

UNIVERSITY OF CALIFORNIA, RIVERSIDE

# UCR

## Undergraduate Research Tracking Report

SEPTEMBER 2014



**UNDERGRADUATE RESEARCH TRACKING REPORT**  
**UNIVERSITY OF CALIFORNIA, RIVERSIDE**  
**SEPTEMBER 2014**

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## **EXECUTIVE SUMMARY**

Twenty-two percent (22%) of enrolled undergraduates participated in faculty-mentored research and creative activities in AY2012-13. Activities included (i) research courses for academic credit, (ii) sponsored research programs (e.g., Gluck Fellows, Chancellor's Research Fellows), (iii) paid undergraduate research positions, and (iv) participation in the Annual Undergraduate Research, Scholarship, and Creative Activity Symposium. The majority of students participated through research courses and later in their academic careers (i.e., juniors and seniors). Female and underrepresented minority (URM) students participated in undergraduate research at largely the same proportion as their campus enrollment. In the next five years, we seek to raise participation rates by at least 10%, such that 1 in 3 UCR undergraduates participate in faculty-mentored research and creative activities. This benchmark will be achieved in concert with UCR's goal to attain the profile of an AAU (Association of American Universities) institution and more specifically, through improved data collection (e.g., including Honors theses, voluntary or unpaid research positions, and external publications), focused student outreach and support services, new faculty hiring, and increased extramural funding.

## **INTRODUCTION**

The University of California, Riverside (UCR) and the Office of Undergraduate Education (UE) provide undergraduate students with multiple opportunities to participate in faculty-mentored research and creative activities. Guided by the Council on Undergraduate Research (CUR, 2014), we define undergraduate research as “an inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline.” We further define undergraduate research as involving supervision or guidance from a faculty mentor. Students benefit from working with a faculty mentor in terms of learning gains (e.g., conducting literature reviews, designing and conducting experiments, learning to analyze data), communication gains (e.g., developing skills in written and oral presentations), and personal or professional gains (e.g., mentor relationship, peer interactions, learning to work independently, clarifying career goals) (Lopatto, 2003). Moreover, faculty mentorship and sustained involvement in activities for more than one academic term lead to increased workplace engagement after graduation (Gallup, 2014).

At UCR, colleges, departments and programs, and the Office of Undergraduate Education facilitate different types of undergraduate research and creative activities. For example, the colleges offer courses specifically designed to provide students with research, internship, and creative experiences. Also, many colleges coordinate sponsored research programs, such as the Gluck Fellows Program of the Arts, Minority Access to Research Careers (MARC-U), and Future Physician Leaders. Individual faculty members offer paid research positions for undergraduate students to engage in research activities (e.g., laboratory research, data analysis, and archival research). Furthermore, the Office of Undergraduate Education (UE) coordinates the Chancellor’s Research Fellowships, Undergraduate Research Mini Grants, Undergraduate Research Journal, and the Annual Undergraduate Research, Scholarship, and Creative Activity Symposium.

For this report, we summarized undergraduate research activities occurring across the campus. More specifically, we examined four categories of undergraduate research and creative activities:

1. Research courses for academic credit (e.g., 190-199 courses, capstone courses, senior design, internships, and research seminars)
2. Sponsored research programs (e.g., Gluck Fellows, Chancellor’s Research Fellows)
3. Paid undergraduate research positions (i.e., Student Helper I and II in academic settings)
4. Annual Undergraduate Research, Scholarship, and Creative Activity Symposium.

To interpret our findings, we also reviewed survey data from the University of California Undergraduate Experience Survey (UCUES, 2012), which provides self-reported measures of undergraduate participation in research and creative activities.

## **METHODOLOGY**

We analyzed data from the fall 2012, winter 2013, spring 2013, and summer 2013 quarters. Specifically, we requested data from UCR's Student Information System (SIS), campus-based sponsored research programs, UCR's Payroll and Personnel System (PPS), and UE's Annual Symposium participation list. Using student identification numbers (SIDs), we merged these data sources into a unified dataset with the following variables: SID, first and last name, quarter, class level (e.g., freshman, sophomore, etc.), gender, race/ethnicity, major, and type of research participation (i.e., research courses, sponsored research programs, paid position, and annual symposium).

