Davis Division Academic Senate

Request for Consultation Responses

Prerequisite Enforcement System

December 16, 2014

The Campus Registrar provided the subject document that lays out specifications for a prerequisite enforcement system. The Academic Senate requested an opportunity to review and provided feedback concerning the specifications and implementation timeline prior to commencement of programming. The system, when developed, proposes to enable and streamline the process faculty use to enforce course prerequisites.

Council of School & College Faculty Chairs (AGRICULTURE)

December 16, 2014 5:02 PM

This is a good idea and we support this effort.

From an implementation perspective, there is concern that we have adequate time to test the system so as to avoid chaos and frustration in the case the system doesn't work as envisioned.

Council of School & College Faculty Chairs (BIOLOGICAL SCIENCES)

December 10, 2014 9:25 AM

In general this is a good idea. It is important that departments have time to revise the prerequisites of courses before this enforcement goes into effect. It is important that instructors can opt out of enforcement.

Council of School & College Faculty Chairs (LS: MATH/PHY SCI)

November 6, 2014 3:35 PM

Initial response:

1. Under the opt-in option, the proposal (p.4) states that a student who does have a prerequisite would be asked if they think "they have satisfied this prerequisite and would like to send a request to the instructor foe evaluation and decision," and goes on to give students an opportunity to explain "how they think the prerequisite has been met." This is much too narrowly phrased. A student should also be able to ask for an exception to the prerequisite -- for instance, "I'm taking a related course concurrently"; "If you look at my record, I'm very good in this field, and I think I can catch up with independent reading"; "I want to take this course for breadth, to get a flavor of this field; I may be a little lost at times, but I'd like to take that risk." Students should be asked much more broadly whether they want to ask for an exception, and given the option to provide the justification they think is appropriate.

2. I assume a student who did not meet the prerequisites could, under any option, still add the course with a PTA number from the instructor. Is this correct? It should be stated explicitly.

Added considerations raised at L&S Executive Committee meeting:

1. Many departments have not updated their course prerequisites for years. It is vital that they be given time to do this -- which is not a quick or trivial task -- and that the changes be put into place -- also not trivial -- before the new system is implemented.

2. The proposal calls for instructors to be able to opt out or to opt in with exceptions only before the start of registration, which is several months before the beginning of each quarter. Some departments don't even know who will be teaching a course that far in advance. There needs to be a clear system to handle courses taught by "the staff."

3. Some discussion may be needed about the interaction of this system with the new budget model. Departments may be tempted to automatically opt out because of the strong incentives to maximize enrollments, and some deans may pressure departments on this matter. How do we ensure that departments are not penalized for choosing to enforce prerequisites?

Courses of Instruction

January 6, 2015 8:27 AM

Members of the Committee on Courses of Instruction (COCI) have reviewed the proposal for a Prerequisite Enforcement System from the Campus Registrar. The comments reported here reflect the opinions of members of COCI as well as members of the course approval committees of the College of Agricultural and Environmental Sciences (CAES) and the College of Biological Sciences (CBS), whose chairs are ex-officio members of COCI.

In general, committee members found the proposal to be thorough and well thought-out and the program it describes to be an important and much-needed step in clarifying and enforcing prerequisite course requirements on our campus. The flexibility of the proposed system and the preservation of instructors' abilities to make decisions about the stringency of prerequisite enforcement for each of their courses and students' abilities to request exceptions are particularly appreciated. There were, nonetheless, some concerns and questions about the specific implementation plan for the system, and the committee therefore offers the following recommendations:

1) In the Opt In With Exceptions option, it will be important to enforce a quick turnaround time for instructors to make decisions on student petitions. If the instructor is slow in deciding which students' petitions to honor, there could be a situation where underqualified students are taking seats away from qualified students.

2) Some courses accept concurrent enrollment in a prerequisite as an alternative to prior completion of a course, and the system should be enabled to accommodate that type of "co-requisite" enrollment option.

3) In order to help ensure fair and consistent treatment of all students, instructor of multi-section courses (e.g., the same course offered multiple times each year by different faculty) should be encouraged to consult with one another so that the same level of prerequisite enforcement is applied to all sections of the course; departments could play a key role in facilitating such discussions.

4) The period of February – March 2015 may not be long enough for departments to review the prerequisite lists, rules, and interpretations collected by the Registrar's Office and make changes, especially if some of those changes (i.e., prerequisites for particular courses) have be routed through the college course committees, which is nonetheless important, since sometimes prerequisite changes affect other courses within the college. An extension of this period to at least a full quarter should be considered.

