

Final Assessment Report

Oenology and Viticulture Undergraduate Program Review

A. Summary

1. The Program's Self Study was considered and approved by the Academic Review Committee of Senate on January 18, 2013.
2. The Review Committee consisted of two external reviewers: David Percival, Dalhousie University and Wayne Wilcox, Cornell University and an internal reviewer, Heather Gordon, Chemistry.
3. The site visit occurred on April 7-9, 2013.
4. The Reviewers' Report was received on May 21, 2013.
5. The Program's response was received on July 8, 2013.
6. The Dean of Mathematics and Science response from Associate Dean Rick Cheel was received on September 1, 2013.
7. The Undergraduate Program Committee response was received on June 17, 2013.

The undergraduate programs which were examined as part of the review included:

BSc (Honours) Oenology and Viticulture
Certificate in Grape and Wine Technology

This review was conducted under the terms and conditions of the IQAP approved by Senate on June 6, 2011.

The reviewers assigned the Outcome Category 1, "Good Quality with National Prominence" to the academic program.

B. Strengths of the Program

The Reviewers' reported that the program:

has several specific strengths that accrue from its unique status focusing on the academic underpinnings of a specialized industry found in only a few locations across Canada. Among these are:

- ***Synergistic association with Brock University's Cool Climate Oenology and Viticulture Institute (CCOVI).***

The undergraduate students in the OEVI program benefit immeasurably through its association with CCOVI (a unit focused on research and outreach activities) in multiple ways. Importantly, these include a level of exposure to the Ontario grape and wine industry, with the attendant potential for future employment opportunities, beyond any which they would likely receive within the standard structure of an academic department and its major. Perhaps even more important from a broader educational perspective, this association provides students unique opportunities for exposure to and interactions with numerous international researchers and industry professionals beyond the Brock faculty and local industry members, in addition to participation in a wide variety of continuing education and outreach programs related to their field of study.

- ***Efficiency of program delivery.*** The ability to deliver a high quality, internationally recognized undergraduate major while employing a core of only three faculty specifically tasked to do so is an exceptional accomplishment. The incorporation of existing courses from complementary majors to provide background and supporting subject matter, and the strategic utilization of economical but highly qualified sessional instructors have been essential components of what has heretofore been a successful strategy for maximizing limited resources.

- ***Quality and dedication of the instructors.*** The quality and dedication of the three core OEVI faculty, other involved Brock faculty, and the sessional instructors is very high and constitutes the fundamental pillar upon which the success of the program is based.

- ***Quality of the students.*** Students within the OEVI program are unusually diverse relative to those in most other undergraduate programs with respect to their age, previous life experiences, focus, passion for their field of study, and academic maturity... Collectively, these attributes "raise the bar" of expectations and resulting performance for all students in the OEVI program, contribute to its stature and reputation (and those of the University) when they graduate and join the work force, and assist in efforts to recruit top students as future matriculants.

- ***Quality, breadth, integration, and rigor of the course offerings.*** Interviewees, including both instructors and several students, consistently commented upon the rigor of the course work involved, and the students consistently praised its quality as well... Within this context, it is another strength of the program that this practical

orientation has been maintained within a strict academic context that emphasizes theoretical principles as the underpinning of whatever technical training is provided.

- ***OEVI students are well placed for employment and subsequent professional success upon graduation.*** The integrated design of the program subject matter; exposure to the wine and grape industry through coursework, continuing education and outreach programs, and various workshops and conferences; the formalized requirement of participation in the co-op program; and the availability of a 1-year Certificate program for focused training by those already holding a B.Sc. degree in another field all provide students with both the knowledge and social contacts to gain employment in the wine and grape industry upon graduation and to flourish in it thereafter.
- ***Small student cohorts and enrollments in specialized classes.*** Although relatively small student numbers (by design) in the OEVI program and its specialized courses necessarily limit resources, this has provided a level of individualized instruction and group cohesion that is highly valued by the students and appears to be a contributor to the program's success. This is an elite, high profile program with high standards and a high impact.

C. Opportunities for Improvement and Enhancement

The reviewers provided thirteen recommendations for the program.