For research courses, we identified courses in the UCR catalog that involved course credit for research, design, internship, and creative activities; and we sought verification of these selected courses from college personnel (e.g., Associate Deans and individual faculty members). Afterward, we obtained enrollment data for these courses offered in AY 2012-13 and summer 2013 from SIS (see Appendix 1). It should be noted that there was a substantial increase in the number of courses identified for this year's analysis: 189 courses in AY 2012-13 as compared to 113 courses in AY 2011-12.

We used payroll data to identify "Student Helper I" and "Student Helper II", and we selected only those who worked in academic settings. In addition, we obtained lists of undergraduates who participated in campus-based sponsored research programs in the College of Humanities, Arts, and Social Sciences (CHASS), the College of Natural and Agricultural Sciences (CNAS), the Bourns College of Engineering (BCOE), and the School of Business Administration (SOBA) (see Appendix 2).

Finally, we included students who participated in the Annual Symposium, but were not counted in the previous categories (i.e., research courses, sponsored research programs, or paid positions); that is, students who participated in the Annual Symposium that were not already represented in the other research categories. We analyzed data by quarter and assessed overall individual participation. We calculated percentages using the total enrollment of undergraduate students from fall 2012 (F12). Furthermore, we reviewed UCUES survey data conducted in AY 2011-12 to examine self-reported measures of undergraduate participation in research and creative activities, as compared to the university records collected for this report.



**Figure 1: Photographs from 2014 Annual Symposium**



## FINDINGS

### Participation

Table 1 provides a summary of the number of undergraduates who participated in research, scholarly, or creative activities for academic year 2012-13 (fall 2012, winter 2013, spring 2013, and summer 2013), by college and type of involvement, i.e., research courses, sponsored research program, paid positions, and Annual Symposium. The number of total individuals represents the unduplicated headcount for students who participated in all forms of undergraduate research. Note, a student may have participated in both a research course and a paid position, but is only counted once in the total. Students counted for the Annual Symposium did not participate in any of the other forms of research involvement.

**Table 1: Undergraduate Research Participation by Type and College**

College	Type of Undergraduate Research Involvement				Total Individuals (unduplicated headcount)	Fall 2012 College Enrollment	Percent
	Research Courses	Sponsored Research Programs	Paid Positions	Annual Symposium			
SOBA	677	0	20	0	687	1062	64.7%
BCOE	449	64	152	5	572	2260	25.3%
CNAS	691	112	266	23	939	4653	20.2%
CHASS	1660	84	221	38	1853	10561	17.5%
<b>Total</b>	<b>3477</b>	<b>260</b>	<b>659</b>	<b>66</b>	<b>4051</b>	<b>18536</b>	<b>21.9%</b>

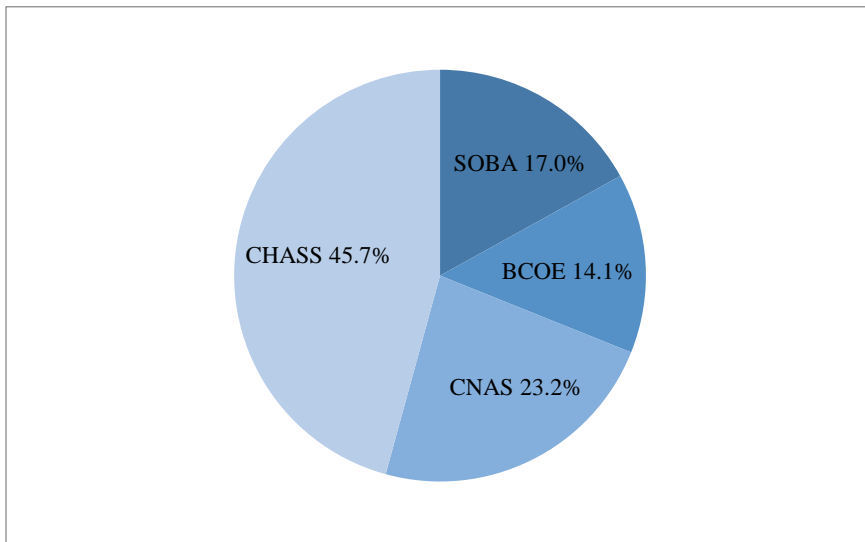
Across all four quarters, 4,051 students participated in an undergraduate research activity under faculty mentorship, which represents about 22% of enrolled undergraduate students for fall 2012. An average of 1,116 students engaged in a research-related activity during each quarter, with highest involvement taking

place during fall 2012 and spring 2013 quarters. The large majority of undergraduate students participated in research courses for academic credit (86%).

