### UNIVERSITY COUNCIL

### ACADEMIC PROGRAMS COMMITTEE FOR INFORMATION ONLY

**PRESENTED BY:** Kevin Flynn, Chair, Academic Programs Committee

**DATE OF MEETING:** May 18, 2017

SUBJECT: Graduate Programs Reviews 2014/15 and 2015/16

**COUNCIL ACTION:** For information only

### **CONTEXT AND BACKGROUND:**

The graduate program review process assesses the quality of University of Saskatchewan graduate programs with respect to (i) teaching and learning and (ii) research and scholarly accomplishments. The College of Graduate and Postdoctoral Studies (CGPS) is committed to this process and established the graduate program review process to assess the quality of graduate program activities and outcomes.

The terms of reference for the Academic Programs Committee requires that the committee report to Council the processes and outcomes of academic program reviews.

### **DISCUSSION SUMMARY:**

The university's <u>Framework for Assessment</u> was approved by Council and the Board in 2008 and established the Graduate Program Review Process as the primary instrument to assess the quality of our graduate program activities and outcomes. The College of Graduate and Postdoctoral Studies had developed a process of review for all graduate programs. Two external reviewers, one from Canada and one international, as well as an internal reviewer from the U of S, conduct a review to determine if departments offering graduate degree program meet the quality standards for that discipline by conducting site visits and engaging in interviews with faculty and students.

The Graduate Program Review for 2014-15 was presented to APC at its October 6, 2016 meeting and a good discussion occurred around how to best report a program that was not successful when reviewed. The committee expressed a desire that the information be provided in a clearer way before taking it to Council for information. CGPS revised that report to ensure that it was clearly represented which program needed improvement and

what changes needed to be made. APC also asked CGPS to develop a process for following up with programs to address deficiencies identified in the review.

As CGPS was revising the 2014-15 report, work was completed on the 2015-16 Graduate Program Review. APC reviewed the 2015-16 Graduate Program Review at its May 3, 2017 meeting, alongside the revised 2014-15 report. The committee appreciated the newly formatting and discussed the possible steps that could be taken if a program that was unsuccessful did not make efforts to remediate the deficiencies outlined in the report.

### **ATTACHMENTS:**

- 1. Graduate Programs Review 2014-15
- 2. Graduate Programs Review 2015-16





Graduate Program Review – Outcome Synthesis Report 2014-15

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### **Background**

Renewing the Dream (2002) committed the University of Saskatchewan to be a major presence in graduate education in Canada and to adhere to international standards in all that we do. Therefore, we expect our graduate programs to meet or exceed the quality standards demonstrated in similar programs at medical-doctoral and research-intensive universities across Canada and around the world.

The academic review of graduate programs is one of the priorities for assessment at the University of Saskatchewan. The university's *Framework for Assessment* (2008) established the Graduate Program Review process as the primary instrument to assess the quality of our graduate program activities and outcomes. A graduate program review is not an end in itself but a means by which information, data and analyses are used to improve all aspects of the program.

The quality of University of Saskatchewan graduate programs will be assessed in the domains of teaching and learning, research, and scholarly accomplishments. Review results will indicate whether programs **meet** or **do not meet** the standards of quality expected of other similar programs at comparable medical/doctoral and major research universities in Canada and internationally.

### **Process Summary**

### **Quality Assessment Categories and Criteria**

Graduate Program Review utilizes the following six quality assessment criteria as guidance for the review. The criteria are derived from the detailed degree level standards for graduate programs, articulated by the **Council of Ministers of Education, Canada**.

