

Third Year Seminar
Davis Honors Challenge
University of California – Davis



Time to Degree: A Closer Look at Course Availability

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Prepared by:

Courtney Beed

Parisa Manteghi

Ruth Rayikanti

Blavir Sukhorukov

Sponsored by:

Dr. Fred Wood

Vice Provost – Undergraduate Studies

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Charge:

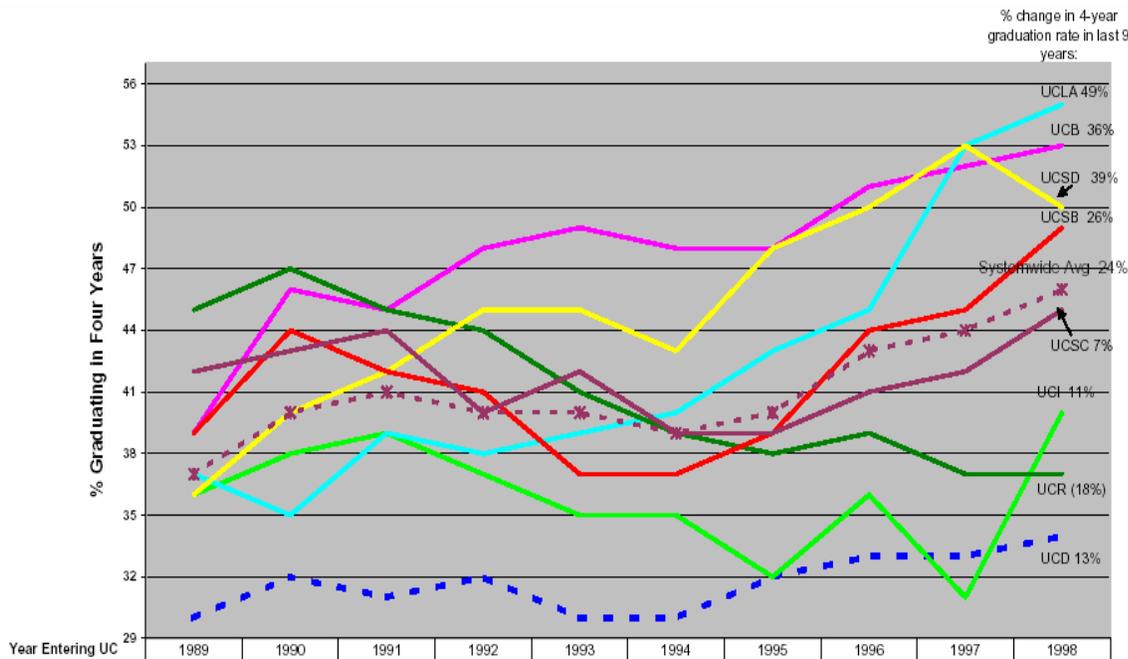
Assess the impact of course availability on time-to-degree. This would include data regarding graduation rates, a student survey to determine if availability of courses or other factors are preventing graduation in four years. Survey major advisors to see if class availability is a viable problem for decreased 4 year (for high school admits) and 2 year (for transfer students) graduation rates among UC Davis students. Research highly impacted courses and waitlists for such courses. Draw conclusions and make possible recommendations based on results and correlation of data gathered from surveys, advisors, and research.

Introduction:

Time to degree has become a growing concern at UC Davis in the last few years. Not only does the university have a vested interest in graduation rates, but so does the public, the state government, parents, and students, not to mention the next generation of Aggies.

Time to Degree is clearly a very complex issue and it has been determined that no one factor has contributed to the steady graduation rates incurred over the last decade. Because of the complexity, we took an in depth look at course availability and how it affects graduating on time. Graduating in four years is defined as having started the day you enter college and ending on the day you finish your degree and requirements.

We further looked into whether impacted classes were prerequisites and/or major requirements. From that research, we conducted case studies on three departments. It is our hope that our data, research, and recommendations will aide in beginning to improve the four year graduation rate at the University of California, Davis.

