

The New MyUCLA

www.my.ucla.edu

UCLA's New Student Services Portal

Submitter: Arun Pasricha

Director, Student Affairs Information Technology, UCLA

apasricha@sait.ucla.edu

(310) 825-9475

Project Core Team:

- ❖ *Arun Pasricha, Director, Student Affairs IT*
- ❖ *Christian Spreitzer, Director, Undergraduate Education IT*
- ❖ *Jinnah Sultan, Manager, Distributed Technologies Team, IT Services*
- ❖ *Praveen Dugar, Manager, Application Development, Student Affairs IT*
- ❖ *Donny Morada, Business Analyst, Student Affairs IT*
- ❖ *Bruce Dumes, Manager, Application Development, Undergraduate Education IT*
- ❖ *John Hirning, Programmer Analyst, Undergraduate Education IT*
- ❖ *Albert Wu, Senior Director, Information Management Services, IT Services*
- ❖ *Shan Kandaswamy, Director, Architecture Team, IT Services*

Introduction

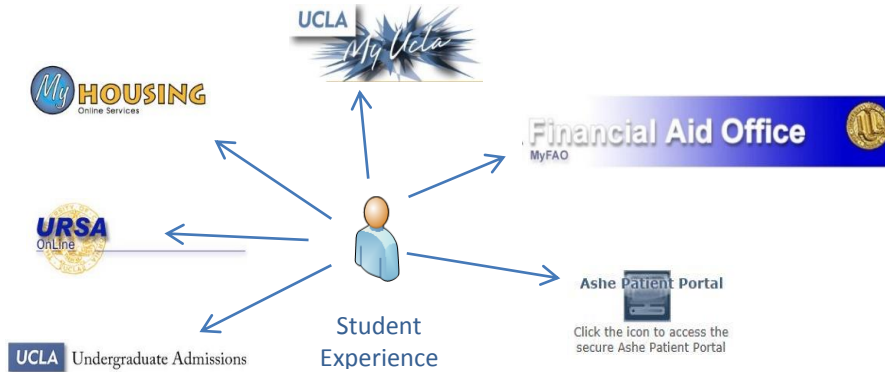
The New MyUCLA is a modern and integrated student services portal at UCLA. It is a landmark accomplishment for the campus and finally provides UCLA students with a much desired integrated web experience. A result of an unprecedented effort in IT collaboration, it brings together rich functionality that was previously fragmented across organizational lines and only available through disparate websites, including URSA, MyUCLA and MyFAO.

Campus Demand for an Integrated Web Experience

Despite being one of the early leaders in providing web enabled student services, UCLA's student websites had become dated over time when compared to those of other similar institutions. Student focus groups as well as editorials in the Daily Bruin from as far back as April 2005 had voiced serious concerns over the lack of a unified web presence and its impact on student services on campus (Daily Bruin Editorial: [UCLA ought to unify, update Web services](#), April 14, 2005). The following excerpt from the editorial demonstrated the widespread concern and underscored the urgency for the campus to respond:

"Eight years ago, UCLA was a pioneer online. But the digital aspect of our university has become stagnant. From MyUCLA to class Web sites, UCLA is stuck in the era of dial-up to the detriment of its students. Every quarter, undergraduates must trudge through an unnecessarily complex set of Web sites of varying usefulness: department homepages to check requirements, the registrar's course listings and MyUCLA to plan classes, UCLAprofessors.com to read reviews, URSA to enroll and pay, then a mix of Blackboard, E-Campus and social science Web sites (all with unique interfaces, login requirements and features) to interact with their classes. The fragmentation is hardly useful and, as the pace of Internet innovation has quickened, UCLA looks painfully stuck in 1997."

The fragmented nature and distinct user interfaces of different websites hampered usability of the otherwise rich functionality.



As shown above, students were previously forced to navigate through disconnected and uniquely branded sites that encompassed their UCLA web experience, as they progressed from the Admissions website to find their admission decision, to URSA to file their Statement of Intent to Register (SIR), to MyFAO to view and accept their financial aid package, to MyUCLA for numerous additional campus related functions. As the student population consisting of a significant international and out-of-state population further diversified, the need for such an upgrade was recognized as even more acute.