- 1 <u>Program Objectives and Curriculum</u> A quality program has clearly stated objectives that are appropriate to: the level of degree offered, the academic context of the discipline and/or the expectations of the profession.
  - The program curriculum meets the program objectives at the level of degree offered, is current and includes opportunities for specialization, cultivating further conceptual depth or breadth of knowledge. Student learning success is assessed through written and oral examinations of knowledge and skills in all aspects of the discipline. Interdisciplinary collaborations provide opportunities for the acquisition, synthesis, application and integration of knowledge, cultivating the intellectual development of graduate students.
- **Program Enrolment and Student Funding** A quality graduate program has the profile and reputation to attract a viable number of high caliber students, who will have local, national and/or international backgrounds. The students entering the program have the capacity and preparation necessary to meet the challenges of the program and to successfully complete their degree.
  - Graduate student research grants, scholarships and awards contribute to the completion of the program.
- 3 Student Outcomes Graduate students acquire a systematic knowledge of the discipline and are being suitably prepared for professional practice and for research and inquiry. Masters students engage in independent research, or practice, in a supervised context and demonstrate critical thinking and analytical skills. Doctoral students show a high degree of intellectual autonomy, an ability to conceptualize, design and complete projects, and generate knowledge through original research or creative activity.
  - Students participate in seminars and conferences; they present their research findings through posters and published papers; and have opportunities to develop professional skills. Graduate students are credited with a suitable number and quality achievement awards and conference invitations.
  - A quality graduate program demonstrates that its graduate students successfully complete their degree requirements on time, and that students can access a variety of career paths post-graduation. Students express a high level of satisfaction with their program.
- 4 <u>Learning Environment</u> A quality student experience at the graduate level is built on strong interactions with faculty. Students are regularly advised, informed and guided by meetings with their graduate supervisor. The learning environment provides a range of opportunities for students to participate in intellectually and professionally challenging activities. Graduate course instruction uses state of the art modalities and processes that enhance the student learning experience.

- Students have access to appropriate learning and information resources (such as library, databases, computers, classroom equipment, and laboratory facilities) and to an appropriate range of academic support services.
- 5 <u>Faculty Profile</u> The quality of a graduate program is defined by the extent of the scholarly activities of its program's faculty, as well as by a high degree of faculty involvement in the graduate program as supervisors and teachers.
  - In doctoral and research-oriented masters programs, faculty members are credited with a suitable number and quality of discipline-specific publications, awards, research grants and conference invitations, all indicative of the breadth and level of their engagement in scholarly work.
- **Administration** A quality graduate program incorporates effective systems and procedures in the areas of recruitment and admissions, program management, and in the allocation of awards and scholarships to graduate students.
  - Program leadership anticipates the ongoing evolution of their discipline, which is reflected in evolving program delivery and program planning activities. There is an anticipation and analysis of how future trends in the discipline may impact on the recruitment and selection of students, on the content and quality of program delivery, and ultimately, on the student experience. The strategic vision of the program is aligned with the broader integrated planning environment at the university.

### Steps in Graduate Program Review Process

There are four major steps in the Graduate Program Review process. Described below, these steps are completed during a 10 month period (July 1<sup>st</sup> to April 30<sup>th</sup>).

### 1. Appointment of Reviewers

A team of three senior academics will provide a peer assessment of the program under review. The academic unit will be asked to submit three nominations for each of the following reviewer types:

- Internal (from an academic unit at the University of Saskatchewan)
- External Canadian
- External International

Reviewers must have no conflicts of interest with the academic unit and its graduate program, so that any perception of a conflict of interest is avoided. Potential conflicts must be declared at the time of nomination and will be taken into consideration in appointing the reviewers.

Possible conflicts of interest include:

- Personal or professional relationship with a faculty member or student in the program under review
- Current or recent research collaborations with a faculty member
- Being a recent graduate of the program
- Being a recent supervisor of a student in the program
- Being a former faculty member of the unit under review

### 2. Program Self-Study

A graduate program self-study document will be prepared and submitted by the graduate program chair or designates from the program under review.

The self-study document will provide data for the graduate program under review. The data will be a combination of historic and current graduate program attributes related to the six Quality Assessment Criteria. The period under review for each program begins five years prior to the last academic year completed before a review is undertaken. For example, a program review starting in July 2016 will include historic program data from the 2011-12 to the 2015-16 academic year.