1. The OEVI program should report directly to the Dean in concert with, rather than through (as currently), the Chair of Biological Science, and an OEVI representative (CCOVI Director or mutually agreed upon designate) should participate in meetings of Department Chairs and similar administrative functions. This additional administrative responsibility is one of several reasons that additional core OEVI faculty are needed.

In its response, the Program stated that:

This recommendation strikes at a core issue concerning both the “autonomy” and “home” of the OEVI program. As the reviewers state, the program can be thought of as a small faction within Biological Sciences who must compete for influence with the rest of the department. Of course when the program was started the alternative was to compete with the rest of the Faculty. By design, housing OEVI within Biological Sciences has served to protect this very unique and small program, and has allowed it to grow into an elite program and maintain a relatively high resource to student ratio and a low student to faculty ratio as compared to the rest of the department and the faculty. This relationship has had its ups and downs over the years, however there is no denying that both OEVI and the department of Biological Sciences have benefit from it. As the reviewers point out, the OEVI program is extremely successful, it is one of the very few “elite” programs at Brock University. It is of extremely high quality and does much to enhance Brocks reputation. It has always been difficult to argue for resources for elite programs designed to serve small numbers, unless of course they are associated with “elite” tuitions. The OEVI program within Biological Sciences has managed to survive as an elite program without high tuitions due to the dedication of its members and the administrative and financial support of Biological Sciences and of CCOVI. The current financial climate at the university with open discussion of “vertical cuts” makes small programs with low enrollments especially nervous. It also makes it extremely unlikely that additional faculty members and/or administrative staff would be allocated specifically to the OEVI program. As the reviewers state, additional faculty and/or administrative support would be required to facilitate an “independent” reporting structure to the Dean for the OEVI program. The three faculty members associated with OEVI are already overwhelmed with administrative duties, especially Professor Inglis, and I frankly don’t see how to make this work. It may be that a positive step towards increased representation of the OEVI program at the level of the Dean could be by having a member of OEVI (either faculty, associate, or senior demonstrator) represent the OEVI program in concert with the Chair of Biological Sciences at the level of chairs and directors. In a related issue, work is currently underway to have the OEVI program become a “member” of CCOVI which will at least allow students to identify with CCOVI.

The Dean responded:

The Chair's response is very reasonable and is consistent with the Dean's position on this recommendation. The placement of OEVI as a program within Biological Sciences has worked well. The program has some distinction compared to other department-based programs such as a separate calendar entry (whereas other programs are listed under their department) and a separate booth for OEVI at Open House and Fall Preview. Program administration by an OEVI Program Committee within the Department has worked well and the Dean's Office has seen no evidence that the core faculty of OEVI support this particular recommendation. However, if core OEVI faculty support this recommendation it may be reasonable to consider establishing OEVI as a program "Centre".

ARC considers this recommendation to be not accepted, as the homing and reporting structure of a program are outside the jurisdiction of the Committee.

Implementation Plan

Recommendation NOT accepted.

2. Institute a formal mechanism to provide transparency to and input from industry, through the creation of an advisory board. This would highlight Brock’s commitment and value to the Ontario grape and wine industry, and spotlight its preeminence as the leading institution of higher education with respect to multiple industry issues. Furthermore, it would provide an excellent platform for communicating financial challenges and goals and identifying opportunities for industry involvement to help meet them. However, the creation of such an entity would necessarily be predicated upon a firm understanding that industrial participants would not feel that their time was being wasted, i.e., that their input was considered meaningful and that their concerns were addressed honestly and frankly.

The Program responded by saying, “This is an intriguing idea that we would like to explore.”

The Dean responded:

This recommendation could certainly lead to improved coordination and cooperation between the several educational partners with the wine industry through the proposed “Advisory Board” and would require agreement between the participating Institutions. The Dean’s Office will gladly encourage discussion of this recommendation between OEVI and their counterparts at Niagara College.

ARC considers the recommendation to be worthy of consideration and suggests that the Program is best positioned to determine appropriate strategies to explore this issue.

Implementation Plan (Second Priority)

Responsible for approving:	Program
Responsible for resources:	Program
Responsible for implementation:	Program
Timeline:	Dean of Math and Science to report by end of 2014/15 academic year.