5) In order to help instructors and departments make informed decisions about the appropriate prerequisites and levels of prerequisite enforcement for each course, the Registrar's Office should be asked to generate and provide to faculty data for previous years, showing which students had and had not met the existing prerequisites for past course offerings. Faculty would then be able to assess how meeting and not meeting prerequisites had affected student performance and infer the likely consequences associated with enforcing any particular prerequisite for any particular class in the future. Such data should be provided before instructors make decisions about changing any prerequisites and about the level of enforcement to select for each of their courses. The need to allow enough time to generate and review such data increases the concern discussed in point 4 above.

6) Even if all of the recommendations above are implemented, the new system as described may have unintended and/or unforeseen consequences at least for some courses and instructors, and full-scale adoption in Spring 2016 might result in widespread dissatisfaction among students and faculty. The biggest concern is that, because errors and/or misunderstandings might occur at

multiple levels, adoption of the Strict Opt In level of enforcement without opportunities to first test the system could result in students being automatically disenrolled from courses when they should not be, and they would have no easy means of recourse. In addition, some faculty members may wish to obtain current data on the prerequisite status of students in their courses (in addition to the retroactive data mentioned in point 5) without allowing any automated disenrollment or messaging to students at the time of registration. This could be especially true during the first year or two of implementation of the new system and during the first year or two in which any new courses are offered in the future.

In consideration of the issues discussed above, the committee recommends the following modifications to the proposal: The new system should have four options: Strict Opt Out, Opt Out With Data, Opt In With Exceptions, and Strict Opt In, but only the first three should be made available for the first year of implementation. "Opt Out with Data" would allow an instructor to receive the prerequisite data about students enrolling in his or her courses but no action on the part of the student or the instructor would be required for any student to enroll in the course, regardless of prerequisite status.

Graduate Council

December 11, 2014 12:20 PM

Response continued on next page.

December 8, 2014

RFC: Prerequisite Enforcement System

The Graduate Council, based on a memo from its Courses Committee, and discussions at its meeting on December 5, 2014 and from electronic communications and voting, considered the proposed prerequisite enforcement system proposal RFC.

Graduate Council recommends:

1. In order to provide enough time for communication between students and course instructor, an opportunity for students to challenge the extent to which they meet the prerequisites, before the beginning of "enrollment window of time" should be considered. Such an opportunity can simplify the actual process of enrollment to classes. The process will allow communication with the instructor, if needed.

2. "Opt-in with Exceptions" the process that is described in the proposal seems to be complicated and lengthy (in potential). During the time students communicate with course instructor they remain "enrolled" to the course. The latter has the potential of preventing students that meet the prerequisites from becoming enrolled if course size limitation has been met. It seems that this procedure presents a difficulty and has to be revised. It seems that, as described in comment 1 above, an early opportunity to challenge the issue of prerequisites might help.

3. The default option for graduate courses should be, "Prerequisite enforcement with the ability to generate an automated message from the student to the instructor requesting an exception," (the second option on page 3 of the proposal), in contrast to the current proposal for all courses, that prerequisite enforcement be the default (the first option on page 3; however GC feels that that the first option of proposed opt in could be appropriate for undergraduate courses). Graduate students tend to come to UC Davis from a wider set of national and international institutions than undergraduates, so while many of them may have taken the appropriate equivalent prerequisite courses, an automated system would not accurately determine this because of inadequate formal articulation. Therefore, the determination of prerequisites is best left to dialogues between the instructors and students. This dialogue generally would involve the student or other institution providing course description documentation such as syllabi to the instructor.

4. A related possibility could be for the enforcement system be developed to have the second option noted above in (3.) automatically invoked for graduate students taking any class, irrespective of whether the class be at the lower division, upper division, or graduate level, for the same reasons cited above. This method would be tied to who is taking the course (graduate or

undergraduate student) rather than the level of the course (lower division, upper division, or graduate).

Sincerely,

Kyaw Tha Paw U, Chair
Graduate Council

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C: Gina Anderson, Academic Senate Executive Director

Information Technology

December 22, 2014 2:59 PM

I am happy that Campus Registrar did detailed planning of this new development (prereq enforcement system). Perhaps they (registrars office) can exchange experience with UCD College of Engineering staff (Dean's office) as this college did implement similar tool few years back, and that tool has been used by college faculty, so there is already some experience...