The self-study document will be largely completed by the academic unit responsible for the graduate program. The unit will be assisted in its self-study by the Graduate Program Review Coordinator, the College of Graduate and Postdoctoral Studies and Institutional Planning and Assessment. Much of the self-study data is retrieved from the University's centralized information systems and entered in the self-study templates in advance.

Typically the graduate program under review will begin completing the self-study in **October of the review** year. The completed self-study document will be submitted to the Graduate Program Review Coordinator no later than **4 weeks prior to the review team site visit**.

### 3. Reviewer Site Visit

The review team will conduct a two-day site visit of the program, between February 1 and April 30. During the site visit, the review panel should meet with:

- Dean of the College or Director of the School or Centre responsible for the program
- Dean of the College of Graduate and Postdoctoral Studies
- Head of the Department (for departmentalized colleges)
- Graduate Chair and members of the graduate/research committee associated with the program
- Faculty associated with the program
- Graduate students
- Other members of the university community as appropriate

Costs associated with the site visit will be covered by a fund managed by Institutional Planning and Assessment.

### 4. Review Outcomes

The review team will submit a review report within 30 days of the site visit. The review report will indicate whether the program **meets or does not meet** the standards of quality expected of other similar programs at comparable medical/doctoral and major research universities in Canada and internationally. The reviewers are asked to provide a rationale for their assessment.

The review report will also identify the strengths and the opportunities for improvement for the program, overall and in each of the assessment categories.

The report will be shared with the Dean or Director, Department Head and Graduate Chair responsible for the program under review. The Dean, Director, etc. will be invited to submit written comments about the review report to the provost and to the Dean of Graduate Studies and Research.

The Dean of CGPS, in consultation with the Provost, will issue a **written response to the review.** This response may include recommendations for action and reference to resources that are available to help with program improvements.

### Summary of 2014-15 Reviews

### List of Programs Reviewed

Twelve programs were reviewed in 2014-15.

Program		Degree	
Biology		M.Sc.	Ph.D.
Chemistry		M.Sc.	Ph.D.
Computer Science		M.Sc.	Ph.D.
Geological Sciences		M.Sc.	Ph.D.
Mathematics and Statistics	M.Math	M.Sc.	Ph.D.
Physics & Engineering Physics		M.Sc.	Ph.D.
Biological Engineering	M. Eng.	M.Sc.	Ph.D.
Biomedical Engineering	M. Eng.	M.Sc.	Ph.D.
Chemical Engineering	M. Eng.	M.Sc.	Ph.D.
Civil and Geological Engineering	M. Eng.	M.Sc.	Ph.D.
Electrical & Computer Engineering	M. Eng.	M.Sc.	Ph.D.
Mechanical Engineering	M. Eng.	M.Sc.	Ph.D.

### Review Team Members

Program	Internal	Canadian	International
Biology	Gillian Muir Veterinary Biomedical Sciences	Claire Cupples Simon Fraser University	Daniel Blumstein University of California Los Angeles
Chemistry	Kevin Ansdell Geology	Adrian Schwan University of Guelph	John Spencer Victoria University of Wellington
Computer Science	Tom Steele Physics and Engineering Physics	Robert Mercer University of Western Ontario	Nalini Venkatasubramanian University of California, Irvine
Geological Sciences	Chary Rangacharyulu Physics and Engineering Physics	<b>Bill Arnott</b> University of Ottawa	Nicholas Butterfield University of Cambridge
Mathematics and Statistics	Kevin Schneider Computer Science	Thomas Hillen University of Alberta Mary Thompson University of Waterloo	Thomas Scanlon University of California, Berkeley
Physics & Engineering Physics	Raj Srinivasan Mathematics & Statistics	John Preston McMaster University	Marcelo Loewe Pontificia Universidad Católica de Chile
Biological Engineering	Bernard Laarveld Animal & Poultry Science	<b>Digvir Jayas</b> University of Manitoba	Kumar Mallikarjunan Virginia Tech
Biomedical Engineering	Susan Whiting Pharmacy & Nutrition	<b>Alan Wilman</b> University of Alberta	Anthony Bull Imperial College London
Chemical Engineering	<b>Dale Ward</b> Chemistry	<b>Phillip Choi</b> University of Alberta	<b>Stanley I. Sandler</b> University of Delaware
Civil and Geological Engineering	<b>Fran Walley</b> Soil Science	<b>John Newhook</b> Dalhousie University	Christopher Leung Hong Kong University of Science and Technology
Electrical & Computer Engineering	Rainer Dick Physics and Engineering Physics	<b>Udaya Annakkage</b> University of Manitoba	Saeid Nooshabadi Michigan Tech
Mechanical Engineering	<b>Julita Vassileva</b> Computer Science	<b>Jean Zu</b> University of Toronto	Arend L. Schwab Delft University

