Curriculum Information Record for a Research Degree Programme

Jockey Club College of Veterinary Medicine and Life Sciences
Effective from Semester A 2019/2020
For Students Admitted with Catalogue Term
Semester A 2019/2020 and thereafter

This form is for completion by the College/School for research degree programme. The information provided on this form is the official record of the Programme. It will be used for City University’s database, various City University publications (including websites) and documentation for students and others as required.

Please refer to the Explanatory Notes attached to this form on the various items of information required.

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Part I

Programme Title  (in English) :  Doctor of Philosophy

(in Chinese) :  哲學博士

Award Title  (in English) :  Doctor of Philosophy

(in Chinese) :  哲學博士

Programme Aims

This programme aims to train and produce graduates with an understanding of advanced developments and highly marketable specialist skills in the disciplines of biology, biomedical sciences, veterinary medicine, and to meet local and regional requirements in the industrial, commercial, government or education sectors.

Programme Intended Learning Outcomes (PILOs)
(state what the student is expected to be able to do at the end of the programme according to a given standard of performance)

Upon successful completion of this Programme, students should be able to:

1. Develop intellectual competence necessary to successful academic and professional work.

2. Contribute to the generation and development of knowledge in their respective fields through independent, original, and innovative research.

3. Demonstrate specialist subject knowledge and a high level of transferrable skills with an emphasis on discovery-based element.
### Part II Programme of Study

1. **Research Area(s) in which research students will be admitted to:**

   Comparative Biomedical Sciences  
   Immunology and Infectious Disease  
   Molecular and Systemic Neuroscience  
   Public Health and Epidemiology  

2. **Programme Core Courses:** (9 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Level</th>
<th>Units Worth</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS8102</td>
<td>Frontiers in Biomedical Sciences</td>
<td>R8</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BMS8103</td>
<td>Advanced Cell and Molecular Biology</td>
<td>R8</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>and any two of the following courses:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMS8105</td>
<td>Biotherapy and Nanomedicine</td>
<td>R8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BMS8106</td>
<td>Stem Cell and Regenerative Medicine</td>
<td>R8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BMS8107</td>
<td>Cancer Biology and Precision Medicine</td>
<td>R8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BMS8108</td>
<td>Advanced Neuroscience</td>
<td>R8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BMS8110</td>
<td>Genomics and Bioinformatics</td>
<td>R8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BMS8111</td>
<td>Immunology and Infectious Diseases</td>
<td>R8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PH8001</td>
<td>Computational Biology, Experimental Design and Data Science</td>
<td>R8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>PH8002</td>
<td>Infectious Disease Epidemiology</td>
<td>R8</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

3. **Research Methodology and Ethics Course(s):** (2 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Level</th>
<th>Units Worth</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS8001</td>
<td>Research Ethics and Methodology</td>
<td>R8</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

4. **Programme Electives:** (3 credits)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Level</th>
<th>Units Worth</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMS8105</td>
<td>Biotherapy and Nanomedicine</td>
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<td>3</td>
<td></td>
</tr>
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<td>3</td>
<td></td>
</tr>
</tbody>
</table>
5. Other Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Level</th>
<th>Units Worth</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SG8001</td>
<td>Teaching Students: First Steps</td>
<td>R8</td>
<td>1</td>
<td>The credit unit will not be counted towards the 14 credit units of minimum coursework requirements. To be completed in the first year of study.</td>
</tr>
<tr>
<td></td>
<td>Collaborative Institutional Training Initiative (CITI) programme</td>
<td>n/a</td>
<td>n/a</td>
<td>An online training course on research integrity. Compulsory for RPg students who admitted in 2018/19 and thereafter. To be completed in the first year of study. Details are available in SGS website.</td>
</tr>
</tbody>
</table>

6. Qualifying Examination:

PhD Students are required to pass a written Qualifying Examination within 9–24 months (full-time). It is an additional requirement on top of the existing Qualifying Report and Annual Progress Report assessment. A maximum of two attempts are allowed. Those students who cannot pass the Qualifying Examination will result in termination of study. A fixed timetable is set for students to take the Qualifying Examination. No schedule change is allowed under normal circumstances.

7. Qualifying/Annual Report Submission:

Students are required to submit

i. Qualifying Report, of which assessment includes a compulsory oral examination, within 6–12 months (full-time) after commencement of their studies,

and

ii. Annual Progress Reports on an annual basis after the qualifying period

in compliance with the regulations and guidelines set by SGS accessible via the Guidebook for Research Degree Studies on SGS website.

The College shall appoint a Qualifying Panel for each student upon his or her admission to the research degree programme. The Panel should consist of at least four faculty members. For the PhD programme developed in close collaboration with Cornell, a joint panel consisting of a supervisor from each of Cornell and CityU will be formed. The Panel will include the two supervisors with the CityU supervisor serving as the Panel Chair, an additional academic staff member, or members, from CityU, and a member, or members, from Cornell. The Panel’s responsibility will be to supervise the student’s study throughout his/her PhD candidature. The Panel should normally be required to prescribe coursework for students within one month from their commencement of studies. The Panel will monitor the student’s study throughout his or her entire study period through assessing the qualifying report submitted by the student at regular intervals, assess the student’s progress and performance by conducting an interview, oral examination or presentation for the purpose of confirmation of candidature.
8. **Thesis:**

A PhD thesis should present the results of research investigation, give evidence of a sound understanding of the area of study, its context and applicability, make a contribution to knowledge and make a substantial original contribution to knowledge in the subject areas concerned. Students must submit a thesis for examination by the end of their normal study period or the stipulated study period. The thesis examination should include thesis assessment, an oral examination, and any other assessment arrangements required by the Panel of Examiners.

