<table>
<thead>
<tr>
<th><strong>Unit study package number:</strong></th>
<th>311375 (v.1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mode of study:</strong></td>
<td>Internal</td>
</tr>
<tr>
<td><strong>Tuition pattern summary:</strong></td>
<td>5 hrs/week</td>
</tr>
<tr>
<td><strong>Credit value:</strong></td>
<td>25</td>
</tr>
<tr>
<td><strong>Pre-requisite:</strong></td>
<td>Laboratory Medicine Honours Research 431</td>
</tr>
<tr>
<td><strong>Co-requisite units:</strong></td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Anti-requisite units:</strong></td>
<td>Nil</td>
</tr>
<tr>
<td><strong>Result type:</strong></td>
<td>Grade and Mark</td>
</tr>
</tbody>
</table>

**Unit Co-ordinator:**
- **Name:** Dr Marilyn BENNET-CHAMBERS
- **Phone:** +61 8 9266 3358
- **Email:** M.Bennet-Chambers@curtin.edu.au
- **Building:** Room 308
- **Consultation times:** Any time office door is open.

**Administrative contact:**
- **Name:** Mrs Janette McLeod
- **Phone:** (08) 9266 7374
- **Email:** j.mcleod@curtin.edu.au
- **Building:** Room Biomedical Sciences Building 308.122

**Learning Management System:**
- FLECS - Blackboard  (oasis.curtin.edu.au)

Please read this outline fully before commencing your study in this unit.
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AIMS

Honours provides the student with skills relevant to a career in scientific research. The major emphasis is upon the research project, which will develop the student's ability to perform independent research, to identify and solve problems, to research and utilise the scientific literature and to communicate effectively in either a verbal or written context. The program should be considered as an apprenticeship, which prepares the student for further studies for a higher research degree.

SYLLABUS

Ongoing research project work, using results obtained to produce a completed research project manuscript suitable for publication and presentation at the Research Seminar.

UNIT LEARNING OUTCOMES

On successful completion of this unit students can:

1. Complete research relevant to a chosen project
2. Integrate research results in a manner that answers the 'Research Question'.
3. Produce a written research paper (scientific) that reflects good research laboratory practice.
4. Evaluate results critically in context of the current literature in the chosen research topic.
5. Demonstrate adequate problem solving and time management skills to have completed research safely within required timeframe
6. Synthesize, assess, critically evaluate and present the data collected from research as oral presentation.
7. Support, defend & explain research findings to scientists within the chosen research topic.

Curtin's Graduate Attributes

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Thinking skills (use analytical skills to solve problems)</th>
<th>Information skills (confidence to investigate new ideas)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply discipline knowledge</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Communication skills</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>International perspective (value the perspectives of others)</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Technology skills</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Cultural understanding (value the perspectives of others)</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Professional skills (work independently and as a team) (plan own work)</td>
<td>✅</td>
<td>✅</td>
</tr>
<tr>
<td>Learning how to learn (apply principles learnt to new situations) (confidence to tackle unfamiliar problems)</td>
<td>✅</td>
<td>✅</td>
</tr>
</tbody>
</table>

CRICOS Provider Code WA 00301J, NSW 02637B
REQUIREMENTS TO COMPLETE THE COURSE

Learning Activities

Research
Research is an aspect of Science that often results in new knowledge. Science is a way of observing and understanding the world. This semester you will complete your research and answered your research question. The 'experiments' you undertook provided a means of answering your question. You will have to produce a well maintained and accurate laboratory workbook that reflects the research you have undertaken and present a seminar of your preliminary findings and analysis.

Dress Requirements: closed shoes must be worn in all laboratories & laboratory coats are essential.

Learning Resources

Essential Texts
You will need to purchase the following textbook in order to complete this unit:


Online Resources

1. FLECS-Blackboard – This will provide you with Lecture/Tutorial guidelines. This material will only be accessible to students enrolled in the unit.

(https://lms.curtin.edu.au)

Assessment Schedule

<table>
<thead>
<tr>
<th>Task</th>
<th>Value (%)</th>
<th>Date due</th>
<th>Unit Learning Outcome(s) assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Paper (Thesis)</td>
<td>65%</td>
<td>5th October, 2012</td>
<td>![Icon]</td>
</tr>
<tr>
<td>Research Poster</td>
<td>10%</td>
<td>17th October, 2012</td>
<td>![Icon]</td>
</tr>
<tr>
<td>Oral Defence</td>
<td>25%</td>
<td>18th October, 2012</td>
<td>![Icon]</td>
</tr>
</tbody>
</table>
Detailed information on assessment tasks

Scientific Paper (65%)

The student’s written report on the scientific project undertaken during the year is to be provided in the form of a manuscript for a scientific paper. The paper must comply with the Instruction to Authors as required for acceptance of a paper for publication in the Australian Journal of Medical Science. A copy of these instructions is available from the Honours FLECS-Blackboard site as a pdf file. If it deemed that the format of another journal would be more suitable this must be discussed with the Honours Co-ordinator and a copy of the Instruction to Authors provided.