### **Review Results**

Review teams are asked to evaluate whether a program meets or does not meet quality standards in each of the six Quality Assessment Categories. Through this evaluation, review teams provide an overall statement about program quality. The following is a summary of each review team's statements on overall program quality.

Biology	QUALITY STANDARDS
<ul> <li>Program Strengths</li> <li>Strong student outcomes with respect to journal publications and conference presentations</li> </ul>	<ul><li>☑ Meets</li><li>☐ Does Not Meet</li></ul>
<ul> <li>Areas for Improvement</li> <li>Create opportunities for more graduate student interactions and involvement including the development of a core Biology course, a student retreat, leaders departmental seminars and events.</li> <li>Streamline student progress through the graduate program by (1) the creation student affairs officer to manage administrative tasks relating to the graduate an effective graduate student manual which serves the needs of the graduate</li> </ul>	ship development  n of a single graduate program and (2) develop

### Program Strengths Strong group of faculty that a) demonstrates a unified commitment to the research enterprise; b) sustains a good publication rate in international journals; and c) pursues broad interests with ties to mining/agriculture and local scientific infrastructure. QUALITY STANDARDS Meets Does Not Meet

Successfully integrates and manages a graduate student population that arrives with a very diverse mix of

### Areas for Improvement

backgrounds

- In conjunction with the College of Arts and Science and CGPS make adjustments to improve the funding mechanism for international students
- Develop a coherent faculty renewal plan that is well understood by the faculty, which includes a strategy
  for attracting high quality female applicants and for resourcing new faculty at a level which will make
  them competitive in their research careers

### Computer Science

### **QUALITY STANDARDS**

### Program Strengths

■ Meets

 Marketability of the program is high, provides very good training to students in both hands-on and theoretical aspects of Computer Science generating value to industry and the workforce ☐ Does Not Meet

• The department is structured into cohesive research groups that work in a collegial environment with good involvement from faculty, MSc and PhD students

### Areas for Improvement

- Filling in research area gaps that build connections both within and outside of unit. Recruitment of faculty in the area of data management/big data
- Reassess the scope and expectations of the MSc degree and provide an effective shift of resources to the PhD program

### **Geological Sciences**

### **QUALITY STANDARDS**

### Program Strengths

**M**eets

• High quality faculty and graduate students

☐ Does Not Meet

• Excellent research facilities

### Areas for Improvement

- Enhance learning atmosphere by better structuring course offerings
- Develop a fairer distribution of graduate student funding and TA assignments

### **Mathematics and Statistics**

### **QUALITY STANDARDS**

### Program Strengths

Meets

• High quality of supervision by the faculty members

☐ Does Not Meet

• High quality of administration of the graduate program

### Areas for Improvement

- Increase faculty complement to strengthen internal and interdisciplinary research activities
- Increase student funding to compensate for recently increased housing expenses and general inflation

## Program Strengths • High quality of the research programs and the students' research projects • Access to unique facilities: Canadian Light Source (CLS), Tokamak, Atmospheric & Space Physics Areas for Improvement • Guarantee a minimum, stable funding levels for graduate students • Increased interactions with existing facilities, especially the Canadian Light Source (CLS)