### College

The total number of students participating in undergraduate research was 4,051 (see also Table1). Figure 2 depicts total undergraduate research participation by college. CHASS students represented nearly half (or 45.7%) of all students participating in undergraduate research. Both CHASS and SOBA students were primarily involved through research courses. CNAS students had the second largest research participation (23.2%), representing all forms of involvement, e.g., research courses, sponsored research programs, paid positions, and Annual Symposium. BCOE students represented 14.1% of undergraduate research participation, mostly through research courses and paid positions.

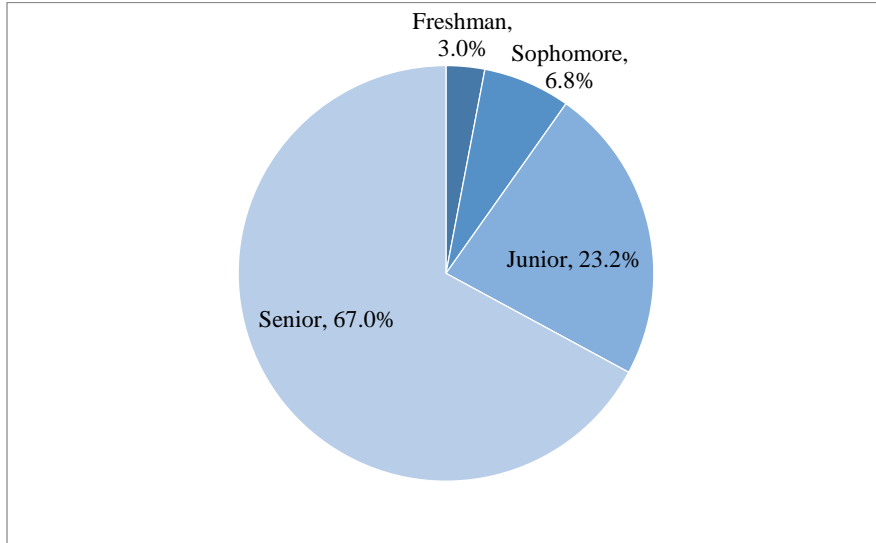
**Figure 2: Total Undergraduate Research Participation by College**



### Class Level

Undergraduate research participation by class level indicated very high rates of involvement among upper-division undergraduate students (see Figure 3). Not surprisingly, 67% of undergraduate research students were seniors. Table 2 represents the number of students by class level and college.

**Figure 3: Percent Undergraduate Research Participation by Class Level**



**Table 2: Undergraduate Research Participation by Class Level and College**

College	Class Level				Total Individuals
	Freshman	Sophomore	Junior	Senior	
SOBA	0	1	128	559	688
BCOE	8	17	123	423	571
CNAS	32	114	268	524	938
CHASS	82	143	419	1205	1849
<b>Total</b>	<b>122</b>	<b>275</b>	<b>938</b>	<b>2711</b>	<b>4051</b>