Background:

The above graph is for the UC Four Year Graduation Rates of all the campuses from the years 1989-1998. The dotted line in the middle is the UC average and it has an upward trend. UCLA tops the list with the highest rates followed by UC Berkeley. UCLA invested a lot of money into their advising services, which could account for their sudden increase in rates. At the very bottom is UC Davis with an overall percentage change of 13. Most of the other UC schools all have increasing rates; whereas, the curve for Davis has remained fairly constant.

There have been many efforts made to address how to improve our graduation rates. My group is exploring the extent to which course availability could be factor in these low rates. Although our school may have a low four-year rate, it, in fact, has one of the highest six-year cumulative rates of approximately 79% beating out the national average of 54%. Even though our students may not graduate in four, they are, however, finishing strong and in larger numbers to obtain their respective degrees.

Previous Findings:

Last year, the Davis Honors Challenge Time to Degree team conducted a campus surveyed administered through Student Affairs Research and Information asking 296 students:

What do you think is the number one reason UCD students stay longer than 4 years?

- Change/addition of major(s): 119 responses

40.20 %

- Academic workload: 72 responses

24.32 %

- Difficulty with enrolling in courses required for major: 46 responses

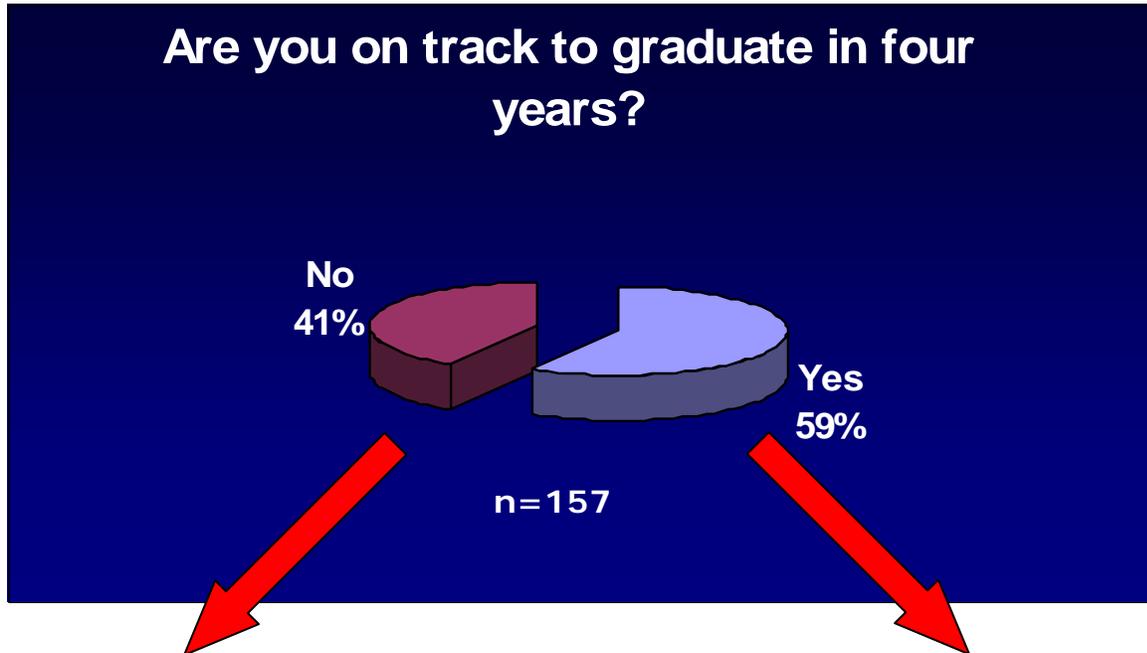
15.54 %

**Information Provided by 3rd year DHC “Finish in Four” 2005 Survey administered through

SARI**

This team focused most of their efforts on evaluating advising services. The focus of our study is with respect to the third response from the survey: difficulty with enrolling in course required for majors.

