

Annual Report of the Subcommittee on Program Review - Undergraduate (SUPR-U) – 2010-2011

SUPR-U's role is to coordinate and assume responsibility for reviewing proposals for new undergraduate programs, and to recommend approved proposals to the Senate Committee on Academic Policy and Awards (SCAPA) for consideration by Senate. In addition, SUPR-U is responsible for reviewing proposals for major modifications to existing programs as well as for the periodic reviews of existing undergraduate programs and make appropriate recommendations to SCAPA and Senate. Dr. Michael Milde continued as Chair of the Subcommittee and led 8 SUPR-U meetings in 2010-2011. The committee meetings were held on September 29, November 24, January 5, March 2, March 30, April 27, May 25 and June 14.

1) Amendments to the “Terms of Reference” and change in the subcommittee’s name:

In September 2010, Senate approved the amendments to the subcommittee's terms of reference, as well as a name change from SUUPR to SUPR-U. This was done in preparation of submitting Western's proposed IQAP process to the Quality Council for approval. The subcommittee's current terms are located here: <http://www.uwo.ca/univsec/senate/cteeterms/supr-u.pdf>

2) Approval of Western’s new Institutional Quality Assurance Process (IQAP):

The Quality Council approved Western's new Institutional Quality Assurance Process on May 4, 2011. The approved guidelines are posted on the web here: <http://www.uwo.ca/univsec/handbook/iqap/WesternIQAP.pdf>

3) Changes to the review schedule:

The review of the Faculty of Law was postponed from 2010 - 2011 to the 2013 – 2014 cycle due to change in leadership in the faculty.

4) Approvals of new modules and programs:

SUPR-U approved the following modules:

- Faculty of Arts and Humanities: Major in Sexuality Studies
- Faculty of Arts and Richard Ivey School of Business: Combined HBA degree
- Brescia University College: Specialization, Honors Specialization and Major in Food Management
- Brescia University College: Major in Accounting
- Brescia University College: Major in Consumer Behaviour
- Faculty of Engineering: Green Processing Engineering and Management Option
- Faculty of Engineering: Green Processing Engineering and Law Option
- Faculty of Engineering: Software Engineering and Medicine Option
- Huron University College: Honors, Honors Specialization and Major in Organizational Studies, Policy and Ethics
- Huron University College, Department of Psychology and Richard Ivey School of Business: Combined HBA degree
- King's University College: Honors Specialization in Accounting (BMOS)
- King's University College: Specialization in Financial Economics
- Faculty of Law and Faculty of Science: Combined JD/MSc in Computer Science program
- Schulich School of Medicine and Dentistry and Faculty of Science: Honors Specialization in Chemical Biology
- Faculty of Science, Department of Statistical and Actuarial Sciences: Major in Applied Statistics

The committee did not approve the following proposals:

Brescia University College: Specialization and Honors Specialization in Accounting

Brescia University College: Specialization and Honors Specialization in Consumer Behaviour

Huron University College: Specialization and Honors Specialization in Accounting

The approval of Huron University College's Honors Specialization in Religious Studies, Theology and Culture is pending and waiting for the external review to conclude.

5) Cyclical review of modules and programs:

The 2009 - 2010 reviews of Huron University College's BMOS and Economics programs are included in this year's report.

The programs reviewed during 2010 – 2011 were:

- Classical Studies, Geography, Music, Physics and Astronomy (including Planetary Science and Materials Science)
- Brescia College – Social Sciences; Huron University College – Centre for Global Studies; King's College – Political Science

The subcommittee continued to use the OCGS qualifiers - good quality, good quality with report, conditionally approved and not approved - for its assessment of programs and for its recommendation to SCAPA. The Executive Summaries of the reviews that were completed by August 31, 2011, along with SUPR-U's final recommendations are listed below

2009 – 2010 REVIEWS

(These reviews were conducted and finalized under the UPRAC guidelines)

A) Huron University College – BMOS modules

The Executive Summary was prepared by Dr. Mark Blagrove, Chair, Educational Policy Committee, Faculty of Arts and Social Science, Huron College.