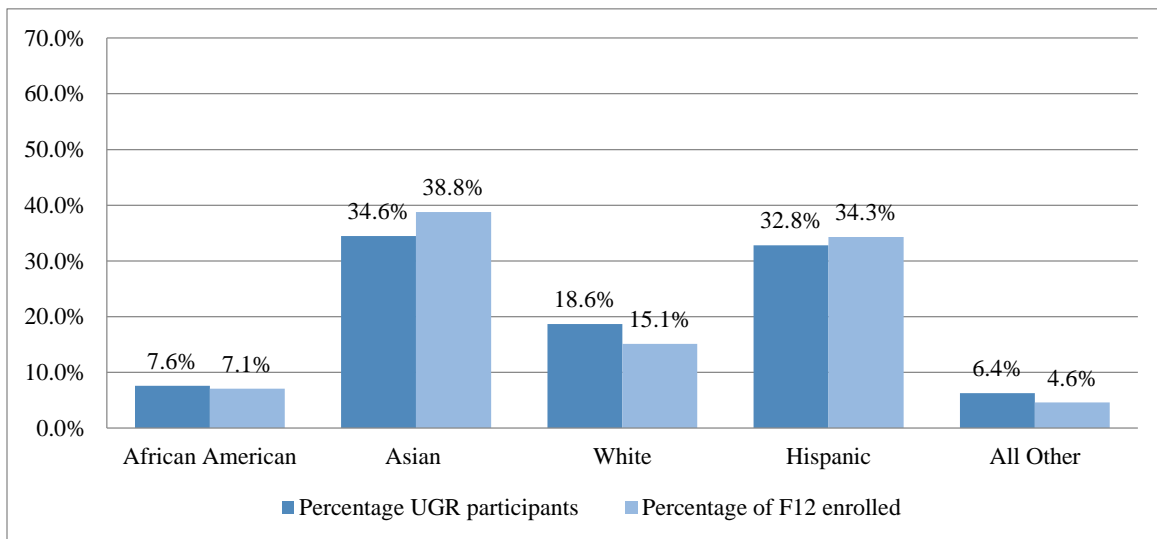


### Gender and Race/Ethnicity

In terms of gender, 51.8% of female students and 48.2% of male students participated in undergraduate research, which mirrors their representation on campus (51.8% and 48.2%, respectively). Among sophomores and juniors, female students participated at 1-2% slightly higher rates than male students. However, among seniors, male students (69.2%) participated at higher rates than female students (65.1%).

The representation of various racial/ethnic groups in undergraduate research largely matched their proportion of campus enrollment. For example, African American and Hispanic (i.e., underrepresented minority or URM) students participated at about the same proportion as their campus enrollment (see Figure 4). Asian students participated at slightly lower rates than their campus enrollment (4.2% difference; see Figure 4). White students (18.7%) participated at rates slightly higher than their proportion of campus enrollment (15.1%). The “All Other” category included 25 Native American students who participated in undergraduate research.

**Figure 4: Percent Undergraduate Research (UGR) Participation and Campus Enrollment by Race/Ethnicity**



### UCUES Survey Data

The University of California Undergraduate Experience Survey (UCUES) provides additional insight about undergraduate research participation. The UCUES Survey was taken by more than 4,800 undergraduates at UCR in the spring of 2012 and more than 50,000 undergraduates on nine UC undergraduate campuses. Table 3 depicts student responses on nine questions related to undergraduate research and creative activities, by college, at UCR, and across the nine UC undergraduate campuses.

Questions 1-3 do not align with our working definition of undergraduate research or creative activities, i.e., “an original intellectual or creative contribution to the discipline”, nor do they specify faculty-mentored activities. For questions 4-9 which explicitly state faculty involvement, UCR student participation ranged from 7% to 21% (e.g., “assist faculty in research for course credit” or “work on creative projects under the direction of faculty without course credit”).

Our overall finding that 21.9% of students participated in undergraduate research generally matched UCUES survey data for UCR students on the following questions: “assist faculty in research with course credit” (21%), and “work on creative projects under the direction of faculty with course credit” (19%). However, in regard to paid positions, our findings illustrate that only 3.6% (660 students; see Table 1) of UCR students engaged in this form of undergraduate research, whereas UCUES survey data indicated that 11% of UCR students answered yes to “assist faculty in research for pay without course credit”. It should be noted that only 4,500 students responded to the UCUES Survey in 2012, and thus responses may not have fully represented the entire UCR population. Also, our data analysis did not include students who volunteered in faculty research or creative activities, without course credit.