The paper will comply with the general requirements applicable to written presentations provided above and shall not exceed 5,000 words (excluding figures, tables and references). Figures and tables are to be identified with a figure/table number and a title, printed onto a single A4 page and provided as attachments to the text of the paper. The paper is to be presented in black text on white paper printed on only one side of the pages. Presentation of material in the paper in colour should be restricted to those areas where it serves a valid purpose e.g. in graphs or for illustrating the 3D configurations of proteins.

The supervisor will assist the student in the design, writing and the production of the paper. Students should be encouraged to develop their own writing style appropriate for science publications. However, supervisor input to the discussion section of the paper shall be limited to a once only read and comment.

Three (3) copies of the paper are to be submitted to the Honours Coordinator (or her nominated deputy) by 4:00 pm on 2 May 2011. Extension of this deadline will not be granted except for medical or other exceptional extenuating circumstances. A 10% penalty per day will be imposed for late submission. In addition, an electronic copy of the paper should be forwarded to the Honours Course Co-ordinator.

A signed declaration, see Figure 1, must accompany the submitted paper.

Research Poster (10%)

Students will prepare a poster for display at a poster session. It is expected that the content and structure of the posters will be compatible with those presented at national and international conferences. Specific direction will be given to students during the teaching weeks. Each poster should include: Title, authors and affiliation; Introduction, Aim(s), Significance, Methodology, Results and Discussion. Students will be expected to submit their posters for printing by Wednesday October 17th, 2012. These will be marked by a panel of academics, including the Unit Coordinator, and will culminate with a poster session from 3-5 pm on Friday, 19th October 2012. You will be expected to stand by your poster at this session, answer questions and support your peers.
I certify that this manuscript does not incorporate, without acknowledgement, any material previously submitted for a degree or diploma from any university and that to the best of my knowledge and belief does not contain any material previously published or written by another person except where due reference is made in the text.

Signed

Name:

Date / /2012

Figure 1 Declaration

**Oral Defence Of Project (25%)**

The student will discuss his/her project/paper for up to 30 minutes with their examiners. All honours examiners and supervisors also may be present at this discussion of the project/paper as observers but will not contribute to the proceedings unless given permission by the Chairperson (usually the Honours Coordinator or her deputy). The supervisor should only comment to clarify points with permission of the Chair of the defence. The Chairperson will ensure consistency from one defence to another. Questions may be asked to clarify points not understood or made clear in the paper and the questions should probe the student's understanding without being destructive (often the student may not fully understand a question but can be lead into providing the appropriate answer!); the student then leaves the room. The Chairperson will give the supervisor an opportunity to comment on the project/paper discussion or about any other aspect of the student's performance during the year. The Chairperson may also seek feedback from the student regarding problems that require comment before the examiners compile their final grade for the paper.

**Fair assessment through moderation**

Moderation describes a quality assurance process to ensure that assessments are appropriate to the learning outcomes, and that student work is consistently evaluated by assessors. Minimum standards for the moderation of assessment are described in the Assessment Manual, available from [policies.curtin.edu.au/policies/teachingandlearning.cfm](policies.curtin.edu.au/policies/teachingandlearning.cfm)

**Referencing style**

Students should use the Chicago referencing style when preparing assessments. More information can be found on this style from the Library web site: [library.curtin.edu.au/research_and_information_skills/referencing](library.curtin.edu.au/research_and_information_skills/referencing)

**Pass Requirements**

In order to complete this unit for full credit towards your degree, you must complete the assessments; the research paper, seminar presentation and oral defence. For details on the allocation of marks refer to page 4 of this outline.
**Supplementary information**

**Enrolment and HECS:**
It is your responsibility to ensure that your enrolment is correct - you can check your enrolment through the eStudent option on OASIS, where you can also print an Enrolment Advice.

**Supplementary Examinations**
Honours students are advised that supplementary examination(s) are NOT awarded.

**Deferred Assessment**
Deferred assessments are awarded in response to medical or other extenuating circumstances. Students requiring deferral of any assessment should discuss the matter first with the supervisor and then with the Honours Co-ordinator. Application for a deferred assessment should be lodged in writing with the Honours Co-ordinator together with any supporting documentation. A letter from the supervisor supporting the award of a deferred assessment should also be provided.