# Biological Engineering Program Strengths Excellent research facilities and resources Faculty members are productive and are qualified to offer the program Areas for Improvement Streamline program administration and develop learning expectations for students Restructure the delivery and focus of the programs through the Division of Agricultural and Bio-Resource Engineering

# Biomedical Engineering Program Strengths Student enrollment indicative of interest in BME from International students who find positive student experience in lab settings Potential to be well known for opportunities in BME related to imaging methodologies Areas for Improvement Increase administrative support and formalize a "home' that will support this program Support a targeted growth strategy

### **Chemical Engineering**

### Program Strengths

- Graduate laboratories are well equipped for teaching the core concepts in chemical engineering and for carrying out research projects in the theme areas as defined by the department
- Department appears to be a very cohesive one in which individual faculty members communicating very well with each other, collaborate extensively, and share equipment

### Areas for Improvement

- Develop and invest in more graduate course offerings
  - o Comment related to Quality Assessment Category 1 Program Objectives and Curriculum
- Redesign the seminar series to provide appropriate learning outcomes
  - o Comment related to Quality Assessment Category 4 Learning Environment

### Issues that precluded an overall assessment of "meets quality standards"

- Insufficient number of courses to meet students' requirements
- Some courses on essential core topics are absent
- Variable quality of courses within and outside the department
- Need clearly articulated objectives for the seminar series (e.g., students need sufficient feedback on content and quality of presentations; better faculty attendance needed, increase number of seminars by external experts).

### Civil & Geological Engineering

### Program Strengths

- Strong industrial links and relevance to Saskatchewan and western Canada
- Flexibility and interdisciplinarity

### Areas for Improvement

- Enhance planning to improve time to completion
- Promote program to enhance recruitment

### QUALITY STANDARDS

☐ Meets

☑ Does Not Meet

### **QUALITY STANDARDS**

Meets

### **Electrical & Computer Engineering**

### Program Strengths

- Excellent state of the art research facilities available to students
- High number of publications and strong conference attendance of students

### **QUALITY STANDARDS**

■ Meets

☐ Does Not Meet

### Areas for Improvement

- Allow students to take inter-disciplinary (eg. Mathematics, Computer Science, Engineering Physics) courses
- Allocate more U of S Devolved or similar funding to graduate students.

### **Mechanical Engineering**

### Program Strengths

- High quality faculty members
- Mature and well established graduate program, with high output

### **QUALITY STANDARDS**

Meets

☐ Does Not Meet

### Areas for Improvement

- Reduce course load in in MSc program and increase the number in PhD program; allow for inclusion of sources of broader selection of graduate courses from other units and colleges.
- Enforce progress report procedure for both MSC and PhD studies

### **Next Steps**

### Follow Up on 2014-15 Review Reports

The Interim Dean of CGPS and the Interim Provost have issued a joint response to each program's review report. They have encouraged program leaders to consider follow-up actions that address the areas for improvement identified in each report. The Interim Dean has met with program leaders where necessary and has offered CGPS's assistance in designing and implementing follow-up actions.

### **Program Reviews for 2015-16**

The following programs completed Graduate Program Reviews in 2015-16

Program		Degree	
Archaeology & Anthropology	M.A		
Economics	M.A		
Geography & Planning	M.A	M.Sc.	Ph.D.
Indigenous Studies	M.A		Ph.D. (Special Case)
Political Studies	M.A		
Psychology	M.A		Ph.D.
Sociology	M.A		Ph.D.
Large Animal Clinical Science	M. Vet. Sc.	M.Sc.	Ph.D.
Small Animal Clinical Science	M. Vet. Sc.	M.Sc.	Ph.D.
Veterinary Biomedical Science		M.Sc.	Ph.D.
Veterinary Microbiology		M.Sc.	Ph.D.
Veterinary Pathology	M. Vet. Sc.	M.Sc.	Ph.D.