The undergraduate programs in the Bachelor of Management and Organizational Studies were reviewed in 2009-10. The program's self-assessment, the report of the external reviewer, and the department's response all confirm the quality of the programs. The external reviewer commended the College on the creation of a strong community, in its well-qualified students, and on small class sizes.

The External reviewer, Professor John McCutcheon of the School of Business and Economics at Wilfred Laurier University, was provided with the departmental self-assessment; 3 years' worth of annual reports; a list of FASS overall learning objectives; the program's course-by-course learning objectives; links to course outlines; and print-outs of the Calendar.

He made his site visit on 7 April, meeting with teachers in the program, the Principal, the Registrar, the Dean, the Coordinator of the MOS program, and a group of students. The schedule of the Director of the Aubrey Dan School made a meeting between him and the reviewer impossible.

The reviewer identified, and made a number of recommendations regarding, areas for further attention.

The Reviewer noted that the current "BMOS" name is found confusing by students and fails to reflect the strong accounting emphasis of the Huron programs, and he therefore made a recommendation that a change in nomenclature of the degree be explored. Given the connexions among our programs and those on main campus and at the other affiliates, there seems little to be done at present to make any change.

The reviewer reported that students felt that not enough was done to make connexions towards career paths. Enhancements to career orientation will be explored, although the Career Development Office and the alumni mentoring programs have made significant progress in this area (perhaps unknown to the reviewer). More will be done to publicize the opportunities, and steps will be taken to identify further Community-Based-Learning opportunities for inclusion in MOS courses at Huron. Mounting a full co-op program (as the reviewer pointed out when he mooted it) is not deemed to be practical at the scale upon which Huron operates.

The reviewer observed a lack of apparent structure to the non-MOS course options on the degree programs. As part of an effort in the coming year to craft Huron versions of new BMOS modules in response to changes on main campus, careful consideration will be given to making the Social Science components more meaningful to the overall degree.

The reviewer pointed out that growth in enrolments in BMOS at Huron has not kept pace with the significant growths in the program at Main Campus. In an effort to retain the desirable balance of programs at Huron, there are no plans to grow enrolments in this program at the College.

In light of Huron's small size and limited resources, the reviewer advised focussing on only some of the modules also available on main campus. It is anticipated that Huron will focus on Finance for MOS and on Accounting modules in future, as these have been most popular with students and form a good fit with resources in Huron's Economics Department. An accounting link with the CGA will also be explored further.

As the reviewer points out, the BMOS Specialization in Global Studies, which seems a natural fit for Huron, has not attracted significant enrolments. A review of the MOS Specialization in Global Studies will be conducted to discover why it has not been attractive to students and how it might be made more so.

Perhaps the most significant recommendations of the reviewer came in the area of staffing. Regarding the recommendations for a full-time tenure-track faculty appointment and making permanent the coordinator position, a necessary first step will be to research best practices elsewhere for accommodating credentials and activities of Business teachers in Conditions of Appointment language.

The reviewer's point that a small pool of part-time instructors may become overtaxed is well taken, and the idea of broadening the part-time instructor pool will be investigated, with positions being advertized more widely.

A study of attrition of student enrolments, pointed out as a concern by the reviewer, will be made; and more systematic tracking of graduates is a college-wide priority.

B) Huron University College – Economics

The Executive Summary was prepared by Dr. Mark Blagrove, Chair, Educational Policy Committee, Faculty of Arts and Social Science, Huron College.

The undergraduate programs in Economics at Huron University College were reviewed in 2009-10. The departmental self-assessment, the report of the external reviewer, and the department's response all confirm the quality of the programs. In the reviewer's words, "the Department is strong and collegial and offers students a solid educational experience."

The External reviewer, Dr Frank Strain of the Economics Department at Mount Allison University, was provided with the following information prior to his site visit: the departmental self-assessment; 3 years' worth of annual reports; a list of FASS overall learning objectives; the department's course-by-course learning objectives; links to course outlines; print-outs of the Calendar; and curricula vitarum of departmental members.

