Evaluation of the influence of the simultaneous or sequential offering of Ecampus and face to face courses

Roger Nielsen - Geosciences

Introduction  One of the greatest challenges faced by administrators in this difficult fiscal climate is deciding if and when to devote resources to the development of new courses. The advent of Ecampus has made this a particularly contentious process, made worse by the absence of any hard information regarding the impact of the consequences of their decisions. These decisions are often driven by the needs to generate income or provide increased access, and balanced against the need to offer sections of courses for majors – often using the same pool of instructors. If a department invests in the development of new Ecampus courses, or adds new sections in an effort to expand access or generate income to support other department functions, there are often severe financial consequences if the predicted enrollment does not occur. The response time of the system is too slow to change course as events unfold, leaving the unit in a hole, with under-enrolled Ecampus courses, a fiscal burden and in the position of having to cut sections in future quarters in order to balance their budget. Further, an understanding of the potential impact of the development of the total distance curriculum on Face to Face enrollment is critical to our allocation of faculty and space resources. In short, we must gain a more nuanced understanding of both small scale (course to course) and large scale (total Ecampus vs. Face to Face) if we are to efficiently plan future curriculum directions.

The goal of this project was to develop the database required to obtain that detailed understanding of the influence of Ecampus and Face to Face course offerings on enrollment. From this increased understanding we hope to develop an administrative decision making tool that will allow unit leaders and Ecampus to more effectively focus development funds and schedule course offerings. This evaluation required that we also compile information on a number of other course characteristics, and course changes that may impact enrollment trends, including course structure, instructor, credit and capacity.

Question - Using readily available information, can one reliably predict whether specific offering strategies make a difference in whether Ecampus and face to face courses reinforce one another or interfere with one another’s mission?

Scope: This investigation was limited to courses offered through Geosciences for the following reasons.

- Presence of a substantial number of Ecampus courses with equivalent face to face courses
- Large total number of courses - both Ecampus and face to face
- Coherent structure of enrollment data, yet diverse departmental mission with a data single source

Required Information: For such a tool to be useful, it must be based on data readily available to unit leaders and/or maintained by Ecampus. Otherwise, the time required to apply it would weigh against any gains to be made by its application. After consultation with a number of individuals knowledgeable with respect to records management in the Registrars Office, the Office of Institutional Research and University Archives, all the required information is available through the generally available Institutional Research documents, Data Warehouse, and generally accessible department documents. Less accessible additional items include the role of curriculum development, the level of instructor experience and the role of head advisors. That
information is generally available through departmental records, and is known to most unit leaders.

**Approach to the question:** Our basic approach was to collect past enrollment and student population numbers to predict future enrollment dynamics. After a first attempt at analysis using 3 years of data, it became apparent that we needed to understand the enrollment dynamics that predated the development of the Ecampus curriculum. Such an analysis required that we compile information for the past 9 years (2001-2010) and include information on some other additional constraints—specifically the role of course capacity and on limits on the number of laboratory sections. The first number is readily available through data warehouse and department records. The second number is less well known generally, but is information available at the department level.

**Data Types**
1. Enrollment
2. Course level
3. Course type (lab, bac core, face to face, Ecampus, required/majors)
4. Course level (100, 300)
5. Experience of instructor (with course, and total experience)
6. Number of other courses of that type offered that quarter
7. Quarter offered
8. Course Capacity

The range of information and a range of course type was chosen in order to provide a cross section of courses that might be in the potential profile of any department’s future offerings. In addition, other factors were found to be important indicators of future enrollment. The most important of these was course demand. This is a somewhat ambiguous quantity to measure. However, the metric we can see is the consistency with which a course reached capacity.

**A Brief History:** The Department of Geosciences began developing Ecampus courses in 2001-2 as part of an effort to project the unit’s expertise in GIS and spatial analysis. Towards that end, courses were developed in GIS techniques and Map interpretation. Those courses are now part of the GIS certificate program, which has been a successful means for student to obtain a coherent body of coursework in the field.