Survey Data and Analysis:



In conducting our survey, we surveyed four areas on campus: Sciences, Engineering, Social Sciences, and Humanities. We posed the question: Are you on track to graduate in four years? 59% of the students surveyed said they are on track to graduate on time while 41% said they would not graduate in 4 years. We asked both those who are graduating on time and those who are not: “Has course availability kept you from taking a required class for your major?” Of those graduating on time, a little more than 50% said course availability kept them out of a required class. Of those not graduating on time, 66% said that course availability kept them out of a required class. As you see, those who are not graduating on time have greater difficulty registering for required classes. This data correlates the fact that course availability is one of the reasons students are not graduating on time.

Engineering:

-Are you on track to graduate in four years, from the start of first day of college?

Answer Choice	# of Responses	% of Total
Yes	15	47
No	17	53

-Those who are on track:

Questions:	Answer	# Responses	% of Total
*Has course availability kept you from taking a required class for you major?	Yes	6	40
	No	9	60
<i>*If answered yes to previous, was the class a prerequisite for another class?</i>	Yes	3	50
	No	3	50
Has a particular professor/early class prevented you from taking a course required for you major?	Yes	4	27
	No	11	73

-Those who are **not** on track:

Questions:	Answer	# Responses	% of Total
*Has course availability kept you from taking a required class for you major?	Yes	10	59
	No	7	41
<i>*If answered yes to previous, was the class a prerequisite for another class?</i>	Yes	8	80
	No	2	20
Has a particular professor/early class prevented you from taking a course required for you major?	Yes	10	59
	No	7	41

Engineering majors have always had problems graduating on time. What is important to notice here is that course availability does not seem to be a major problem in the department's graduation rate. Also those not graduating on time seem to be pickier towards professors and class times. The trend of those not graduating on time being picky about class times and professors seems to be evident across all majors.

Humanities:

-Are you on track to graduate in four years, from the start of first day of college?

Answer Choice	# of Responses	% of Total
Yes	24	63
No	14	37

-Those who are on track:

Questions:	Answer	# Responses	% of Total
*Has course availability kept you from taking a required class for you major?	Yes	16	67
	No	8	33
<i>*If answered yes to previous, was the class a prerequisite for another class?</i>	Yes	6	37.5
	No	10	63.5
Has a particular professor/early class prevented you from taking a course required for you major?	Yes	13	54
	No	11	46

-Those who are **not** on track:

Questions:	Answer	# Responses	% of Total
*Has course availability kept you from taking a required class for you major?	Yes	10	71
	No	4	29
<i>*If answered yes to previous, was the class a prerequisite for another class?</i>	Yes	7	50
	No	7	50
Has a particular professor/early class prevented you from taking a course required for you major?	Yes	8	57
	No	6	43

Both those graduating in four years and those that are not seem to state that course availability is an issue. Therefore course availability is not the issue of Humanities majors not graduating on time.

Social Sciences:

-Are you on track to graduate in four years, from the start of first day of college?

Answer Choice	# of Responses	% of Total
Yes	28	61
No	18	39

-Those who are on track:

Questions:	Answer	# Responses	% of Total
*Has course availability kept you from taking a required class for you major?	Yes	16	57
	No	12	43
<i>*If answered yes to previous, was the class a prerequisite for another class?</i>	Yes	6	37.5
	No	10	62.5
Has a particular professor/early class prevented you from taking a course required for you major?	Yes	18	64
	No	10	36

-Those who are **not** on track:

Questions:	Answer	# Responses	% of Total
*Has course availability kept you from taking a required class for you major?	Yes	14	77
	No	4	22
<i>*If answered yes to previous, was the class a prerequisite for another class?</i>	Yes	8	57
	No	6	43
Has a particular professor/early class prevented you from taking a course required for you major?	Yes	18	100
	No	0	0

In the Social Sciences once again students not graduating on time seem to be picky towards class times and professors. However, a good majority of them were graduating on time. For those who were, half of them found that course availability has kept them for taking a required class for their major. For those who were not on track, 77% found that course availability is an issue. The very obvious result of this survey was when 100% of those who were not graduating on time said they found the professor or the time to be factor in them not being able to finish in four. We plan on exploring this correlation in depth for our fourth year project.