He made his site visit on 30 and 31 March 2010, meeting with members of the Department, the Huron Librarian, the Director of IT at Huron, regular part-time appointees in the Department, the Principal, the Registrar, the Dean, the Coordinator of the MOS program, the Chair and the Undergraduate Program Director in Economics on main campus, and a group of students.

The reviewer raised several issues for consideration.

His report included a recommendation to devise a strategy for securing ongoing leadership in face of impending retirements in the department, and a strategy for hiring, including consideration of hiring at a senior level. The department is well aware of the challenges facing it in light of impending retirements and will explore alternatives, with a preference for attracting a mid-to-later-career Economist with a strong interest in undergraduate teaching.

The reviewer recommended implementing a reduced teaching load (2.0 course per annum) for new faculty members coming into the department to allow them adequate time for research activities. As this is a workload issue, it will be explored in the appropriate fora.

Since the department relies regularly on several individuals for part-time teaching (up to 2.5 courses per annum), the reviewer recommended developing continuing part-time appointment arrangements. This also will be explored in the appropriate fora.

Dr Strain recommended retaining the finance focus (although it may seem unusual for a liberal arts institution), the theory focus, and the empirical-research-methods focus of the programs in Economics, given the complementarities with the Bachelor of Management and Organization Studies programs in the College, student interest at Huron, and the shape of UWO's main campus program. The department concurs with this, especially in light of current staffing levels in the department.

The reviewer reported that students feel that there is a considerable increase in the degree of difficulty of Economics courses at Huron as they move from year two to year three. The faculty members who teach in the core areas of Macroeconomics, Microeconomics, and Econometrics will continue their past and

current practice of holding regular meetings to discuss content of these courses. This may address the students' concerns.

Regarding the longstanding 2+2 program with Dongbei University of Finance and Economics, the reviewer perceived an absence of connexions among the DUFE students and four-year Huron Economics students. The department and the College will continue to work to integrate DUFE students and Huron 4-year students more closely, and to expose DUFE students to more of the Canadian context.

Finally, the reviewer reported that the students with whom he met felt there was only a limited amount of information available regarding program options and requirements. A greater effort will be made to ensure that students know where to look for the information, and that it is current and helpful.

2010 – 2011 REVIEWS

(Reviews were conducted before receiving final approval for Western's Institutional Quality Assurance Process, therefore reports and recommendations were prepared under the UPRAC Guidelines.)

C) Department of Classical Studies – Faculty of Arts and Humanities

The Executive Summary of the Review was prepared by Dr. Joan Finegan, Faculty of Social Science and SUPR-U member.

On February 16, Professor Jonathan Edmondson (Chair of the Department of History at York University), Eric Kular (UWO undergraduate student) and Joan Finegan (Associate Dean, Social Science) met to review the Department of Classical Studies. Meetings were scheduled with administration of the University (Professors Alan Weedon, John Doerksen and John Hatch), library representatives (Fran Gray and Catherine Wilkins) as well as Faculty members (both full and part-time), staff, and students, past and present, from the Department of Classical Studies. The general tenor of all our conversations suggested a vibrant department where faculty, staff and students get along very well. The department has continued to operate under strong leadership and members have demonstrated the highest quality of teaching and research. The support staff received much praise. We were struck by the level of enthusiasm and esprit de corps among members. Overall, our impressions were uniformly positive.

With respect to curriculum development, the department has been able to support their smaller third and fourth year classes by successfully teaching large, general courses at the 1000- and 2000-level. Within their modules, the committee agreed with the department that 3000 and 4000 level courses should be clearly differentiated. Indeed as a result of the department's curriculum mapping in the fall of 2010, fourth-year courses require third-year prerequisites. Third-year courses are more likely to be lecture format whereas fourth-year will be small group seminars. The recently developed Greek and Latin Literature (in translation) Minor could benefit from a 4000-level course, a possibility the Department is exploring. Though the committee recommended offering more summer courses, the department notes that the demand is not there.