In 2003-4, the Department began to expand the range of offerings, with a focus on courses that would aid students with degree completion. Specifically, there was demand for baccalaureate -core courses that students could take off campus, or could be taken with a flexible schedule to accommodate a work schedule (transitioning to a job or together with internships). In addition, there were other niches of expertise that the department wished to project (e.g. National Park Interpretation). Finally, budget realities made the development of Ecampus courses attractive because it allowed the department to hire additional staff to develop and/or deliver the courses with staff that would not otherwise be available to carry the additional load.

As of 2009-10, the Department of Geosciences delivers over 40 sections of 25 different courses to over 1200 students (>3800 student credit hours). Courses range from 100 level physical geology lab to 300 level bac core synthesis to 300 level required majors to 500 level techniques courses. On line degree programs include collaborative efforts with Environmental Sciences, Fisheries and Wildlife and Natural Resources (BS), plus graduate certificates in GIS and Water Conflict Management.
During that time, there has been an ongoing debate within the department surrounding the development of Ecampus. This debate has centered on four issues.

1. The value of the learning experience in Ecampus courses
2. The balance of financial and educational goals represented by the Ecampus curriculum
3. The extent to which Ecampus courses pull students away from our face to face classes (zero sum game of students taking Geosciences courses) and therefore are a threat to the department’s face to face SCH totals.
4. The extent to which new Ecampus courses simply redistribute existing Ecampus students (zero sum of Geoscience Ecampus) and therefore do not represent a significant increase in revenue.

As in many departments, these issues merge into one another. It is to all our benefit to examine the actual data on enrollment trends to better address each of these issues individually.

**Preliminary Observations**

In the course of this investigation, we found that the enrollment trends for any specific course are a consequence of a complex set of intersecting influences. In almost all cases there were more than one or two variables that dictated whether a course would grow or decline in enrollment. Nevertheless, after detailed analysis it was possible to describe the most important parameters in each. In the section below, I have presented a number of case studies, beginning with the simplest and most general and moving to cases representing increasing numbers of controlling variables. In the end, I will outline some of the most important controlling factors which can be used to predict enrollment trends for Ecampus courses. Evaluation of that model will be based upon the degree to which it predicts enrollment for Ecampus and face to face courses.

As noted above, the Geosciences Ecampus curriculum has been focused at two goals 1) development of a GIS curriculum and 2) baccalaureate core and introductory courses. Our intent was to expand access to current students, and more importantly, expand the reach of the
department to a new student population. The Ecampus financial model allowed us to accomplish these goals using new instructional faculty and reallocation of duties of existing faculty – all funded by Ecampus enrollment.

We may begin the examination of the effect of this Ecampus growth on face to face courses and the degree to which we have simply re-allocated existing student enrollment by looking at the total enrollment of our large introductory and bac core courses (Fig. 1). These data document the rapid increase in total Ecampus enrollment since 2003, as well as the dynamic enrollment picture for the other large classes. This information also shows how fluctuations in each course are independent of one another. For example, Geo300 decreases dramatically after 2005 – then recovers after 2008. In contrast, Geo105 (Geography of the Western World) decreases earlier (in 2004) and recovers sooner. Geo102 (Introduction to Earth System Science) increases, then decreases during the equivalent period. Clearly, the collective enrollment trends are not directly related to the increase in the Ecampus enrollment.

A second important observation from the general enrollment data (Fig 1b) documents the relative growth of the Ecampus population compared to the face to face curriculum. From 2001 to the present, the face to face enrollment first grew, then declined then grew again after 2007. The total enrollment follows that trend – indicating that the growth of Ecampus enrollment was not a re-allocation of a fixed student population. Nevertheless, understanding the influence of the specific enrollment drivers requires that we look at enrollment trends for specific courses as a function of when they were offered.

![Figure 2](image-url)  a) Enrollment trends for face to face and Ecampus versions of Geo103 Geography of the World’s Oceans. Face to face sections were offered once per year in the Spring, Ecampus versions were offered 3 times per year, with enrollment caps of 50 students. b.) Enrollment trends for face to face and Ecampus versions of Geo335 Water Science and Policy. Face to face sections were offered once per year in the Spring, Ecampus versions were offered 3 times per year, with enrollment caps of 50 students.