3. Consider changing the status of the most important of these elective courses into one of “required”. However, it is very likely that the importance of some of these courses (e.g., soil science, plant physiology) is greater for students whose careers will be focused primarily upon grape production than it is for students focusing on producing wines from such grapes. Thus, we also recommend that consideration be given to allowing students to choose an Oenology or Viticulture “track” or “specialization”, whereby all students would be required to take most of the currently-required curriculum, but other courses would be absolutely required only for those emphasizing viticulture (soil science) and others that are currently required for all (e.g., advanced chemistry) would be absolutely required only for those emphasizing oenology. It also may be possible to augment current course offerings/availabilities through cooperative arrangements with other institutions via distance learning mechanisms, as discussed in other sections.

In its response, the Program stated:

The chair's personal take on this issue has long been that Biol 3P91 (his own Plant Physiology course) be required by the OEVI program! However, the existing program is very full and most students have managed to fit the “recommended” courses into their individual programs. Although it is possible that “tracks” or “specializations” may be of benefit the program has not been eager to pursue this option. The strength and uniqueness of the program is that students obtain a well rounded education in both oenology and viticulture, something we believe is very important. The matter of course conflicts has become a hot issue over the past few years and is a huge problem for many programs on campus, including biological sciences and OEVI. With more and more students and programs being serviced by the same number of faculty and in the same number of rooms, it is inevitable that significant conflicts arise and it has become extremely difficult if not impossible for students to complete their programs within the designated time. We can explore additional online alternatives to some courses, there have been programs by the administration to assist in development and funding that we have taken advantage of, and Biol 3P91 may be a possibility, however the funding for these initiatives is usually predicated on student numbers.

The Dean responded:

When CCOVI and OEVI were created it was the intention to graduate students with the “well-rounded” education referred to by the Chair. However, the breadth of OEVI has grown as its participating membership has grown to include faculty members from four Faculties of the University: Mathematics and Science (the founding Faculty), Applied Health Sciences, Business and Social Sciences). It may be worthwhile to strike a larger OEVI committee, including participants from all four Faculties, to consider the development of tracks or streams that would allow program options for students who want to focus on a particular area of oenology and viticulture.

UPC commented:

We understand how courses ‘on the books’ are not always offered and how scheduling of courses offered by different units on campus may not consider time conflicts, and how these may lead to frustration for students. Turning elective courses into required courses however, for the purposes of ensuring they are offered on a yearly basis may not be the right motive. However, if a course is judged to provide students with foundational and core knowledge, then it should be required for students. Creating specialization tracks may allow students to specialize in certain areas of OEVI but the size of the program and number of faculty members affiliated with the program may pose certain challenges.

ARC considers the first part of the recommendation to change important elective courses into required courses to be not accepted. The Program maintains that difficulty with scheduling is the main contributing factor to the inability to register in these courses and not the structure of the program. ARC considers the second part of the recommendation to create “tracks” or “specializations” to be not accepted. The dual nature of the oenology and viticulture program is considered to be a key strength and distinguishing feature of the program.

Implementation Plan

Recommendation NOT accepted.

4. Because there is no field component to this course [required course on pest management], it would be most convenient and efficient for students to have it held during the academic year at an on-campus site if that is technically feasible. However, if a significant field component were introduced, where the students' presence during the growing season at off-campus vineyard sites was necessary, the current scheduling would be appropriate.

The Program responded:

We agree and will look into this issue, with the idea of either working to introduce a significant field component or move the course, with preference being given to introducing a field component.

The Dean responded:

The Chair's response is appropriate. This recommendation may also benefit from opportunities that might arise from the response to Recommendation 2.

UPC responded:

We would support members of the OEVI program in addressing the issue raised with the required course on pest management held off campus.

ARC considers this recommendation to integrate a field component into the pest management course to require further investigation by the Program Committee.

Implementation Plan (First Priority)

Responsible for approving:	Program
Responsible for resources:	Program
Responsible for implementation:	Program
Timeline:	Dean of Math and Science to report by end of academic year 2013/14

5. Explore the feasibility of developing a “summer upgrade program” for such [mature] students, in which remedial lab skills and associated concepts are taught.

In its response, the Program stated:

This is a good idea, and we can look into the feasibility, again the question would be one of funding for the small number of students involved. It may be that such a course could have additional fees associated with it.