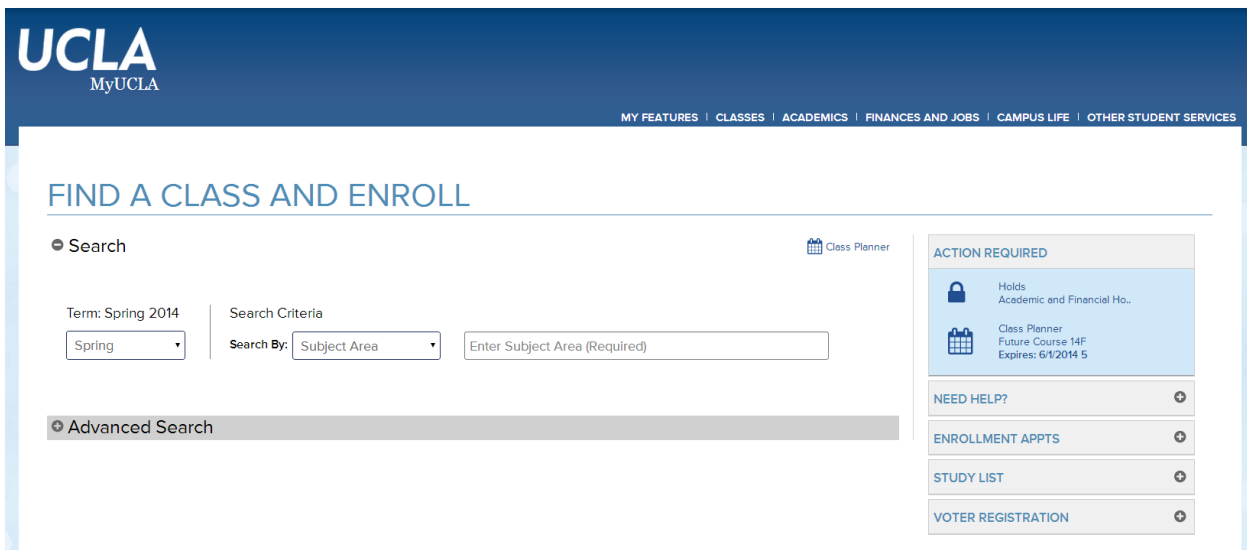
The New MyUCLA

To address this need, Student Affairs, IT Services and the Division of Undergraduate Education pooled their resources and devised an approach that, rather than using third-party portal software or a centralized website, leveraged UCLA's single sign-on capability (SSO) to tie together functionality provided by different campus organizations, avoiding unnecessary large scale changes to the underlying architecture of the participating websites. The project was formally launched in November 2011 and the first phase of the new MyUCLA was [successfully implemented](#) in October 2013. This unprecedented collaboration and resource pooling by these three organizations removed the immediate need for campus funding.

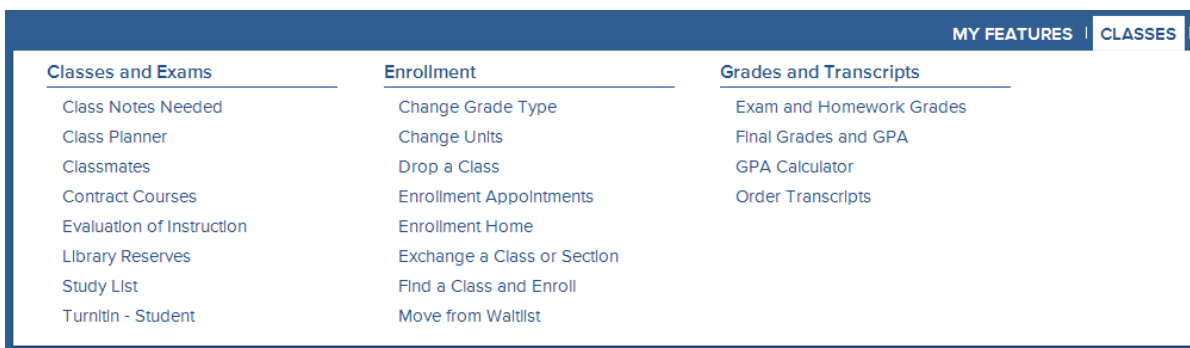
As planned, phase 1 of the new MyUCLA presented a brand new user interface and a common navigation system shared by all participating organizations. The presentation tier integrated numerous business processes spanning multiple offices and presented them in a seamless and integrated view. The exceptional aspect of this approach, is that it did not *move* current functionality owned by the various websites into a new "centralized" hosted system or a 3rd party software. Rather, it allowed the organizations currently hosting the feature to *retain* that ownership, and simply brought them all under a consolidated uniform presentation tier. From an architectural perspective, a comprehensive and new underlying infrastructure was developed to tie the enterprise application across multiple organizations. It allowed for data to propagate seamlessly among websites and provided a highly customized experience based on various roles and permissions. A subset of changes implemented in phase 1 is provided below:

Updated Modern Interface

The new MyUCLA is a complete redesign of the web presentation tier and employs the campus User Interface (UI) and branding standards. This modern interface finally replaces the dated and fragmented web presence and distinct interfaces of each participating site.



A new mega-menu was introduced to conveniently present the wide array of available functionality. The mega-menu presents features categorized by use, irrespective of the organization providing the functionality. In the example below, features provided by the Division of Undergraduate Education, Student Affairs and IT Services are presented in a single comprehensive menu. The functional owners of the various features are completely transparent and the user can navigate to any of these features with a simple click.



To ensure the goal of maintaining a common look and feel across MyUCLA going forward, the team prepared a comprehensive set of User Interface Guideline documents with a clear definition of design elements and styles to be used by all organizations under the MyUCLA framework. This documentation is available to the campus via the MyUCLA Wiki maintained by the MyUCLA team.

Integrated Workflows

A brand new class search and enrollment workflow with seamless integration with the class planner was developed in phase 1, significantly improving the students' previous experience. Prior to this, students were forced to open multiple browser windows to search for classes, access their class planner and enroll. The new class search consolidates all search criteria and functionality previously only available through the Registrar's Schedule of Classes, URSA's 'Find a Class and Enroll' feature and MyUCLA's Class Planner (legacy version). Students can now enroll within the class search feature, or within the class planner. The need to cut and paste class ids into text boxes to enroll is now obsolete, and the redesigned workflow significantly improves the efficiency of enrollment transactions by processing most of the enrollment information and validation upfront.

FIND A CLASS AND ENROLL

Search Advanced Search Class Planner

Narrow By:

- Status
 - Open
 - Waitlisted
 - Closed
 - Cancelled
- Meeting Day
 - Monday
 - Tuesday
 - Wednesday
 - Thursday
 - Friday
- Meeting Time
- Location
- Units
- Instructor
- Level
- Impacted
- Enrollment Restrictions
- Enforced Requisites
- Individual Studies

Your results for: 2014, Spring, Mathematics (MATH)

Expand Results First 1 2 3 4 Last

NOTE: The number of open seats for a section is constantly updated.

3B - Calculus for Life Sciences Students
3C - Probability for Life Sciences Students

NOTE: To enroll for this class, you must select: (1) a Lecture; (2) a Discussion.

Enroll	Section	Status	Info	Day(s)	Time	Location	Units	Instructor
<input checked="" type="checkbox"/>	Lec 3	Open: 71 of 210 Left	⚠	MWF	2pm-2:50pm	Wgyoung CS24	4.0	Schaeffer, G.
Please select a Discussion.								
<input checked="" type="checkbox"/>	Dis 3A	Open: 9 of 35 Left	⚠	T	2pm-2:50pm	MS 5138	0.0	Chou, H.

WARNING

Mathematics (MATH) 3C - Probability for Life Sciences Students with the following sections has warnings:

- Lecture 3
- Discussion 3A

Acknowledge the following warnings to enroll:

I understand that this class has the following requisite(s) which may prevent me from enrolling in this class:

Class Name	Minimum Grade	Pre-Requisite	Co-Requisite	Type
Mathematics 3B	C-	Yes	--	⚠

OPTIONS

Mathematics (MATH) 3C - Probability for Life Sciences Students has the following options:

Select the grade type:

Letter Grade

To enroll, acknowledge all warnings, then click:

Enroll

Or

Select one of the following options:

Start Exchange Enter PTE# Add to Class Planner Cancel

<input type="checkbox"/>	Dis 3B	Open: 11 of 35 Left	⚠	R	2pm-2:50pm	MS 5138	0.0	Chou, H.
<input type="checkbox"/>	Dis 3C	Waitlist: 0 of 3 Taken	⚠	T	2pm-2:50pm	MS 5137	0.0	Lensmire, J.J.
<input type="checkbox"/>	Dis 3D	Open: 5 of 35 Left	⚠	R	2pm-2:50pm	MS 5137	0.0	Lensmire, J.J.
<input type="checkbox"/>	Dis 3E	Open: 25 of 35 Left	⚠	T	2pm-2:50pm	Geology 4645	0.0	Lagkas-Nikolos, I.
<input type="checkbox"/>	Dis 3F	Open: 21 of 35 Left	⚠	R	2pm-2:50pm	Geology 3656	0.0	Lagkas-Nikolos, I.