We begin the detailed analysis with two courses that represent simple cases. These two examples, Geo103 Geography of the World’s Oceans and Geo335 Water Science and Policy are both baccalaureate core courses (Geo103 is a physical science/laboratory option and Geo335 is a Sci/Tech/Soc synthesis course) that were consistently at capacity prior to the development of the Ecampus version of the course, were normally filled weeks prior to the beginning of classes, and are characterized by low dropout rates after. In addition, both courses are used as basic core component for their degrees (e.g. Env Sci, Nat. Resources, Geosciences). Each course is offered once per year in a face to face format, and multiple times per year in the E-version (Fig. 2).
In both cases, the addition of section of Ecampus versions of the courses had no effect on the enrollment level of the face to face version of the course. The E-versions quickly reached the capacity levels set by the instructors and have stayed there. In addition, note that there appears to be no effect of offering the courses either sequentially or simultaneously. This information may be derived from the figure above by considering the relative position of the enrollment figures for the Ecampus and face to face points. Ecampus and face to face courses offered during the same quarter would be vertical to one another. Ecampus offerings offered in sequential quarters would be close together on the horizontal axis. Any influence of one on the other would be seen in a drop in enrollment in subsequent quarters – or in a drop in either the Ecampus or on campus enrollment.

An open question for many of the Ecampus courses is the total demand, and the degree to which the development of a new course expands the reach of the university to a student body outside the university core. The information presented in Fig 1b documents the total enrollment trends, but we must look at individual course data if we are to develop a sufficient understanding to develop when we can develop new courses.

If we look at the total enrollment for these courses (Fig. 3), we see that total (Ecampus plus face to face) enrollment increased significantly for both courses. The enrollment cap for the Ecampus version was set at 50 per term in order to keep the discussion board interactions manageable. This is the convention for Geosciences Ecampus courses, based on the experience of our instructors that more than 50 students makes it impossible to engage all members of the class in an active learning experience – critical for the distance format. In addition, the system provides few incentives for class sizes greater than 50 per term.

The next two examples represent two courses at opposite ends of the spectrum in terms of class level, but have been subject to a number of similar influences that bear examination. Both of these courses, Geo101 and Geo465/565 are laboratory courses, but otherwise have little in common in terms of material type or student population served. Geo101 is an introductory physical science course and Geo465/565 is a senior/graduate course in Geographic Information Science serving both Geosciences and several other majors on campus, as well as a number of students from outside the university.
graduate programs. Nevertheless, if we examine the enrollment dynamics, they appear at first glance to have some similarities to Geo103. Specifically, prior to 2004 both were oversubscribed compared to the available support (both in terms of space and GTAs).

Geo465/565 was one of the first courses developed by Geosciences for on line delivery. It has been delivered on line at least 3 times per year since 2002, with enrollment of 10 to 20 each quarter. The face to face version of the course is offered once per year in the Winter quarter. Both versions of the course have the same instructor, who has taught the class for the past 10+ years. The one exception is a sabbatical replacement in 2008.

![Enrollment Trends](image)

Figure 4 a) Enrollment trends for face to face and Ecampus versions of Geo101 Introduction to Physical Geology. Face to face sections were offered once per year in the Fall, Ecampus versions were offered twice times per year, with enrollment caps of 50 students. b) Enrollment trends for face to face and Ecampus versions of Geo465/565 Geographic Information Systems and Science. Face to face sections were offered once per year in the Winter, Ecampus versions were offered at least 3 times per year, with enrollment caps of ~20 students.

![Cumulative Enrollment](image)

Figure 5 a Cumulative annual enrollment for a) Geo101 – introductory Physical Geology and b) Geo465/565 Geographic Information Systems and Science. These numbers include all students for all face to face or Ecampus sections offered during each specific academic year (including summer).
The face to face sections of Geo101 were taught by the same two instructors until 2005, after which they were taught by a succession of different individuals. The drop in enrollment from 2002 to 2007 is a function of limitations on the availability of GTAs during the Fall quarter. Note that this predated the development of the Ecampus version, after which enrollment has remained constant. Most important, during this entire period, Geo101 remained at or close to capacity.

One additional parameter with potential for controlling enrollment in face to face courses is classroom remodeling. In order to comply with new guidelines for access, remodeling of classrooms almost always results in a significant reduction in capacity (5-20%). In 2008, the capacity of the classroom being used for Geo101 was reduced by remodeling, the result of which can be seen in the enrollment data for Geo101 as well as in a number of courses (e.g. 465/565 in 2004). This ongoing classroom modification across campus must be taken into account as we plan for future enrollment trends and staffing needs.