The Faculty Dean responded:

Within the Faculty we have, or are in the process of developing, remedial courses or programs for incoming students who lack specific skills and/or knowledge to succeed in some of our programs (e.g., Chemistry and Mathematics at the moment). We will include a consideration of the needs of OEVI as we move forward.

ARC considers the recommendation to be accepted and in the process of implementation.

Implementation Plan (Second Priority)

Responsible for approving:	Dean, Program
Responsible for resources:	Dean, Program
Responsible for implementation:	Dean, Program
Timeline:	Dean of Math and Science to report by the end of 2014/15 academic year.

6. Explore the feasibility of developing a skills portfolio for the OEVI program.

The Program responded by saying, “This is an excellent idea, we will explore the feasibility of it.”

The Dean stated:

The OEVI program committee should work with CPI and the Vice Provost Teaching and Learning, to explore the implementation of this recommendation.

ARC considers this recommendation to be accepted and in the process of implementation.

Implementation Plan (First Priority)	
Responsible for approving:	Program
Responsible for resources:	Program
Responsible for implementation:	Program
Timeline:	Dean of Math and Science to report by end of academic year 2013/14

7. Examine the possibility of designing a program that would satisfy the needs of such a clientele [international students from countries with a rapidly developing interest in winegrowing and wine making but only limited domestic instructional infrastructure] while generating significant revenue. Whether this can be done with existing personnel and resources without sacrificing current program quality and local relevance, or if it might be feasible only if additional personnel and resources were made available, is a topic that should be explored within this context.

The Program stated that:

This idea was put forward by the Chair to members of OEVI and the CCOVI director not too long ago. The concept did not find a large degree of support. Problematic issues have polarized in two areas.

1. The perception of such a program supporting international competition with domestic industry.
2. The problems associated with either attempting to integrate foreign students into the existing program or the practicalities of being able to run a parallel stream for foreign students which would require an increase in staff.

We can explore this idea again, but must be cognizant of our strong connections with local industry and of their concerns.

The Dean responded:

The Dean's Office encourages the development of revenue generating programs such as that proposed in this recommendation. We are currently developing three such programs and will soon have in place the necessary support for a cohort of International Students who are participating in these programs. The Dean has already discussed the possibility of such a program with an international recruiter who reported that there would be significant interest from a large pool of qualified candidates. The Dean's office is ready to provide the funding necessary to develop and launch such a program and revenue generated by such a program could be used to fund other costs arising from reviewers recommendations. This type of program might also provide an opportunity for new collaborations with Niagara College if it is necessary to bring in instructors from outside of Brock.

UPC commented:

With respect to recommendation 7, please note that an increased reach to international students may be appealing, however, there may be a need to increase the number of resources invested into the program to accommodate these students.

ARC considers this recommendation to be not accepted as the Program finds it to be problematic on at least two grounds.

Implementation Plan

Recommendation NOT accepted.

8. We encourage the new attitude that appears to welcome the participation of all interested Brock University faculty in the OEVI program and recommend that it be continued.

The Program responded by stating, “We strongly agree.”

The Dean responded:

It has always been the intent for OEVI to include interested faculty members from across the University and we plan to continue to welcome interest and participation by others at Brock.

ARC considers this recommendation to be accepted and consistent with existing practice. No further action is required.

Implementation Plan

No further action is required.

9. We recommend that a mechanism be developed to formally define and recognize such contributions above and beyond some base level expected from all students. Mechanisms that could be used include using programs already in place at Brock University including Experience Plus, integrating this into the potential skills portfolio (recommendation #6) or by noting completion of a non-credit course or attainment of a certificate on a transcript.

The Program responded by saying, “An excellent idea, we agree and Gail Hignell is already looking into this.”

The Dean responded, “This is an excellent way to recognize the value of service learning within this program.”

ARC considers this recommendation to accepted and in the process of implementation.