Best regards, Boris

Additional comments provided following committee electronic deliberation:

The committee believes that this proposal offers an improvement in the way that the university manages the issue of prerequisite classes. It seems, however, that the default option would better ensure deserved enrollment for students if it was set at "non-enforcement of prerequisites", for at least the first two years of the new system, or until instructors are able to identify what prerequisites remain necessary for their courses and what effect not taking these prerequisites have on students' performances. The proposed default "prerequisite enforcement" is problematic because some classes change over the years and no longer require the prerequisites listed, but the prerequisites are not changed due to the difficulty of making this change, thus many students would unnecessarily be declined enrollment if the professor failed to change the class' setting. The second option, "prerequisite enforcement with the ability to generate an automated message from the student to the professor requesting an exception", is also not ideal because the instructor may not be available for communication in the necessary timeframe due to sabbatical, travel, etc., and it would result in the student being dropped from the class. A possible alternative would be to send an instructor a list of students who have not met the prerequisites and give him or her a deadline to accept or reject each student with the understanding that no action will result in the students being accepted into the course.

An alternative action to this proposal that may be more effective in guaranteeing that students graduate in a timely fashion and take the correct courses in the proper sequence, would be to put a registration hold on all students after they reach 90 units, which may be released after they meet with an advisor and plan out their courses until graduation. It appears that technology should be available that would allow students to plan out their "critical path" including prerequisites before sitting down with an advisor for approval. This would lessen the administration involved in the Prerequisite Management Proposal and have an equal effect on guaranteeing that students take the correct courses in the correct order in a reasonable amount of time.

Undergraduate Council

December 15, 2014 2:28 PM

Response continued on next page.

Undergraduate Council Response to Prerequisite Enforcement System:

Undergraduate Council's principal concern about the Prerequisite Management Proposal is about how and when departments/majors convert some existing prerequisites into the new "recommended" category. This is not a topic that the OUR's proposal can or should cover. Rather, this is a responsibility of the Senate. While we wait for a new ICMS to become operational – one with the capacity to have programs change prerequisites without the involvement of COCI – we need to get the word out to departments, so that they can have their lists of recommended/ true prerequisites ready sooner rather than later. This coming Winter Quarter, rather than after the new COCI system becomes operational, perhaps one member of UGC and one member of COCI could make a joint presentation to the regular meetings of groups of chairs.

But UGC does have some issues for the OUR about the proposal itself. It seems a new page (or part of a page) in Banner needs to be designed before anything else can happen. The proposal does not include this step. This page would complement (or be part of) the current regular submissions of courses, namely ZSADEPT. It goes without saying that those who submit ZSADEPT must also be the staff who will submit information about the enforcement of prerequisites. If individual faculty could correspond with the OUR, chaos will ensue.

The OUR's proposal allows for three degrees of enforcement: Strict Opt In; Opt In With Exceptions (messages from students, that is); and Opt Out. UGC has major reservations that this third option, which is non-enforcement of prerequisites, should be included. First, prerequisites have been set by all the faculty in a major as part of the major's overall structure. Academic freedom for an individual faculty member does not extend to ignoring the structure of a major, any more than it does to offering substantively different material than what was told to COCI to be the course's content. Second, an essential course taught multiple times a year (and even each Quarter) by a number of instructors should have a consistent policy about prerequisites. Contemplate the situation if some instructors enforce the prerequisites while others do not. At best, students will be confused; at worst, students will seek particular sections for poor reasons. Third, many prerequisites are tiered. An example from Managerial Economics illustrates the problem. ARE 171A, Financial Markets, has ARE 106, Econometrics, as a prerequisite, and that course in turn has STA 103, Applied Statistics for Business and Economics, as a prerequisite. Should an instructor for ARE 176 not want to enforce the prerequisite ARE 106, there would be no enforcement of STA 103 either. The whole tier of prerequisites could be included explicitly on the Banner page, but that flexibility comes at a cost of complexity. And what would happen in a situation such as this, with ARE 171A as the example? A strict enforcer could deny registration to a student whose ARE 106 instructor did not enforce the STA 103 prerequisites. Fourth, the degree Opt In with Exceptions allows an instructor who wants to be very loose to allow almost every student into the course, but at least students will understand that they do not have the prerequisite.

Should this third option of Opt Out be included, UGC recommends that the registration software nonetheless record those students who do not have the prerequisites. Analysis of students' performance in that course might reveal that the prerequisite was important. Or it might reveal that the prerequisite mattered little, in which case the prerequisites should be converted to recommended. Such analysis could be conducted by departments/majors with their access to every student's record, but the analysis would be much easier were the key courses recorded by the registration software.

Instead of the degree of enforcement Opt Out, UGC suggests that a third option might better be spent on "Concurrent Registration." (In the example from Managerial Economics above, this would amount to ARE 106 and ARE 171A being taken simultaneously.) These pairs could be accommodated under Opt In with Exceptions, but perhaps this third official degree would deal with the students who say they will take a prerequisite concurrently with a main course but after the start of a Quarter drop the prerequisite. An individual instructor of the second course wouldn't know of this broken promise, but the registration software for Concurrent Registration could trigger appropriate warnings.