Potential impact for departments can be illustrated by considering the actions unit leaders must take in order to maintain the same level of enrollment or access in a specific course. Units are provided the choice of 1) adding another face to face section of a course (for which there may not be available resources) 2) finding a larger venue – in an environment where such classrooms are extremely short supply 3) add Ecampus versions of the courses – which is possible only where expertise and resources (e.g. computer servers/software) are readily available. Comparing Geo101 and Geo465/565, the expertise required to deliver Geo101 is much more readily available in the instructor pool (although excellent instructors are difficult to retain hence the turnover) and there are fewer computer and material resources required. Therefore, the department is able to increase access by adding Ecampus sections up to the limits of demand.

As we can see from the cumulative enrollment results, the Ecampus sections provided access to an additional 100 students per year in Geo101. Increased access to Geo465/565 has hit a plateau, limited by the availability of the primary instructor (who is teaching the Ecampus version on overload. As noted above, addition of those sections had little discernable influence on enrollment in the face to face sections. Neither did changing instructors, other than a small one time drop in enrollment in Geo465/565 during a sabbatical by the primary instructor. This is indicative of the strong, ongoing demand for all versions of these courses.

The next case is for a baccalaureate core synthesis course, Geo307 National Parks Geology and Preservation. This course was developed almost 10 years ago, first as a face to face course, then a couple of years later as an Ecampus course. Enrollment in both was reasonably strong through the first few years, which encouraged the department to retain a sabbatical replacement instructor for the Ecampus version of the course in 2005-6. The result was anomalously low enrollment, followed by slow recovery over the next four years. The face to face course returned to pre-sabbatical levels almost immediately. In this specific case, Geosciences chose not to offer the Ecampus version simultaneous with the face to face version in order to avoid duplication. The result was the opposite of that intended. In addition, the department chose not to offer the Ecampus version of Geo307 in AY2010. Enrollment in the face to face version was limited by the size of the classroom selected – and since there is no direct incentive for increasing face to face class size (e.g. by moving the class to a larger room), the net result was a loss of access and a loss of potential income.

What may make this case distinctive is the specific instructor, who is an acknowledged expert in this field. However, we must ask “do the students know this?” “To what level are they aware at this level of detail?” “If they are not driving these trends, who are the groups that are?” One answer to this question may be obtained by looking at additional examples and considering the
number of potential sources of information students have at their disposal when they make choices, and the degree to which they have choices. In this case, Geo307 was one of several choices that would satisfy degree requirements (e.g. it was not a specific requirement for any degree). Are such courses particularly susceptible to enrollment fluctuation?

![Figure 6 Enrollment trends for Geo307 National Parks Geology and Preservation.](image)

A course with a similar profile is Geo308 Global Change and Earth Sciences (bac core synth). This course is also delivered in the face to face version by a world leader in the field. It has filled to capacity each year for the past decade, usually several weeks prior to the beginning of classes. Three years ago, an Ecampus version of the course was developed by a faculty member in the same discipline as the primary faculty member (e.g. a different scenario from Geo307 where the Ecampus course was developed by the primary instructor). The results were initial low enrollments (equivalent to those seen by the sabbatical replacement for Geo307). However over the next couple of years, enrollment increased to the desired capacity for the Ecampus version of the course.

![Figure 7 Enrollment trends for Geo308 Climate Change and Earth Sciences](image)
One other observation to be made from the data was that the face to face version of the Geo308 failed to fill to capacity for the first time in Winter 2009. This raised the question “are there specific limits to the populations served by specific courses – or collection of courses?” It is apparent that enrollment in each course type will depend on the level of access as well as the demand for any course. This is a complex problem that combines the role of off campus students and Ecampus, plus the dynamic picture of enrollment changes in both on campus and on line degree programs.

This question can be addressed by examination of the enrollment figures for specific classes of courses offered in the same quarter. Enrollment in all Geoscience courses indicate that enrollment in the face to face sections has increased – however a somewhat unexpected dynamic has appeared in the data (Figure 8). Specifically, achievement of enrollment goals or caps appears to be a function of the course number.