Class Search Filters (points to the filter sidebar)

Class selection (points to the class list table)

Validation: possible conflicts identified (points to the warning message)

Enrollment (points to the 'Enroll' button)

Class Planner (points to the 'Add to Class Planner' button)

As shown above, students can now search for classes using the 'Find a Class and Enroll' feature in MyUCLA and are able to use a rich set of filters to further narrow their search efficiently. To enroll, students select a lecture and corresponding discussion from within the search results. Based on these selections, students are immediately provided with information that may prevent successful enrollment, such as time conflicts, lacking prerequisites, a need for permission to enroll (PTE numbers), etc. The class search listing conveniently provides all the relevant course information, such as course description, course instructor, final exam time, etc. Students can also add courses to their class planner from within the class search. A similar class search capability is integrated within the class planner as well.

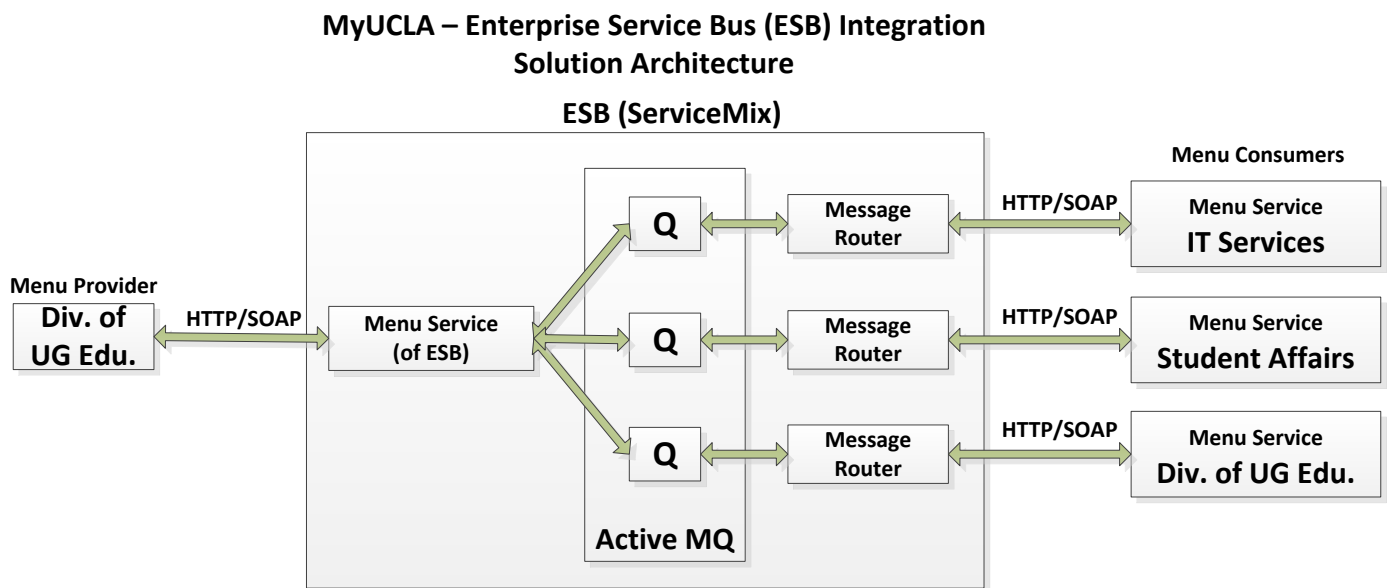
New Architecture

The new MyUCLA functional enhancements described above are supported by a comprehensive and scalable infrastructure that seamlessly connects the functionality offered by different organizations. Elements of the new infrastructure are listed below:

Definition of Roles and Permissions – allowing for a highly customized view of features. The MyUCLA team has, for the first time, established well defined student and staff roles and corresponding data sources. These definitions are managed by role owners and populated into the Enterprise Directory via Grouper, for use by all organizations providing functionality within MyUCLA. This approach allows MyUCLA to display custom notifications and alerts, as well as a fully customized view of available feature sets.