**Table 3: UCUES Self-Report Survey Data on Undergraduate Research Participation by College, UCR, and All UC Campuses.**

<b>Indicate the following research and creative activities that you are currently doing or have completed as a UCR student:</b>	<b>SOBA</b>	<b>BCOE</b>	<b>CNAS</b>	<b>CHASS</b>	<b>UCR</b>	<b>all-UC</b>
1. A research project, creative activity, or research paper as part of your coursework	81%	55%	57%	72%	66%	74%
2. At least one student research course	44%	24%	33%	42%	37%	40%
3. At least one independent study course	31%	15%	18%	23%	21%	20%
4. Assist faculty in research with course credit	17%	13%	23%	22%	21%	20%
5. Assist faculty in research for pay without course credit	10%	13%	15%	9%	11%	10%
6. Assist faculty in research as a volunteer without course credit	14%	19%	24%	14%	17%	16%
7. Work on creative projects under the direction of faculty with course credit	25%	15%	13%	23%	19%	20%
8. Work on creative projects under the direction of faculty for pay without course credit	8%	6%	7%	7%	7%	47%
9. Work on creative projects under direction of faculty as volunteer without course credit	13%	11%	13%	12%	12%	10%
<b>Number of students (N)</b>	<b>289</b>	<b>655</b>	<b>1272</b>	<b>2613</b>	<b>4827</b>	<b>50426</b>

## **DISCUSSION**

Our analysis indicated that about one in five (21.9%) UCR undergraduates participated in a faculty-mentored research or creative activity during the 2012-13 academic year. We found that students participated more towards the end of their undergraduate career and mostly through course-based research, internship, design, and creative activities. UCR rates of undergraduate research participation were relatively consistent with other UC campuses (see Table 3) and national trends. According to National Survey of Student Engagement (NSSE) data analyzed by the Council of Undergraduate Research (Wilson, 2012), about 25% of undergraduate seniors at research universities (with very high research activity) responded that they had “done” research.

We observed varying rates and forms of undergraduate research participation by college. For example, the large majority of CHASS and SOBA students participated in course-based activities, suggesting there were less paid opportunities to engage in undergraduate research. In BCOE and CNAS, a larger proportion of these students engaged in sponsored research programs and paid positions, likely due to greater availability of external funds for undergraduate research in science and engineering disciplines (e.g., National Science Foundation, USDA, and NIH).

Among our diverse undergraduate student population, we attained representative rates of participation for female and underrepresented minority (URM) students. This is a testament to UCR’s commitment to diversity as well as availability of funding for sponsored research programs, such as Minority Access to Research Careers (MARC-U) and Future Physician Leaders. In future reports, we might also analyze student participation by first-generation, low-income, and transfer student status.

Though we were able to examine various metrics of undergraduate research, our analysis did not verify the quality or faculty contact hours associated with these activities, nor did we count the number of students who participated in multiple research or creative activities (e.g., sponsored research program and research course). Further, we did not assess the number of undergraduates participating in voluntary or unpaid research activities, as there was no reliable metric for counting these students. We also did not include the number of senior theses filed in the University Honors Program or articles submitted to the Undergraduate Research Journal (see for example, 2012 Annual Report of the Undergraduate Research Office at the Ohio State University). Thus, our 21.9% undergraduate participation rate underestimates actual student engagement in research and creative activities at UC Riverside, perhaps by as much as 10%. Future reports might therefore collect student volunteer data, number of Honors theses, journal

submissions or publications, external conference presentations, and student participation in multiple activities to obtain a better estimate of overall participation.

Based on our findings, we offer several recommendations to enhance undergraduate research participation at UC Riverside:

- Increase outreach to lower division students, particularly in CHASS, to encourage greater research participation via targeted workshops (e.g., Highlander Orientation) and classroom presentations, or allocation of internal grant funding (e.g., Undergraduate Research Mini Grants, Chancellor's Research Fellowship)
- Reinforce the value of undergraduate research and faculty mentorship to students in regard to professional and graduate school outcomes (Gallup, 2014; Hunter et al., 2007; Lopatto, 2003)
- Develop a system for counting unpaid or volunteer undergraduate research activities, e.g., zero-credit course or volunteer forms
- Examine rates of undergraduate research participation among first-generation, low-income, and transfer students
- Collaborate with departments and programs to develop course-based opportunities for undergraduate research (e.g., School of Public Policy, capstone courses)
- Provide more opportunities for students to publish or present undergraduate research and creative activities, e.g., Annual Symposium (separate tracks for emerging and completed research), Southern California Conference on Undergraduate Research
- Develop a certificate or workshop series for students to gain exposure to theories, principles, and methods associated with undergraduate research and creative activities (see for example, UC Irvine Research Education Advancement Program)

As part of UC Riverside's goal to attain the profile of an AAU (Association of American Universities) institution, we must continue to provide more high-quality, faculty-mentored research experiences for undergraduate students. In the next five years, UCR should seek to raise undergraduate research participation by approximately 10%, with a goal of at least 1 in 3 students (33%) participating in faculty-mentored undergraduate research and creative activities. This is certainly a worthy and achievable goal, likely to be attained through improved data collection, focused student outreach and support services, new faculty hiring, and increased extramural funding.