In terms of program development, the committee agreed with the department that a new minor in Greek and Roman history should be introduced. The implementation date is expected to be either the fall of 2012 or 2013. The department was also supportive of the suggestions made to improve the curriculum and is considering having students in Honors Specialization, Specialization and Majors take 1.0 4000-level capstone course as part of their modules, and students in the minor taking a 0.5 course at the 4000 level. There is consensus that a fourth-year honors thesis would be a positive addition to the program. The department also plans to increase field course offerings including an Archaeological field school to commence in 2012 and a study tour in the Mediterranean. The issue of whether undergraduate and masters students should be taught in the same course is being addressed and efforts are being made to ensure that only strong undergraduates are in classes with graduate students.

Finally with respect to department culture, we were pleased to see that both the Department Library and the University Library have critical editions of literary texts. The reviewer recommended establishing a subscription of the electronic edition of Thesaurus Linguae Latinae. This in fact has been done. The Department has had considerable faculty renewal and has been able to hire a number of very strong people to replace retirements. One eminent member of the department is set to retire in 2012, and the reviewer strongly recommended that a replacement tenure-stream appointment be part of the Faculty of Arts and Humanities faculty complement plan. The committee also recommended that the Faculty ensure that pre-tenure faculty members get a term relief to enrich the research culture of the department. As per this report's recommendations, the Department plans to institute a regular research seminar series to

showcase the work of Faculty and Graduate students. Finally the report recommended attracting post-doctoral candidates for their research and teaching expertise.

SUPR-U Recommendation: Good quality

D) Department of Geography – Faculty of Social Science

The Executive Summary was prepared by Dr. Grant Campbell, Faculty of Information and Media Studies and SUPR-U Member.

Undergraduate education in the Department of Geography was reviewed on April 5, 2011. The review was conducted by:

- Dr. Bob Sharpe, Department of Geography and Environmental Studies, Wilfrid Laurier University
- Dr. Joe Desloges, Department of Geography and Program in Planning, University of Toronto

Also participating on the review committee were:

- Dr. Grant Campbell, Faculty of Information and Media Studies, University of Western Ontario (SUPR-U Representative)
- Kathryn Dockstader, Faculty of Music (Student Representative)

The review consisted of a comprehensive self-appraisal document submitted in March, Brief for the Periodic Appraisal of the Undergraduate Programs in Geography, together with a complete list of CVs of all regular faculty and limited duties instructors, and a complete list of course outlines and assignments. During the site visit on April 5, the review committee met key administrative personnel, including the Department Chair, the Undergraduate Chair, the Undergraduate Assistant and Program Advisor, the Vice Dean of the Faculty of Social Science, the Vice Provost for Academic Planning, Policy and Faculty, and the Vice Provost for Academic Programs and Students. The Committee also met with the Assistant University Librarian and the Research and Instructional Librarian. The Committee met with almost all faculty and staff engaged with undergraduate education in the Department, and with more than half a dozen undergraduate students from second year up to the 2011 graduating class, including representatives of the Geography Undergraduate Association.

The report of the Committee was submitted on May 3, 2011, and the Department responded on May 17, 2011.

In examining the structure, content and quality of the programs, the reviewers noted that both substantive and methodological/technique program requirements ensure exposure to the breadth and depth of the discipline. It commended the “core” curricular structure that promotes integration across the social science and science within the discipline which reflects the interdisciplinarity of geography. UWO Geography offers undergraduate programs that strongly reflect all of the major sub-disciplines in Geography, with a somewhat greater emphasis in Geographic Information Science compared to some programs in Canada.

Enrolment appears very healthy, with a significant number of non-program students taking geography courses. The reviewers noted that all programs emphasize discipline-specific skills together with transferable knowledge, including critical reading and thinking, analytical approaches, field skills and larger perspectives of geographic thinking. These features are apparent in the major programs as well as in the honours programs. The committee commended the Department’s commitment to a strong first-year curriculum, and its insistence that second-year students take both human and physical geography. There were no student complaints about course availability, and students expressed appreciation of the capstone courses. TA and limited duties instruction resources appear to be appropriate.