Graduate Program Review – Outcome Synthesis Report 2015-16

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- Current or recent (within five years) research collaborations with a faculty member
- Being a recent (within five years) graduate of the program
- Being a recent (within five years) supervisor of a student in the program
- Being a former faculty member of the unit under review

### 2. Program Self-Study

A graduate program self-study document will be prepared and submitted by the graduate program chair or designates from the program under review.

The self-study document will provide data for the graduate program under review. The data will be a combination of historic and current graduate program attributes related to the six Quality Assessment Criteria. The period under review for each program begins five years prior to the last academic year completed before a review is undertaken. For example, a program review starting in July 2016 will include historic program data from the 2011-12 to the 2015-16 academic year.

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- Other members of the university community as appropriate

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The Dean of CGPS, in consultation with the Provost, will issue a **written response to the review.** This response may include recommendations for action and reference to resources that are available to help with program improvements.

### Summary of 2015-16 Reviews

### List of Programs Reviewed

Twelve programs were reviewed in 2015-16.

Program		Degree	
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Economics	M.A.		
Geography	M.A.	M.Sc.	Ph.D.
Indigenous Studies	M.A.		Ph.D. (Special Case)
Political Studies	M.A.		
Psychology	M.A.		Ph.D.
Sociology	M.A.		Ph.D.
Large Animal Clinical Science	M. Vet. Sc.	M.Sc.	Ph.D.
Small Animal Clinical Science	M. Vet. Sc.	M.Sc.	Ph.D.
Veterinary Biomedical Science		M.Sc.	Ph.D.
Veterinary Microbiology		M.Sc.	Ph.D.
Veterinary Pathology	M. Vet. Sc.	M.Sc.	Ph.D.

### Review Team Members

Program	Internal	Canadian	International
Archaeology & Anthropology	<b>Linda McMullen</b> Psychology	Michel Bouchard University of Northern British Columbia	Douglas Bamforth University of Colorado
Economics	Michael Atkinson Johnson-Shoyama Graduate School of Public Policy	<b>Beverly Dahlby</b> University of Calgary	Martin Boileau University of Colorado, Boulder
Geography	<b>Jim Kells</b> Civil & Geological Engineering	<b>Brian Klinkenberg</b> University of British Columbia	Mark Williams University of Colorado, Boulder
Indigenous Studies	Terry Wotherspoon Sociology	<b>Daniel Justice</b> University of British Columbia	<b>Jean O'Brien</b> University of Minnesota
Political Studies	<b>Keith Walker</b> Educational Administration	Stephen McBride McMaster University	Munroe Eagles State University of New York
Psychology	<b>Jack Gray</b> Biology	Murray Singer University of Manitoba	<b>Stanley Brodsky</b> University of Alabama
Sociology	<b>Lisa Vargo</b> English	Jerry White University of Western Ontario	Min Zhou UCLA
Large Animal Clinical Science	Graham Scoles Plant Sciences	<b>David Kelton</b> University of Guelph	<b>David Renter</b> Kansas State University
Small Animal Clinical Science	Catherine Arnold Physical Therapy	Carolyn Kerr University of Guelph	Andrew Mackin Mississippi State University
Veterinary Biomedical Science	Thomas Fisher Physiology	Allan King University of Guelph	Robert Burghardt Texas A&M University
Veterinary Microbiology	Peter Howard Microbiology and Immunology	John Prescott University of Guelph	Sandra Quackenbush Colorado State University
Veterinary Pathology	Andrew Van Kessel Animal and Poultry Science	<b>Jeff Caswell</b> University of Guelph	Susan Tornquist Oregon State University

### **Review Results**

Review teams are asked to evaluate whether a program meets or does not meet quality standards in each of the six Quality Assessment Categories. Through this evaluation, review teams provide an overall statement about program quality. The following is a summary of each review team's statements on overall program quality.