**Late Submissions**
Late submissions of submissions will only be accepted when prior arrangements have been made with the Honours Co-ordinator. Discuss any problems relating to the expected deadlines in the course with the undersigned, thereby facilitating identification of arrangements that are mutually agreeable to the parties concerned. Late submissions granted prior approval of the Honours Co-ordinator must be lodged with the Honours Co-ordinator, unless otherwise arranged.

**Late penalties**
This ensures that the requirements for submission of assignments and other work to be assessed are fair, transparent, equitable, and that penalties are consistently applied.

1. All assessments which students are required to submit will have a due date and time specified on the Unit Outline.
2. Accepting late submission of assignments or other work will be determined by the unit coordinator or Head of School and will be specified on the Unit Outline (see above).
3. If late submission of assignments or other work is not accepted, students will receive a penalty of 100% after the due date and time i.e. a zero mark for the late assessment.
4. If late submission of assignments or other work is accepted, students will be penalised by ten percent per working day for a late assessment submission (e.g. a mark equivalent to 10% of the total allocated for the assessment will be deducted from the marked value for every day that the assessment is late). This means that an assignment worth 20 will have two marks deducted per working day late. Hence if it was handed in three working days late and marked as 12/20, the student would receive 6/20. An assessment **more than seven working days overdue will not be marked.** Work submitted after this time (due date plus seven days) may result in a Fail - Incomplete (F-IN) grade being awarded for the unit.

**Technology**
Computers will be available in or adjacent to the research labs operated within the School or in the external laboratories in which the project is undertaken. Computers in the Mac Lab (Building 308) represent an additional resource for student use.

Honours students need access to a computer in their own time (including evenings and weekends). It is essential, that you have access to a computer with an Internet connection. The School uses a large number of dual boot Macintosh computers. For ease of transfer of files
between lab and home computers and for printing while retaining established document formats, it is recommended that your home computer uses an operating system and programs compatible with these Intel Macintosh computers.

It is essential that students identify appropriate storage for their computer files and to develop a disciplined approach to backing up files on a regular basis.

**Student Rights and Responsibilities**

It is the responsibility of every student to be aware of all relevant legislation, policies and procedures relating to their rights and responsibilities as a student. These include:

- the Student Charter
- the University's Guiding Ethical Principles
- the University's policy and statements on plagiarism and academic integrity
- copyright principles and responsibilities
- the University's policies on appropriate use of software and computer facilities

Information on all these things is available through the University's "Student Rights and Responsibilities” website at: students.curtin.edu.au/rights.

**Your responsibilities**

**Research conduct**

This project is to be carried out individually. You may require help from your supervisor and lab technicians in order to set up experiments, properly use equipment and data collection. However, the analysis, writing and presentation of the research report are your sole responsibility. Your research supervisor will help you plan your research. You should talk/email them regularly according to an agreed timetable. You should seek any support you need from technical staff well in advance. If your project requires contact with students or staff of the university or with the general public you must be behave in a professional manner and always receive informed consent from all subjects for their involvement.

**Ethical Issues**

As a biomedical researcher you MUST adhere to ethical regulation in aspects of direct research on human and animals, usage and manipulation of human and animal tissues and handling of human identifiable information and data in a confidential manner. Be aware that you have to check whether or not you need to clear your ethics requirement before you start your research. If you do you will be expected to prepare and lodge an ethics application to the right committee on the due date. Please discuss this matter with your supervisor and the unit coordinator.

**Intellectual property**

All teaching and research materials, resources and outcome are the property of Curtin University. Students are responsible for keeping all the above in a proper way with a self-explanatory record in your lab book. At the end of your work you MUST hand these materials to your supervisor and/or the unit coordinator.

**Copyright**

As a student of Curtin you must be familiar with the requirements of the University's Copyright Procedures. Failure to comply with the University's policies and procedures on Copyright and IT/IS use may include suspension or termination of enrolment, fines, withdrawal of privileges for
use of the University's ICT facilities and services and, depending on what is copied, stored or communicated, may also render you liable to prosecution in the courts. Guidance is available to you at the following web page: http://www.copyright.curtin.edu.au/

Recent unit changes
We welcome feedback as one way to keep improving this unit. Students are encouraged to provide unit feedback through eVALUate, Curtin's online student feedback system (see evaluate.curtin.edu.au/info/). This is a new unit and your feedback is appreciated.

See evaluate.curtin.edu.au to find out when you can eVALUate this unit.

Academic problems
Students experiencing difficulties with the academic content of this unit should see the lecturer responsible for the subject matter presenting problems or the Unit Coordinator Dr M Bennet-Chambers, whose details appear on the front page of this unit outline.

Internet/FLECS-Blackboard access problems
Any problems associated with internet/FLECS-Blackboard access should be addressed to Randy Strack at: R.Strack@curtin.edu.au