The committee noted some ongoing challenges with the program structure: particularly those of ensuring that students in the major programs get the necessary quality and depth of disciplinary exposure. In addition, the recent decision to make the Spatial Analysis course a required gateway for all Geography programs has caused challenges for some students, mainly around problem-solving skills.

In examining the governance and administration, the committee learned of several concerns facing the Department, primarily in response to making resource allocations for staffing, space and budgeting in the face of policy decisions made outside the Department. In particular, the lack of sustainable funding for more expensive items is proving a significant problem in efforts to fund core activities related to equipment and field experience. Above all, the Department is concerned about the new enrolment-based budgeting model and its implications for maintaining the limited-enrolment Honours programs.

The Department's strategic priorities (maintaining faculty and staff complement and developing and implementing a space plan) are closely aligned with those of the University and the Faculty of Social Science. The Department and its undergraduate programs are highly regarded within the Faculty of Social Science. With the imminent move of resources and staff from the Sauer Map Library into the Western Library system, the Department will need to work with the library staff to ensure that appropriate support and access is given to the specialized materials.

The reviewers found the administration of the Department effective and efficient. Finding spaces for students in courses is rarely difficult, but the timetabling of courses is a recurrent issue, particularly for students who enter programs after first year, as well as for students in the complex Urban Development module. The Undergraduate Affairs Committee has identified five main issues of concern for program development: a) balancing rigour and flexibility across programs; b) balancing physical and human components of geography; c) reflecting faculty and graduate research clusters; d) ensuring the proper recognition of Geography courses and modules by the Faculty of Science in order to permit Geography courses and modules to be considered as 'science credits' and contribute to BSC degrees completed by Faculty of Science students and e) reforming the undergraduate course structure and distribution

The committee was impressed with the degree to which the Department's governance draws on the voices of its members. The Undergraduate Affairs Committee has fostered a Department-wide discussion of undergraduate program development. Staff members, administrative and technical, have had commendably major roles in the teaching and research mission of the Department. And while the students have no dedicated space in the Department, they have nonetheless played an active role on the Undergraduate Affairs Committee and in the overall discussion of undergraduate program development.

SUPR-U Recommendation: Good quality

E) Faculty of Music

The Executive Summary was prepared by Dr. Mark Workentin, Department of Chemistry and SUPR-U Member.

The Don Wright Faculty of Music was reviewed on March 8 and 9, 2011 by Dr. Lori Burns an esteemed colleague who is a Professor in the School of Music and past Associate Dean of Research in the Faculty of Arts at the University of Ottawa. The School of Music at the University of Ottawa is highly regarded and offers music programs in performance, musicology, theory, composition, music education and piano pedagogy. They also have a vigorous and varied ensemble program. Because of the similarities to our own Faculty, and because she is an alumna of Western, her perspectives on the undergraduate programs in the Don Wright Faculty of Music are particularly germane. As the SUPR-U representative, I also participated in all aspects of the review. We were also fortunate to have Shauna Fraser participate as a student representative (Health Sciences) for the full schedule.

The review itself included information provided in a Self-Appraisal document produced by the Faculty as well as that gathered during the site visit. Interviews were carried out with all the important stakeholders, including the Vice-Provost (Academic Planning, Policy and Faculty), the Vice Provost (Academic Programs and Students), the Dean and Associate Dean Academic, each department Chair and their faculty, and staff groups. A cohort of current undergraduate students representing the various programs and selected modules was also consulted. It would be difficult to find a more engaged and thoughtful group of students. This later meeting was extremely fruitful, providing insights into improving/evolving their programs and the student experience in the Faculty and the University.