Service Oriented Architecture (SOA) – For an enterprise application such as the new MyUCLA that encompasses a significant number of functionalities, employing a Service Oriented Architecture was the natural choice. By defining a set of common services for frequently requested data and functionality, redundancy was reduced and a consistent user experience could be delivered. Examples of services created for MyUCLA include – student profile, study list, 3rd party widget, pre-enrollment validation, enrollment, mega menu and notices.

Enterprise Service Bus Integration (ESB) – An ESB is a middleware component required to implement a service oriented architecture. In a general sense, an ESB is a mechanism to manage access to services via a simple and consistent interface to all end-users. The MyUCLA team initiated the use of an ESB architecture to seamlessly provide menu data to all groups. ESB integration for menu data synchronizes the mega menu between the menu provider systems and the menu subscriber systems. When a MyUCLA menu provider (such as the Division of Undergraduate Education) posts any changes to the menu data to the ESB system (hosted by IT Services), it instantly synchronizes the same data to all MyUCLA menu consumers as shown below.



The above infrastructural changes were key to integrating functionality provided by different development groups within the MyUCLA team. By using these common data definitions, data sources and services, the MyUCLA team was able to ensure a consistent user experience regardless of which team developed a particular feature or where the feature is hosted.

Collaborative Development and Management

The unique management and development structure of this project epitomizes the spirit of IT collaboration and cooperation that was needed. Successfully fulfilling the common objective of delivering the new MyUCLA required a

fresh perspective in how to formulate an integrated, yet distinct set of development teams, all to be supervised by a cross organizational management group, without any formalized organizational change.

A consensus based approach was accepted and decided by the management team. This meant that all decisions about functional and technical scope, timelines, estimates, design standards, division of responsibilities etc. were arrived at after full discussion and cooperation across all three organizations. Compromises keeping the overall objectives and priorities in mind were the norm, rather than the exception. This style of managing an enterprise level initiative was unprecedented in many ways at UCLA and has paved the way for many more campus critical projects to become feasible in the future.

Student Affairs, IT Services and the Division of Undergraduate Education pooled their IT resources to form the MyUCLA development team. Resources across all three organizations not only worked on their own hosted functionality, but often were asked to take on additional feature sets hosted by other departments. Development responsibilities were based on domain knowledge and the strength of individual and organizational skill sets and project timelines, rather than organizational boundaries. This structure helped to alter the previous organizational mindset and allowed the developers to view MyUCLA as one application, transcending individual offices or specific functionalities.

Agile methodology was used successfully and was critical in keeping the project timelines and scope in control. Daily scrum meetings were instrumental in communication and incremental milestones were quickly adjusted as necessary.

MyUCLA's Campus Impact

The new MyUCLA implementation has been highly successful and the demand for additional functionality and continued enhancements has been steadily growing. Its success is reflected by the fact that while legacy websites were still functional, the adoption rate of the MyUCLA version of these functions, e.g. enrollment, study list etc. skyrocketed. In the month of April 2014, for example, typical adoption rate for MyUCLA functions was around 80 percent.

Due to the resounding success of this system, MyFAO was shut down on 4/15/2014 and URSA was sunset on 5/12/2014. These were pioneering websites and had been the cornerstone of student services at UCLA since 1995. The new system not only presents the campus's core functionality in a modern interface, but also creates an extensible and scalable architecture for providing online services that can be leveraged by other websites on campus to integrate their own functionality. The following student feedback reflects the general sentiment about the new MyUCLA on campus.

"The start of Spring Quarter is great thanks to the new MyUCLA format. It's nice that everything is on a central platform. It's very efficient and makes things a lot easier for me. Thank you!"

"Website looks great! Kudos."

"The changes to the study list looks great! Clean and well laid-out of information makes it easier to read... Thanks for the overall great look!"

"The integration of URSA into myUCLA is great"

"Wonderful!!!! This no-nonsense and less graphic interface is amazing. Thanks for paring this down to something more usable."

As the [Daily Bruin article](#) announcing the rollout of the new system mentions, 'As ambitious as the new MyUCLA is, it's only the beginning.'