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## Appendix 1. List of AY 2013 research courses.

Course Number	Course Title	Fall	Winter	Spring	Summer
AHS 192	Junior & Senior Seminar	x	x	x	
AHS 195H	Senior Honors Thesis			x	
AHS 198I	Individual Internship	x	x	x	
ANTH190	Special Studies		x	x	
ANTH191	Seminar in Anthropology		x	x	
ANTH195A	Senior Thesis	x	x		
ANTH195B	Senior Thesis	x	x		
ANTH195C	Senior Thesis	x		x	
ANTH198I	Internship in Anthropology	x	x	x	x
ANTH199H	Senior Honors Research		x		
ART 190	Special Studies	x			
ART 198I	Individual Internship	x			x
BCH 102	Introductory Biochemistry Laboratory				
BCH 190	Special Studies	x		x	
BCH 197	Research for Undergraduate Students		x	x	
BIEN175A	Senior Design		x		
BIEN175B	Senior Design			x	
BIEN197	Research for Undergraduates	x		x	x
BIOL190	Special Studies	x	x	x	
BIOL194	Independent Reading	x	x	x	
BIOL197	Introduction to Research	x	x	x	
BIOL199	Junior/Senior Research	x	x	x	x
BMSC197L	Research for Undergraduates	x	x		x
BPSC190	Special Studies		x	x	
BPSC193	Senior Seminar		x		
BPSC197	Research for Undergraduates	x	x	x	x
BPSC199	Senior Research			x	
BUS 109	Competitive and Strategic Analysis	x	x	x	x
BUS 190	Special Studies		x	x	x
BUS 198I	Individual Internship	x	x	x	x
BUS 199H	Senior Honors Research	x	x		
CBNS194	Independent Reading	x	x	x	
CBNS197	Research for Undergraduates	x		x	x
CBNS199	Senior Research	x	x		
CEE 197	Research for Undergraduates	x	x	x	x
CHE 175A	Chemical Process Design		x		
CHE 175B	Chemical Process Design			x	
CHE 190	Special Studies	x		x	x
CHEM191	Seminar in Chemistry			x	
CHEM197	Research for Undergraduates	x	x	x	x
CHEM198I	Individual Internship				x
CHEM199	Senior Research	x	x	x	
CHEM199H	Senior Honors Research	x	x	x	
CHF198I	CHASS FIRST Individual Internship			x	
CHN 190	Special Studies			x	
CLA 190	Special Studies		x		
CPLT190	Special Studies			x	
CPLT193	Capstone Research Seminar	x			
CPLT196	Senior Research Paper		x	x	
CRWT190	Special Studies	x	x	x	
CRWT195	Senior Thesis	x	x	x	
CRWT198I	Individual Internship	x		x	