Dr. Burns provided a thoughtful and informative report that captured the main issues that arose during the visit. Based on her experience she also offered a number of useful and creative recommendations. Dr. Burns was the sole external examiner of the Faculty of Music that has 3 departments (, over 10 programs (and modules) and 600 undergraduate students. She should be commended for taking on the enormous task of the preparing the external report by herself. I recommend that in cases like this, where a program that encompasses a whole Faculty is being reviewed, that at least two external examiners be involved to help with the workload and complexity of preparing a report.

Overall Dr. Burns's assessment was that there was a high level of engagement, enthusiasm and dedication from all stakeholders: faculty, staff and students. The quality of the students admitted and that graduate, and the programs offered, were rated as very strong and of a high quality. The resources

available to the students as they progress through their programs, which include access to their faculty instructors, performance options, practice facilities, counselling services and library facilities, are excellent.

Dr. Burns provided a list of useful recommendations in many areas including student engagement, course objectives and outcomes, degree structure, organizational structure and human and instrument resource management and these are summarized in her report. A number of the recommendations encourage the Faculty and departments to consider ways of evolving the degree structure and course offerings to meet student needs and the broader student experience and degree expectations at Western. For example, students who are nested within the B. Mus. Programs in the Departments of Music Education, Performance, and Music Research and Composition have a true sense of belonging as they are an identifiable group with each department. However, these students voiced concern of a silo effect due to their specific program restrictions. Students who are in programs not as well-identified by one of the departments, namely students in the BA or those enrolled in one of the modules in music identified concerns of non-integration. The undergraduate programs for the majority of students in Music do not follow the Western module system and typical Western degree structure, although there are also a significant number of students in Music who follow the more standard module degree structure. This mix leads to a number of challenges. For students in the Music Programs (non-modules) there is very little opportunity to take courses outside of those prescribed. Several recommendations were made to address these concerns and others directed at curriculum issues, including:

- Develop a general first year course to introduce students to the field of music research
- Develop a capstone course that would bring students together with an interdisciplinary objective
- Identify a process and academic leaders for students in the MA and majors that would act as their champion
- Consider providing a credit for ensemble courses that are currently required on top of the for credit courses
- Consider providing more ensemble opportunities to those in the BA and majors
- Consider ways in the degree structure to allow students to have more flexibility to take music courses in areas from other Music departments and from other faculties across campus to increase their breadth in music (to become more total musicians) or breadth generally as defined by Western's degree structure. Such breadth is the hallmark of Western degrees and more typical of other music programs across the country.

The Faculty received the external report and provided a timely response to a few of the key recommendations. A number of the recommendations that deal with student course selection, degree structure and degree expectations need more time to be broadly evaluated. For example, the external examiner's concerns for "constraints upon course selection" and "need for academic leadership in certain fields in which students feel marginalized" may be more encompassing than addressed by the response. For example, the recommendation to establish champions to allow better integration of these students is a good one and the process cannot just involve a single individual as evidenced by comments in the response from the Faculty. Recommendations relating to degree structure, course flexibility, changes in ensemble credit require further consideration by all stakeholders and were not really addressed in the letter of response.

In summary, the review found that the Faculty of Music offers excellent programs in all disciplines in Music. The admission process is bringing in a very talented pool of high achieving students, retaining them and the graduates are well positioned to be able to enter the professional workforce in music or the best M.Sc. and Ph.D. programs in Canada and the United States. While the Faculty is committed to review their courses and programs there are a number of useful recommendations from the external reviewer to improve the educational experience of their students in the context of a Western degree. The recommendations offered in the report should be investigated and evaluated in more depth, with input and leadership from the incoming new Dean.

SUPR-U Recommendation: Good quality

F) Department of Physics and Astronomy – Faculty of Science

The Executive Summary was prepared by Dr. Margaret McNay, Faculty of Education and SUPR-U Member.

