

R05 RZ Master of Science - Zoology

Year and Campus:	2009
Coordinator:	Dr Laura ParryDr Stephen Swearer
Overview:	<p>Students studying the Master of Science (Zoology program) will complete 200 points over a two year full-time (or four year part-time) program comprising:</p> <p>Core discipline subjects (total of 25 points)</p> <p>Students must take at least one of:</p> <ul style="list-style-type: none"> o 654-637 Graduate Seminar in Population Biology; o 654-635 Graduate Seminar in Reproductive Physiology; <p>and</p> <ul style="list-style-type: none"> o 654-634 Biometry. <p>Elective discipline subjects (at least 25 points)</p> <ul style="list-style-type: none"> o 654-636 Graduate Seminar in Zoology (not available until semester 1, 2010); o other approved subjects, appropriate to their research focus. <p><i>Note: Where appropriate a student may complete up to two 200 or 300 level subjects, with the approval of the course coordinator.</i></p> <p>Professional Tools (at least 25 points)</p> <ul style="list-style-type: none"> o 600-619 Science and Communication o Critical analysis in Science (not available until semester 2, 2010) o eScience (not available until semester 2, 2010) o 600-615 Thinking and Reasoning with Data o 600-617 Systems Modelling and Simulation o 600-616 Science in Context o 600-618 Ethics and Responsibility in Science o 600-614 Business Tools: Money, People and Projects <p>Research Project (112.5 points)</p> <p>Students will gain experience in conducting research in zoology by taking responsibility for a research project, including the design of rigorous field sampling programs, field and/or laboratory experiments; the collection, appropriate statistical analysis, and interpretation of data; and providing an oral and written presentation of the results. A literature review (up to 4000 words; pass/fail) will ensure students assimilate and critically evaluate existing knowledge within a scientific paradigm; a grant proposal/project brief (up to 2000 words; 15%) will encourage students to consider the justification and budget of their proposed research; an oral presentation (20 minutes; pass/fail) will combine oral and visual communication skills; a thesis (up to 10,000 words, 85%) will describe the students' research and enhance their capacity to express persuasive intellectual, scientific arguments.</p> <p>Students enrolled in the Master of Science (Zoology program) are required to complete a 112.5 point Research Project. Students will need to discuss and receive approval for their proposed combination of Research Project subjects (as indicated below) with the course coordinator to ensure they will have completed a total of 112.5 points by the end of their course.</p> <ul style="list-style-type: none"> # 654-671 Zoology Research Project - 12.5 points # 654-672 Zoology Research Project - 25.0 points # 654-673 Zoology Research Project - 37.5 points # 654-675 Zoology Research Project - 50.0 points
Objectives:	At the completion of this course, students should have gained:

- # familiarity with the kinds of data generated by biological and environmental research programs;
- # a detailed understanding of selected contemporary issues in biological sciences;
- # skills in conducting research in zoology;
- # skills in designing rigorous experimental and sampling programs;
- # skills in critical assessment of literature; and
- # the ability to present and interpret results of analyses.

Subject Options:

Subject	Study Period Commencement:	Credit Points:
654-637 Graduate Seminar in Population Biology	Semester 1	12.50
654-635 Grad Seminar in Reproductive Physiology	Semester 1	12.50
654-634 Biometry	Semester 2	12.50
600-619 Science and Communication	Semester 1	12.50
600-615 Thinking and Reasoning with Data	Semester 1	12.50
600-617 Systems Modelling and Simulation	Semester 1	12.50
600-616 Science in Context	Semester 2	12.50
600-618 Ethics and Responsibility in Science	Semester 2	12.50
600-614 Business Tools:Money, People & Projects	Semester 2	12.50
654-671 Zoology Research Project	Summer, Semester 1, Semester 2	12.50
654-672 Zoology Research Project	Summer, Semester 1, Semester 2	25.00
654-673 Zoology Research Project	Summer, Semester 1, Semester 2	37.50
654-675 Zoology Research Project	Summer, Semester 1, Semester 2	50.00

Related Course(s):

Master of Science