeding Systems (A J Richards), 2nd edn, Chapman and Hall, London, 1997 |
| Breadth Options: | This subject is not available as a breadth subject. |
| Fees Information: | Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees |
| Generic Skills: | Information Not Available |
| Notes: | This subject may not be offered in 2009. Please speak to your Course Coordinator about a suitable alternative. |