### Archaeology & Anthropology Program Strengths • Quality and dedication of faculty members • High level of camaraderic among the graduate students Areas for Improvement • The addition of one new faculty position • Additional funding for graduate students

### **Economics**

### Program Strengths

- The program places students very well in either Ph.D. programs or the job market
- The program attracts a truly international and diversified student body

### Areas for Improvement

- We wished that the program could admit more students, but this may require more faculty
- We wished that the program could graduate more students inside of a year

### QUALITY STANDARDS

- **⊠** Meets
- ☐ Does Not Meet

### Geography

### Program Strengths

• The student population is highly productive in terms of journal publications and funding awards received

### **QUALITY STANDARDS**

Meets

- ☐ Does Not Meet
- Both the faculty and students interviewed are passionate about their work in the department. With the faculty, we sensed a high level of collegiality and spirit of cooperation. The students expressed active interest and engagement in their research and in participating in their discussion with us

### Areas for Improvement

- Provide and/or encourage more opportunity for student interaction and collaboration. There is some feeling of isolation from other units on campus and even from each other within the department.
- There is need for the addition of new junior faculty (FTE) to increase the breadth of coverage and to address top-heavy nature of the current faculty complement. This addition should be strategically selected so as to better differentiate the Geography program from that offered in SENS.

### **Indigenous Studies**

### Program Strengths

- High level of expertise in the discipline and commitment to the program.
- Highly competent students with strong critical thinking and analytical skills

### Areas for Improvement

- Increase in faculty resources devoted to graduate supervision.
- Development of a vision to integrate graduate programming with future planning for Department programming and activities.

### **QUALITY STANDARDS**

**M**eets

### **Political Studies**

### Program Strengths

- This department has a strong, dedicated and engaged Department leadership team who work with a relatively small team of capable scholar-colleagues and who, together, have demonstrated the necessary capabilities for re-visioning and delivering a high quality set of graduate programs (in keeping with other excellent North American political studies departments)
- Students are well served by highly personable, welcoming, rigorous and supportive Department culture, excellent teaching and learning experiences and commendable supervision practices

### Areas for Improvement

- Strive to develop the highly productive MRP, as a 12 month graduate program (producing exceptional student scholarship), and from which qualified 24 month MA students are drawn. All graduate students would receive signature professional development and research skill development through the 990 redesign
- Continue to work on refinement of Department identity, focus of research themes, and find way to leverage the competitive advantages that this department has given its faculty, facilities, legacy and synergies with other campus units and University as a whole

### Psychology

### Program Strengths

- The program is outstanding in providing preparation for meaningful specialization. The four streams function well, and, with the possible exception of CHHD, provides excellent depth of experience
- The department provides excellent learning experiences for most students within and outside the University, extending into public and private agencies and organizations. The lab experiences are varied and yield intense exposures to meaningful methodological approaches to important behavioural problems. With good reason the students were enthused about their placements, supervision, and acquired knowledge
- Dedication to graduate training according to the highest standards

### Areas for Improvement

- Ensure the presentation of adequate numbers of graduate courses relevant to each of the four Areas.
- Recruit new faculty members with specialties in (1) human development and (2) quantitative/statistical analysis. These individuals could be affiliated with various of the existing Areas, depending on their precise research fields.
- Program-wide quality control in ensuring that graduate students have regular and full information about the program and in monitoring students' access to their advisors.

### **QUALITY STANDARDS**

**QUALITY STANDARDS** 

Meets.

**Meets** 

### Sociology

### Program Strengths

- Training and Facilities: SSRL /CUISR /community engagement and research / International partnerships
- Enthusiasm, commitment, and collegiality of faculty, staff, and students

### **QUALITY STANDARDS**

Meets

☐ Does Not Meet

### Areas for Improvement

- Improved recruitment processes including earlier offers, particularly for domestic students, with firm financial packages guaranteed over the normal degree length (1-2 years for M.A. and 4-year Ph.D.). This problem will increasingly make Sociology non-competitive among G15 graduate programs.
- That the Department engages in a systematic review of their "990 Course" with the aim of using this vehicle to achieve greater interaction between students and faculty; teaching skills around scholarship applications, ethics protocols and non-academic jobs; and general professional development

### Large Animal Clinical Science

### Program Strengths

- Facilities including equipment and housing/handling facilities provide a tremendous opportunity to grow the graduate program for both clinical and non-clinical students
- Unique funding opportunities, such as the Interprovincial Student funds, that offer a tremendous foundation on which to continue to build the graduate program

### Areas for Improvement

- There needs to be a continued commitment by faculty and department leadership to increase the communication with/and mentorship of both clinical and non-clinical students, especially with respect to expectations around the research programs.
- To evaluate the opportunities for growth in the graduate program based on employment opportunities for students completing the program(s), the strengths of the department faculty members (areas with a critical mass of faculty to support the students) and opportunities to access funding and develop outside collaborations.