9. **Additional Notes:**

Students should always refer to the Guidebook for Research Degree Studies available on SGS website for administrative and operational procedures related to research degree studies at the University. The Department may stipulate a higher standard on the requirements.

*Prepared / Last Updated by*

Name: Dr Linfeng Huang  
College/School: Jockey Club College of Veterinary Medicine and Life Sciences  
Phone/Email: 3442-4828/linfeng.huang@cityu.edu.hk  
Date: Mar 2019
Explanatory Notes for Completing CIR-RPG

1. Research Area
   This refers to the research area(s) in which the University offers MPhil and PhD studies.

2. Programme Title
   This is the full title of the programme in both English and Chinese. One copy of CIR-RPG should be filled in for each research degree programme (i.e. MPhil or PhD) in each research area which is defined by the name of the Department/School.

3. Award Title
   This is the title in both English and Chinese granted by the University upon successful completion of the programme.

4. Number of Credit Units Required for the Award
   This specifies the number of credit units required to obtain an award. Students will need to accumulate credit units at or more than this level in order to gain an award.

5. Programme Aims
   This is a brief description of what the programme is about and what it intends to achieve.

6. Programme Intended Learning Outcomes (PILOs)
   PILOs state what the student is expected to be able to do at the end of a programme according to a given standard of performance. The outcomes statements should be written in a manner which is clearly understood both by students and staff. The outcomes should be achievable and assessable. PILOs should address a number of areas, e.g. subject area, requirements of professional bodies, if any, graduate outcomes of CityU’s research degree graduates provided below, etc.

   Graduate Outcomes of CityU’s Research Degree Graduates:
   On graduation, City University research degree graduates will be able to:
   
   • Apply a thorough understanding of the fundamental concepts of their research areas;
   • Adopt excellent methodological, and relevant ethical principles in the generation of independent and innovative research;
   • Generate strategies to develop internationally competitive research in their fields of expertise;
   • Apply effective communication skills in relation to research.

7. Programme of Study
   This consists of three main parts – Programme Core Courses, Programme Electives and Thesis. Students are required to fulfil the criteria stipulated in each part so as to obtain an award.

   Please refer to the following programme structure for research degree programmes for filling in this section:

   MPhil

<table>
<thead>
<tr>
<th>Coursework Structure applying to 2019/20 intake cohort and thereafter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Courses</td>
</tr>
<tr>
<td>Elective Courses</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Other Requirement</td>
</tr>
</tbody>
</table>

   PhD

   $CU = credit unit$
**Curriculum Information Record for a Research Degree Programme**

**Jan 2019**

### Coursework Structure applying to 2019/20 intake cohort and thereafter

<table>
<thead>
<tr>
<th>Section</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Courses</strong></td>
<td>At least 9 CUs at research level[^a]</td>
</tr>
<tr>
<td><strong>Elective Courses</strong></td>
<td>At least 2 CUs of research methodology[^#] and ethics course at postgraduate level and other postgraduate courses so as to satisfy the minimum coursework requirement of 14 CUs</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>14 CUs</td>
</tr>
<tr>
<td><strong>Other Requirement</strong></td>
<td>Teaching Students: First Steps (SG8001) (1 CU)</td>
</tr>
</tbody>
</table>

[^a]: All core courses should be assessed in gradable mode (A+, A, …F), instead of pass-fail mode.

[^#]: College, school or departmental seminars related to research methodology are not considered as equivalent to the Research Methodology course if they consist of student presentations only, without a teaching component.

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8. **Programme Core Courses**

These are the compulsory courses as required by the relevant faculty or school.

9. **Programme Electives**

These are courses from which students select courses based on their interests.

10. **Qualifying Examination**

    a) The objective of PhD Qualifying Examination (QE) is to ascertain the breadth of the student’s knowledge relating to the major subject areas of the research disciplines, and determine whether the student has the ability to apply their knowledge to solve theoretical and the practical problems in research.

    b) The PhD qualifying examination shall consist of written examination only.

    c) A common (set of) written qualifying examination paper(s) be applicable to all PhD students of the same academic unit. Individual academic units may determine the format and content of the examination paper. In view that students within the same academic unit will have different research disciplines, academic units may either design one set of written examination paper providing choices of questions covering different areas/fields, or several sets of qualifying examination papers each covering a specific area/field.

    d) Schools/Departments may engage academic advisors to review the examination paper to ensure the standard is comparable with their counterparts in the international arena, if necessary.

    e) Individual Schools/Departments will have discretion to determine the number of QE(s) to be offered in an academic year.

f) **Additional Notes**

This may consist of information on any special features of the programme.

g) **Amendments/Revisions to CIR-RPG**

Amendment or revisions to the information provided in CIR-RPG are subject to the procedures outlined in the University’s guidelines on approval authorities for academic and research matters. College and School Boards should consider delegation of authority to C/SGSC as necessary to facilitate innovation and change as appropriate.