![Figure 8](image)

This relationship exists only within similar course types (e.g. 300 level bac core course) – and therefore compares courses that compete with one another on an approximately equal footing. The phenomenon underlying this first order relationship may be related to the means by which students select their courses. Many students simply run down a list within a given discipline until they find a course that is open. This is clearly not the only means of course selection – however the evidence suggests it is of significant impact and justifies further examination. For example, it is evident that equivalent level courses that are part of large degree programs are not part of this trend.

One example of such a course is Geo 365 (Introduction to GIS). This course has been part of the core curriculum in Geography and high demand service course for several years. The Ecampus version was developed to increase access, and as part of the distance GIS certificate program. Enrollment has been extremely strong in the face to face versions, and has stabilized after initial fluctuations in the Ecampus version. This increased stability is indicative of the increased demand on the course from the students participating in the GIS certificate and Environmental Sciences programs.
Another course that has seen increased demand due to its role in distance programs is Geo221 (Environmental Geology). This course was initially designed as a 3 credit introductory laboratory course for engineering students. However, with time, the student population being served by the course changed, moving towards Natural Resources and Environmental Sciences. Those students needed a different mix of content, and a stronger core. In response the course was reconfigured to 4 credits, and was simultaneously developed as an Ecampus course to serve the distance population. As one can see from the trends (Figure 10), enrollment dropped in 2003-5 as the previous student group moved away from the old version of the course. After the Ecampus version of the course was developed in 2007, enrollment was initially sluggish, but increased to capacity after 2 years. The face to face course has been limited in enrollment by a lack of GTA support (which is self funded in the Ecampus version). The result is that the net growth of the course has been significant (Figure 10), but focused within the population of distance students (K. Yalcin pers. comm.).

In contrast to the example above, a number of on campus versions of Geoscience courses have seen significant drops in enrollment in the past few years. The coincidence of the development of Ecampus versions of the course and enrollment reduction has raised the question of cause and effect with some of our faculty and unit administration. What, if anything, do these courses have in common that separates them from courses that have seen enrollment increases?
If we look at the three courses that have seen the greatest changes, Geo 102, Geo300 and Geo380, we see that all are courses that have been part of the Geosciences curriculum for many years (>10). Apart from that, their focus and type are all different. Geo102 is an introductory physical science laboratory course, Geo300 is a large baccalaureate core synthesis course (satisfies two synthesis categories) offered multiple times each year and during the summer, and Geo 380 is a modest size baccalaureate core synthesis course.

Examination of the enrollment data (Figure 11) illustrates a number of similarities in the general trends for these three courses. All are characterized by a drop in enrollment during the past five years, and all had Ecampus versions developed since 2004. However, each is distinctive in a way that demonstrates the difficulty of directly linking any one controlling parameter to the drop in enrollment. In the case of Geo380, the course was not offered during AY 2006 (sabbatical year of the primary instructor for the face to face version). There was a temporary instructor change in Geo300 in 2009, and a permanent change in instructor for Geo102 in 2007. The Ecampus versions of these three courses are taught by different individuals than the face to face versions of the courses. For Geo300 and Geo102 it is a single individual and for Geo380 it is two different instructors alternating duties (since 2006). All three have sustained enrollment in the Ecampus versions, which are offered at least twice per year.

In detail, in spite of these general similarities, it is apparent that the declining enrollment trends did not coincide with the development of the Ecampus course, nor with the instructor changes. In fact, the enrollment trends for the three courses went in three different directions following the change. Therefore, we must look deeper in each case to determine if there is any
common driving mechanism for the drop in overall enrollment, or if there were distinctive individual reasons for the declining enrollment in each case.

The total enrollment data may be used to help us to understand the degree to which the Ecampus course might be pulling students away from the face to face session and the degree to which the two form serve the same student population. The results (Figure 12) indicate that in all three cases – to a greater or lesser degree - total enrollment drops along with enrollment of the face to face sections. Only in the case of Geo102 could one argue that 2005-7 was a high enrollment anomaly – after which we have now returned to normal. That conclusion would require that we presume that the Ecampus version of 102 is pulling away 100 students per year, and that there is something unique about Geo102 that makes it behave differently from the otherwise identical Geo101 and Geo103.