Review Committee:

External Reviewer: Martin Grant, Dean of Science, McGill University

Internal (SUPR-U) Reviewer: Margaret McNay, Associate Dean, Faculty of Education

Student Reviewer: Sabrina Nurmohamed, third-year BMSc, University of Western Ontario

The review of undergraduate programs in the Department of Physics and Astronomy took place in March, 2011. The Review Committee used two primary sources of information in its deliberations:

1. resource documents which offered comprehensive background information about the Department. In particular, the Department's self-appraisal document with its detailed appendices was "clear, comprehensive, and frank," and the External Reviewer "was impressed by the serious diligence the department had undertaken to complete this resource." The document was, in his view, "a model of how to do a great job."
2. face-to-face consultations with groups and individuals who offered observations and critical comments about the Department and who answered questions, candidly and forthrightly and from different points of view:
 - Alan Weedon, Vice-Provost (Academic Planning, Policy and Faculty), and John Doerksen, Vice-Provost (Academic Programs and Students) and Registrar;
 - Shantanu Basu, Department Chair, and Jeff Hutter, Undergraduate Chair;
 - the Department's Undergraduate Curriculum Committee;
 - Keith Griffiths, Associate Dean (Academic), Faculty of Science;
 - upper-year instructors, first-year instructors, and lab coordinators;
 - support staff and graduate teaching assistants;
 - undergraduate chairs of partner departments;
 - undergraduate program students.

By the end of the day on March 14, after seven hours of meetings, discussions and deliberations, the Review Committee had reached a consensus that the undergraduate programs offered by the Department of Physics and Astronomy were, as described by the External Reviewer, "strong." Dr. Grant noted the "justifiable pride" the Department took in the quality of its service courses, majors and honors students, and teaching. The Committee had also identified seven issues, detailed below, for further consideration.

The External Reviewer took primary responsibility for preparing the Review Committee's final report although all members contributed to the report and concurred with the findings. The Report was submitted to the Office of the Vice Provost (Academic Programs & Students) and to the Department on March 29, 2011. The Department's response to the Report was submitted a month after that.

Issues for Further Consideration

1. Integration of research and teaching, quality of department subsequent to renewal. The External Reviewer noted strong leadership provided by current and previous Chairs and strong hiring decisions made during renewal.
2. Innovations in undergraduate lecturing.
The Committee noted the Department's use of full-time faculty members to teach service courses. Also noted was the use of innovations in teaching such as use of the Wimba system, "clickers," multiple evaluation methods and assessment techniques, and efforts to measure the efficacy of these techniques.
3. Innovations in undergraduate laboratory instruction. Some undergraduate students spoke disparagingly of laboratories in a number of courses. The Department is, however, actively implementing discovery laboratories, has added ten new labs to the program, and plans to add yet more discovery labs that will be phased into all first-year courses.
4. Relationship to other departments.
There is "a healthy degree of interdisciplinarity" in the undergraduate programs, and particular overlap, through service teaching, with Medical Biophysics and Applied Mathematics.
5. Quality of advising for physics and astronomy undergraduate students.
The quality of advising for students interested in pursuing graduate studies in science is excellent. The Department was encouraged to address the advising of the 35% of students who do not intend to pursue graduate studies. The Department has already identified several possible options for doing so.
6. Quality of program for physics and astronomy undergraduate students.
The Committee heard many negative comments about Western's module system—that it does not allow enough courses to be taken in the honours degree and thereby compromises the quality of the program. The Department's response that "we are not very concerned about the modular system itself, but do worry about how it might be perceived by other institutions" is justified. The Department is not inordinately worried about how they are perceived—nor should they be.

7. Development of soft skills, outreach, undergraduate research.

The Department's response to the Committee's Report indicates it is making efforts to address soft skills, outreach, and undergraduate research, particularly through enhancements to their seminar course. They are correct that "it will be important [not to rely] on this one venue," and are encouraged to range widely into outreach and undergraduate research possibilities.

Conclusion

The Review Committee concurred with the Department's own conclusion that, "on balance, undergraduate programs . . . appear to be doing well." Because the Department appears committed to ongoing self-examination and to continuing to work to improve its offerings, the Review Committee recommended that the Department's efforts be rewarded with institutional support—as an example, with funding to support the development of more engaging laboratory activities for the service courses.

SUPR-U Recommendation: Good quality