Biological Sciences:

-Are you on track to graduate in four years, from the start of first day of college?

Answer Choice	# of Responses	% of Total
Yes	25	62.5
No	15	37.5

-Those who are on track:

Questions:	Answer	# Responses	% of Total
*Has course availability kept you from taking a required class for you major?	Yes	11	44
	No	14	56
<i>*If answered yes to previous, was the class a prerequisite for another class?</i>	Yes	10	91
	No	1	9
Has a particular professor/early class prevented you from taking a course required for you major?	Yes	12	48
	No	13	52

-Those who are **not** on track:

Questions:	Answer	# Responses	% of Total
*Has course availability kept you from taking a required class for you major?	Yes	9	60
	No	6	40
<i>*If answered yes to previous, was the class a prerequisite for another class?</i>	Yes	6	67
	No	3	33
Has a particular professor/early class prevented you from taking a course required for you major?	Yes	9	60
	No	6	40

The responses from those graduating on time and those that are not seem to be pretty similar. As the Biological Sciences advisor stated, “course availability does not seem to be an issue” in their department.

Impacted Classes:

We next examined which classes were most impacted for Spring Quarter 2006. We defined an impacted course as a waitlisted class, which is either a major requirement and/or a prerequisite for a classes within the major. There is no system in place for taking “snapshots” of waitlists at various times throughout the quarter; therefore, our group had to devise a procedure for looking into impacted classes. We looked at the open course list for spring quarter in the time period between the end of pass one and the beginning of pass two. We chose this time period because classes that did not appear on the open course list at the end of pass one would most likely have waitlists during pass two. Our group compared classes that were listed in the quarterly Schedule of Classes and those on the open course list. Those classes which were not listed on the open course list, but in the registration guide, were closed and would most likely have a waitlist associated with them. We were then able to compile a list of impacted classes for the quarter.

On March 6th, 2006 we were granted access to the program Banner and we were able to see the length of the waitlists for the classes we noted as impacted. We then compiled an updated list of impacted classes:

Art: 110

***BIS: 1C, 103, and 104**

CHE: 124 C and L

CHN: 3

CMN: 1 and 3

***DES: 16, 20B, 77B, 113, 115, 135B, 156C, 160B, 177, 191B, 191C**

DRA: 14

ENG: 105

EMS: 164

ECS: 15, 40

***ECN: NONE**

ENL: 3

EVE: 101

FRE: 1, 2, 3, 100

MAT: 16A and C

MIC: 120L and 155L

MCB: 121

NPB: 100, 101, 101L

POL: 51

PHY: 7A

SPA: 2 and 3

UWP: 104F

Those classes that were MOST impacted (had the longest waitlists) were NPB 101L and UWP 104F. Both of these classes would affect Biological Sciences majors.

Case Studies Introduction:

We decided to do a case study on the Economics, Biological Sciences, and Design Departments, respectively. We chose to focus on the Design department because it is reputed as having issues with course availability and we wanted to see how this affected students within the major. We wanted to look at the Economics Department, because much like other social Sciences, it is acknowledged to have strong four year graduation rates. Perhaps procedures done within in this department could be applied to those having difficulty with course availability and graduating in four. And finally, we looked into Biological Sciences because it is an area where the impact of course availability is relatively unclear.

Protocol for Case Studies:

Our Protocol for these case studies included interviews with major advisors and focus groups consisting of approximately 10 students varying in year.

Department of Design

Advisor Interview:

Kris Carpenter, Advisor, Design Department

Contact info: kccarpenter@ucdavis.edu

Q: Do you feel that there are insufficient classes offered to students that are currently enrolled in this major?

A: Classes such as Design 138, 134 A/B and 135 fill up quickly forcing students that have later pas times to waitlist them.

Q: Are those classes required for them to graduate or can they opt to take different classes in order to graduate?