Confirmation of one hypothesis or the other requires further observation of enrollment trends. If one considers the enrollment in each form of these courses independently, one can see (Fig 11, 12) that the enrollment of the Ecampus version of 102 was paired with an equivalent decline in the face to face version. In the case of Geo300, the expansion of the Ecampus enrollment was simultaneous to a more dramatic drop in the face to face enrollment – with total enrollment dropping by 400 students per year. This was followed by an increase in the face to face version of the course – with fixed Ecampus enrollment. Finally, the face to face version of Geo380 dropped dramatically beginning in 2003 – before the first Ecampus section was taught. Further, limitations on the enrollment of the Ecampus version of the course did not result in increased
enrollment after 2007. In addition, as noted above, it is apparent that not offering Geo380 as a face to face course in 2006 had little or no effect on the enrollment of the Ecampus version (delivered by the regular Ecampus instructor). This data, considered collectively, supports the contention that they were serving separate groups and/or an increased student body (all assuming quality instruction measured by course and peer evaluation in both versions of the course).

If we consider the date of some of the significant changes in enrollment in the face to face sections, we see that occurred around 2004-5. This was coincident with changes in the Natural Resources degree, and its advising structure. The specific links are unclear, however, based on conversations with the instructors of Geo221 and Geo380 at the time, the student body of the course changed suddenly at time. This suggests that enrollment in the large face to face courses may be more susceptible to other controls such as changing degree requirements and advising.

**Comparison of consecutive and simultaneous enrollment**

As noted in the introduction, a primary goal of this investigation was to evaluate the degree to which Ecampus course offerings might influence one another’s enrollment or be influenced by simultaneous or consecutive offerings. This can be broken down into a number of different criteria to examine. First, we can use the average enrollment of all offerings of an Ecampus course as the baseline (overall average). Second, we can examine the average enrollment of Ecampus sections that were offered in a quarter following a quarter where the same Ecampus course was offered. If that “After Ecampus” average is less than the overall average, then that would be evidence that consecutive offerings were depleting the student base. Third, one can compile an average of the enrollment of Ecampus sections that were offered in quarters “After on Campus” face to face sections. Finally, we can compile averages for enrollment of Ecampus sections that were offered in quarters where Ecampus and on Campus versions of the same course were offered “simultaneously”.

![Comparison of enrollment averages for Ecampus courses offered through the Department of Geosciences. Averages represent enrollment for Ecampus sections taught during any quarter, excluding the first quarter the course was offered. “After Ecampus” represents the average enrollment of that specific Ecampus course for any quarter it was offered in a quarter where that specific course had been offered the previous quarter. “After On Campus” represents the average enrollment for a specific course for any quarter it was offered as a face to face course. “Simultaneous” represents the enrollment of an Ecampus course during a quarter when both Ecampus and face to face versions of the course were offered.](image-url)
The results (Figure 13) illustrate a lack of any dependence on when an Ecampus course is offered relative to its face to face equivalent, or whether it was offered in sequential quarters. Note that this is somewhat dependent on the course reaching a specific capacity – and the capacity for each course has been set at different levels by different instructor for different reasons. Nevertheless, across 9 different courses for which there is comparable data, there is no dependence of when a course is offered. This implies that – to a first order – the enrollment in each section is independent.

There is clearly some limit to this behavior – there not being an infinite number of students available. However, these observations suggest that once an Ecampus course is established, and it has become part of established degree programs, the availability of that course to an off campus community does establish an additional independent student body that operates according to its own enrollment dynamics.

**Summary of Observations**

Ecampus courses that reach enrollment capacity most quickly are for lower division courses whose face to face equivalent has reached capacity early. This is the least surprising of our findings.

In cases where there is not a large, “at capacity” face to face course, successful Ecampus courses are characterized by those that satisfy degree requirements for on line degrees that have a professional advisor (example Geo221, Geo335).

Courses that are part of a menu of options (e.g. are not specifically required for a degree program) are particularly susceptible to enrollment fluctuation (e.g. Geo307, Geo308).

Enrollment in Ecampus courses often take 2-3 years to stabilize after initial development of the course.