Implementation Plan (First Priority)	
Responsible for approving:	Program
Responsible for resources:	Program
Responsible for implementation:	Program
Timeline:	Dean of Math and Science to report by end of academic year 2013/14

10. Whereas two new faculty hires would be warranted, this may not be practical in terms of budgeting constraints. Nevertheless, we strongly recommend that at least one new faculty member be hired specifically to teach within the OEVI program and do associated research supportive of it. We furthermore strongly recommend that this person's job description and evaluation for promotion reflect an expectation of both the scientific rigor and industry-oriented relevance that are the foundation of the program and the hallmark of its success to date.

The Program responded by stating that:

This is one of those times where the clear needs of the smaller OEVI program are in direct competition with the needs of the larger Biological Sciences program. Both need additional faculty members, and supporting one over the other is impossible. I do agree that OEVI would benefit immensely from additional faculty. Three faculty, especially when one is serving as Director of CCOVI, is not enough.

The Dean responded:

The Chair is certainly correct that there are many areas in which new faculty are needed, including other areas of the Biological Sciences. However, if the Administration were to provide a new position specifically for OEVI the Faculty would be elated. The Recommendation of having criteria for promotion and tenure, for new faculty members for the OEVI program, that differ from that outlined in the Brock/BUFA Collective Agreement is not acceptable.

A member of UPC, "felt that the reviewers should have clarified the number and specialty of new faculty to be hired."

ARC considers this recommendation to be worthy of consideration but outside of the Committee's jurisdiction. It is expected that the program will proceed through normal channels of advocacy for these resources.

Implementation Plan

Recommendation NOT accepted.

11. Negotiate use of the vineyard presently managed by the Vineland Research and Innovation Center (formerly operated by the Ontario Ministry of Agriculture, Food and Rural Affairs) on Cherry Ave. It might be possible to forge a contractual arrangement with a local grower to do the routine maintenance and harvest operations in return for some or all of the fruit produced, and to provide some labor and oversight as part of a co-op program for a qualified, selected student.

The Program responded by stating that, “We agree and will work towards this”.

The Dean stated:

The Dean’s Office will help with this as needed. However, any costs associated with satisfying this Recommendation would need to be added to the Faculty budget.

ARC considers this recommendation to be accepted and in the process of implementation. The Committee understands that investigation into other options is in progress as well.

Implementation Plan (First Priority)

Responsible for approving:	Program
Responsible for resources:	Program
Responsible for implementation:	Program
Timeline:	Dean of Math and Science to report by end of academic year 2013/14

12. Consideration should be given to allowing acquisition of the necessary funds from a campaign directed towards potential industrial donors in a manner that is consistent with broader University initiatives.

The Program responded by stating that, “We agree and will explore this idea”.

The Dean stated:

Winemakers and Grape growers provided the funding that allowed Brock to create CCOVI. It would be reasonable and timely to return to them with a “Report” of what those contributions have delivered to them and the industry in general and to link that to a new fund-raising initiative. The year 2016 marks 20 years of CCOVI and might be a good year to run such a campaign.

ARC considers this recommendation to be accepted and in the process of implementation.

Implementation Plan (First Priority)	
Responsible for approving:	Program
Responsible for resources:	Program
Responsible for implementation:	Program
Timeline:	Dean of Math and Science to report by end of academic year 2013/14

13. There was some sentiment expressed that space and money are being used to store certain pieces of donated equipment that the program cannot or simply does not use, and that these items might best be sold to free up space while generating additional revenue. **Recommendation:** This contention should be explored and acted upon appropriately if true.

In its response, the Program stated, “We will explore this contention”.

The Dean stated:

Such equipment should be dealt with appropriately for material that has been “donated” to the University. Consultation should be made with the Office of Advancement in order to determine how to move forward with this recommendation.

ARC considers this recommendation to be accepted and in the process of implementation.

Implementation Plan (Third Priority)	
Responsible for approving:	Program
Responsible for resources:	Program
Responsible for implementation:	Program
Timeline:	Dean of Math and Science to report by end of academic year 2016/17

D. Recommendations to be Implemented

The IQAP requires that ARC “set out and prioritize the recommendations that are selected for implementation.” Using the specific ARC proposals listed above, the following priorities are proposed:

First Priority:

Recommendations 4,6,9,11,12

Second Priority:

Recommendations 2,5

Third Priority:

Recommendation 13

No further action required:

Recommendation 8

E. Recommendations that Will Not be Implemented

Recommendations 1,3,7,10