### **QUALITY STANDARDS**

**M**eets

### **Small Animal Clinical Science**

### Program Strengths

- Commitment to the continued advancement of research and the Graduate Programs at the Department, College and University level
- **QUALITY STANDARDS**
- **⋈** Meets
- ☐ Does Not Meet
- Department Chair, Graduate Chair, faculty and trainees commitment to advanced clinical training

### Areas for Improvement

- Graduate curricular redesign
- Differential alignment of Faculty member's duties to support research and training programs

### Veterinary Biomedical Science

### Program Strengths

• Students and faculty were uniformly satisfied with the breadth of opportunities and exposure to high quality research and training within the comparative biomedical sciences research focus of the department.

### QUALITY STANDARDS

- Meets
- ☐ Does Not Meet
- There is a high level of collegiality among the faculty within the department along with high enthusiasm about the research and graduate training programs despite relatively high teaching loads in undergraduate veterinary teaching programs

### Areas for Improvement

- The Departmental minimums for student stipends should be increased and the Department should lobby the College of Graduate Studies to do the same. The Department should encourage student to seek outside funding by topping up the stipends of students who have outside funding
- The Department should consider a common student progress and outcomes tracking system with outcomes that are observable and measurable and that could be used to regularly monitor progress and provide a basis for identification of areas in the program which may require periodic adjustment. Similarly, tracking of students' subsequent career paths and performance is encouraged for evaluation of the program and for recruitment

### Veterinary Microbiology

### Program Strengths

- The high quality of the management of the program by the Graduate Chair and Graduate Secretary.
- ☐ Does Not Meet

**⊠** Meets

**QUALITY STANDARDS** 

• The quality, breadth and depth of the total graduate faculty (Graduate, Adjunct, Associate) of the Department

### Areas for Improvement

- Separation of the responsibility of Department Head from that of Graduate Chair. Having both roles is too much for one person, and the consistency and quality of management is now sufficiently entrenched that it can and should be shared with others committed to the quality of the graduate program
- Division of some of the roles of the Graduate Chair should be established through the creation of a rotating three or four member Graduate Program committee

### Veterinary Pathology

### Program Strengths

• Department faculty demonstrated a uniformly high level of commitment and pride in training of highly qualified students in veterinary diagnostics specialty.

### **QUALITY STANDARDS**

☐ Does Not Meet

Meets

• Department faculty have demonstrated responsiveness to College and University call for increased research intensity as evidenced by development of new MSc (Diagnostics) program and commitment to hiring faculty with emphasis on research.

### Areas for Improvement

 Central processes should be established to better communicate program expectations and monitor student progress, especially in research thesis programs, to ensure consistency and permit corrective action where required

### **Next Steps**

### Follow Up on 2015-16 Review Reports

The Interim Dean of CGPS and the Interim Provost have issued a joint response to each program's review report. They have encouraged program leaders to consider follow-up actions that address the areas for improvement identified in each report. The Interim Dean has met with program leaders where necessary and has offered CGPS's assistance in designing and implementing follow-up actions.

### **Program Reviews for 2016-17**

The following programs completed Graduate Program Reviews in 2016-17

Program	Degree		
English	M.A.		Ph.D.
History	M.A.		Ph.D.
Philosophy	M.A.		
Religion and Culture	M.A.		
Writing	M.F.A.		
Kinesiology		M.Sc.	Ph.D.
Physical Therapy	M.P.T.		