A; The impacted classes are all required for the student's graduation. There is not much flexibility with the major."

Q: What do you feel needs to be done about class availability in the classes that have large waiting lists? (i.e. Hire more professors, build larger lecture halls etc.)

A: I believe that hiring more professors and larger lecture halls will help. Yet I also believe that design majors tend to have anxiety graduating due to uncertainty of what aspects of their careers they wish to pursue.

Focus Group Notes:

Q: I heard about the switch from the BS to the BA in Design. What are your thoughts on the switch and what do you perceive as major differences between the two?

A: I would much rather have the more respectable BS major. Because at the root of it the major has not changed at all.

A: There are no differences in the core classes, the only thing that changed is the title.

A: I think we're actually worst off with the BA. Since now we are in L&S and that requires some English, which I have not taken in 3 years.

A: The requirements are the same yet it seems like it's gotten harder to get into classes that I need, especially lower level classes. Therefore I think in a way it's going to make graduating in four years more of a problem than it has been as of late.

Q: Do you get more freedom with the BA? Maybe a wider selection of classes you can take to satisfy the requirements?

A: I think you're getting the exact same classes that are grouped differently in the catalog, that's the only difference.

Q: Is there a problem with class availability in design?

***A:** When you first start the design major all classes seem like they're filled. So my friends and I couldn't really start working on lower division design classes till our second year.

***A:** Art history classes conflict (time wise) with lower division design classes and since some design classes are offered once a year or even biannually the conflicts delay our progress.

A: I agree class availability is accentuated by class conflicts with art history.

Some other good responses during the discussion:

*“Instability in when classes are offered, makes it difficult to plan more than a year ahead”.

*“I have a lot of friends that are graduating in design this year. Most of them are fifth years”.

*“Biannual classes put third and fourth year students at danger. Because if they can't get into a class that's offered once every two years you're automatically graduating in five”.

Problem classes: (to be verified)

-Design 138, 144 and Art Hist 168, offered rarely and fill up.

-Design 134 A and B, 180 A and B (core classes), are hard to get into and always carry a waiting list.

-Design 21 is too easy, use this class to weed out people that don't seem to care.

Major Problems: (everyone in focus group agreed)

-Biannual Classes

-Design classes and art history classes overlap a lot of time

-Classes fill up, especially lower division design classes, and are offered rarely.

-Portfolio (now cancelled) was a good way to weed people out of the major that were not passionate about it.

Department of Economics

Advisor Interview:

Diane Branam, Advisor, Department of Economics

Contact info: dcbranam@ucdavis.edu

Q: Do you feel that there are insufficient classes offered to students that are currently enrolled in your major?

A: Yes, budget constraints and lack of faculty do not allow for more classes to be offered. We anticipate that our classes will be full in Spring and that Fall is not looking good for our major students. Economics offers a major and a minor. The department is supporting both of these in our classes. Our Summer Session classes offered has more than doubled in the past couple of years.

Q: Are those classes required for them to graduate or can they opt to take different classes in order to graduate?

A: The required classes generally have the room for the major students; however, the students are then required other courses but there are choices for these classes. All of these classes fill up. Before Pass 2 began, 6 out of 23 classes were full As of March 3rd ...9 classes are closed and others are close to full. Our major is restricted to our majors only during Pass 1....with a few classes also open to MGE and IRE.

Q: If class availability is an issue in your department, what do you feel needs to be done to address the issue? (i.e. Hire more professors, build larger lecture halls etc.)

A: I believe that both more professors need to be hired and more lecture halls for 80 student accommodations need to be built.