Negative enrollment anomalies, particularly in Ecampus courses are sometimes (but by no means always) associated with sabbatical replacements. There are few anomalies in Ecampus enrollment that are not associated with changes in instructor (assuming evidence of quality performance).

There is evidence that courses within a specific type compete with one another within a specific quarter. Student criteria apparently include course number within type (e.g. within 300 level courses).

The driving force for enrollment is obviously different with different course type. For most baccalaureate core courses, students have had a wide range of options. How students decide on their course selections remains unclear. However, there is some evidence that advisors – particularly the full time professional advisors (as opposed to faculty advisors) – may have played an important role in Ecampus enrollment trends in the past.

**Initial Conclusion**

Comparison of the enrollment in Ecampus and face to face sections of the same course demonstrates that they are largely independent of one another. This suggests that they serve different populations of students. However, the size of the populations is different and dynamic, and the sample number remains small and requires that we continue observation of simultaneous and sequential enrollment events. The internal dynamics, indicate that there are competitive forces that may be confused for cross-type competition.

**Observations and Planned Communication/Distribution for 2009-10**

The number of examples represented in the averages representing sequential and simultaneous offerings (Figure 13) are small (sometimes representing only two or three cases).
Nevertheless, the new data from 2009-10 continue the existing enrollment trends – indicating that the “enrollment drivers” have remained the same in most cases.

The role of advisors will be investigated by engaging the professional advisor groups in the College of Science, Agriculture (particularly those that work with Fisheries and Wildlife), and Natural Resources. They will be asked how they structure their advice with respect to Ecampus and face to face courses, as well as how they advise them within the selection of courses. These meetings will provide an opportunity to present the content of this report, and for us to exchange information on enrollment trends.

**Recommendations**

As noted above, the goal of this report was to develop a set of decision making tools to help Ecampus and units plan their investments more effectively. The most important constraint on that set of tools is the availability of detailed information on enrollment trends, and time to interpret the information. In the section below, I have outlined my initial recommendations.

**Sabbatical Replacements**

The use of sabbatical replacement instructors, particularly for Ecampus courses should be used only if the course must be offered for degree completion (e.g. students will not be able to graduate without a specific course offered at a specific time).

**Develop the role of Ecampus as part of the unit’s long range plan**

Before making any decisions with respect to design or scheduling of any set of courses, it is critical that the unit decide on their educational or fiscal priorities. What is the unit attempting to accomplish with the development of their Ecampus curriculum? If the goal is to develop on line graduate certificates, one will develop a very different curriculum than if one is attempting to broaden the reach of the department to new audiences or to find extra seats in lower division courses - or generate income for the department. The observed 2-3 year run up time to full enrollment in many Ecampus courses will be easier to build in to a more comprehensive plan if everyone understands the long term goals.

**Develop new or use existing tracking tools for enrollment**

The Ecampus courses that appear to have the greatest immediate success in attracting new enrollment are those from courses that are part of established degree programs, and have exhibited excess enrollment in face to face sections. However, that enrollment is driven by the educational needs of the students – e.g. their need to satisfy a specific degree goal, whether it is a physical science requirement or a specific majors requirement. Long term success is dependent on understanding how each course fulfills core educational needs of the students. These enrollment figures bear that out – courses that fulfill student needs do better in the long run than those that are developed based largely on faculty interests.

Tracking that involves interviews of student preferences – apart from student evaluations – would help greatly in developing more intentional means for guiding students into courses (as opposed to “lowest number”).

**The role of advisors**

An open question remains the role of the cadre of professional advisors. Programs should develop better lines of communication during and after curriculum revision in order to clarify the goals of a program’s available courses. The initial information suggests that the level of
understanding among the advising staff is extremely uneven, particularly with respect to the Ecampus curriculum.

**Accomplishing departmental goals**

The enrollment data presented above strongly supports the contention that Geosciences expanded both access to courses and now serves a broader student community than it did prior to the development of the Ecampus curriculum. In addition, that growth has not come at the expense of on-campus face to face course enrollment. Our ability to accomplish similar goals in other units will depend on careful planning and cooperation between and within units. A broader vision and a more complete understanding among the faculty of the goals and incentives we apply to every aspect of our curriculum, is critical to the future success of the Ecampus curriculum.