Focus Group Notes:

- All are on track to graduate in four years or less, with the majority of them double majoring.
- Students discussed flexibility in their major with having a variety of courses to choose from for any given requirement.
- Class times within the major generally do not conflict
- The greatest difficulty they addressed was in registering for classes during Pass 1 if they had not yet declared Economics as their major.
- They expressed concern over difficulty in declaring a second major.
- Students expressed the most difficulty in registering for Economics 100 and 101, which are requirements for everyone in the major. Thereafter, they have a great deal of flexibility with what to take.
- Most claimed that perceptions of a professor influenced whether they registered for a particular class or not.
- Concern was expressed with respect to late night discussion times.
- Problems they incurred with respect to time conflicts is when classes for 2 different majors conflict.
- The size of the major (64 units), choices available for requirements, and fewer number of prerequisites are very accommodating
- Working with advisors is key.

Department of Biological Sciences

Advisor Interview:

Tom Hall, Biological Science Advisor

E-mail: jthall@ucdavis.edu

Q: Is course availability an issue for Bio-Sci major?

A: I don't think years-to-degree is not an issue with Bio-Sci. major. A lot of students just intentionally stay beyond the five years because they want to raise their science GPA or take some extra sciences. In order to graduate in four, one has to take three science classes; however, most don't feel comfortable doing so because they fear it might hurt their GPA. The major is obviously very challenging and people try to lighten their workload by taking not so intense classes. I can't remember a time when I had someone who wanted to graduate in four, and couldn't because of class availability. In fact, if that ever did come up, we'd probably look for an alternative class to fulfill the requirements.

Q: What are some problem courses as you perceive them?

A: The Bio-Sci major is a bit more forging than most other majors because besides Bio-Sci 101, 102, 103, and 104, students are allowed to restricted electives that a student can take to fulfill the five fields. However, the department does accept petitions to substitute classes. Some of the problem classes are Microbiology 120L, 160L and NPB 101L. These labs are often expensive and resources are limited. The problem is for those students that have to take the lab classes for their prerequisites for health science professions or other graduate schools. However, if a graduating senior needs this class, every effort will be made for this student to get into this highly impacted course. For people on the waitlist, the ranked order for PTAs numbers for

example for a MIC 120L is 1) Graduating seniors in Microbiology and 2) Bio-Sci majors with a Microbiology emphasis. Unfortunately, the classes that are harder to get into are the expensive ones to offer.

Focus Group Notes:

- Most students in the focus group we conducted were on track to graduate in 4 years.
- Generally, they had no difficulty registering for science classes.
- Many shared concerns about the new pass 1 unit cap of 17. One student described it as a mixed blessing because those with early pass times have great ease registering for required class whereas those with later pass times have much more difficulty doing so.
- Many students prefer not taking the risk of waitlisting for a class because it restricted them for registering for other courses, which are open.
- The greatest problem they indicated was registering for labs such as NPB 101L, MIC 120L or 160L. These classes are small in size and fill up quickly even though they are offered every quarter. However, as the advisor Tom said, these classes are harder to get into and the expensive ones to offer.

Recommendations:

We have made several recommendations for some possible next steps in addressing the issue of course availability.

- **Look into specific Majors:**

Even within our case studies, there was a lot of variation between majors with respect to size, structure, and requirements. Therefore, we recommend each major be examined individually (using our case study as a model) because every major is so unique. Currently there is data about 4 year graduation rates within each college but no breakdown for each major. We feel data for graduation rates for each major should be collected as soon as possible. This would greatly narrow down which majors are having problems graduating in four. Thereafter, close examination of these majors is recommended to see if course availability is an area of concern within that particular major.

- **Address Impacted Courses:**

Impacted courses need to be addressed. Only the College of Letters and Science has a system in place for monitoring waitlists at various times and various quarters. This is helpful in gauging which classes are most highly impacted. Randi Thompson, a Data Administrator in the College of Letters and Science, developed a system to monitor waitlists. We recommend other colleges work closely with her and her system to develop a similar process to look at waitlists. If it becomes evident that specific courses have long waitlists, perhaps more sections could be funded.

- **Staying Connected with Students:**

Lastly, we want to continue to foster strong connections between administration and faculty and students so that together we can address our needs and concerns. We will continue to serve in this capacity as liaisons by having already discussed the possibility of a fourth year Time-to Degree DHC project with Dr. Fred Wood.