<b>Course Number</b>	<b>Course Title</b>	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Summer</b>
CS 190	Special Studies	x			
CS 193	Design Project	x	x	x	x
CS 194	Independent Reading			x	x
DNCE167	Dance Production		x		
DNCE168	Dance Touring Ensemble		x		
DNCE180G	Dance Practicum - Adv. Choreography		x		
DNCE180J	Dance Practicum - Repertory			x	
DNCE190	Special Studies		x		
ECON190	Special Studies	x			x
ECON198I	Individual Internship	x	x	x	x
ECON199H	Senior Honors Research		x		
EDUC190	Special Studies	x		x	
EE 175A	Senior Design Project	x			
EE 175B	Senior Design Project		x		
EE 175C	Senior Design Project			x	
EE 190	Special Studies	x		x	
EE 197	Research for Undergraduates	x	x	x	
ENGL190	Special Studies	x	x	x	
ENGL193A	Senior Seminar		x		
ENGL193B	Senior Seminar		x	x	
ENGR198I	Individual Internship	x			
ENSC190	Special Studies			x	
ENSC191	Seminar in Professional Development	x	x	x	
ENSC197	Research for Undergraduates	x	x	x	
ENSC198I	Individual Internship			x	
ENTM190	Special Studies			x	
ENTM197	Research for Undergraduates	x	x	x	x
ENTM199	Senior Research			x	
ENVE175A	Senior Design Project		x		
ENVE175B	Senior Design Project			x	
ENVE190	Special Studies		x	x	
ETST190	Special Studies	x	x	x	
ETST191R	Seminar - Research Methodology	x			
ETST198G	Group Internship	x	x	x	
ETST198I	Individual Internship		x	x	x
FREN290	Directed Studies	x			
GBST191	Seminar in Global Studies	x			
GBST193	Senior Seminar		x		
GBST198I	Individual Internship	x	x		
GEO 190	Special Studies	x	x	x	
GEO 195A	Senior Thesis	x	x		
GEO 195B	Senior Thesis		x	x	
GER 190	Special Studies			x	
HASS190	Special Studies	x	x	x	
HASS191W	Seminar in Wash. DC	x	x		
HIST190	Special Studies		x		
HIST197	Research for Undergraduates	x	x	x	
HIST198I	Individual Internship	x	x		
HNPG190	Special Studies		x	x	
HNPG195H	Senior Honors Thesis		x	x	
HNPG197H	Honors Research for Undergraduates	x	x		
HNPG198I	Honors Individual Internship	x	x	x	
JPN 190	Special Studies			x	
LABR198I	Individual Internship	x			



<b>Course Number</b>	<b>Course Title</b>	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Summer</b>
LGBS190	Special Studies	x	x	x	
LGBS193	Senior Seminar		x		
LING190	Special Studies		x		
LING192	Tutorial Activities	x			
LWSO193	Senior Seminar	x		x	
MATH145B	Introduction to Topology			x	
MATH146A	Ordinary and Partial Differential Equations	x			
MATH146B	Ordinary and Partial Differential Equations		x		
MATH146C	Ordinary and Partial Differential Equations			x	
MATH151B	Advanced Calculus		x		
MATH151C	Advanced Calculus			x	
MATH190	Special Studies	x		x	
MATH197	Research for Undergraduates		x	x	
MATH198I	Internship in Mathematics		x		
MCBL197	Research for Undergraduates			x	
MCS 190	Special Studies	x	x	x	x
MCS 198I	Individual Internship	x		x	x
ME 170B	Experimental Techniques	x			
ME 174	Machine Design			x	
ME 175A	Professional Topics in Engineering	x			
ME 175B	Mechanical Engineering Design	x	x		
ME 175C	Mechanical Engineering Design		x	x	
ME 190	Special Studies				x
ME 197	Research for Undergraduates	x	x	x	x
MUS 170	Rondolla Ensemble		x	x	
MUS 172	Chamber Orchestra		x	x	
MUS 174	Latin American Music Ensemble		x	x	
MUS 175A	Beginning Mariachi Ensemble		x	x	
MUS 175B	Intermediate Mariachi Ensemble		x	x	
MUS 176	Bagpipe Ensemble		x	x	
MUS 177	Bluegrass Ensemble		x	x	
MUS 190	Special Studies	x	x	x	
MUS 191K	Seminar in Music			x	
MUS 191U	Seminar in Music		x		
MUS 194	Independent Reading	x			
MUS 198I	Individual Internship	x		x	
NASC198I	Individual Internship				x
NEM 197	Research for Undergraduates	x	x	x	
NEM 199	Senior Research		x		
PBPL191	Seminar			x	
PBPL198I	Individual Internship			x	x
PCST197	Research for Undergraduates			x	
PHIL190	Special Studies		x	x	
PHIL193	Senior Seminar			x	
PHIL198I	Individual Internship	x			
PHYS142L	Advanced Physics Laboratory		x	x	
PHYS190	Special Studies		x		x
PHYS195A	Senior Thesis	x	x	x	
PHYS195B	Senior Thesis		x	x	
PHYS197	Research for Undergraduates	x			x
PHYS198I	Individual Internship	x			
PLPA197	Research for Undergraduates	x	x	x	x
POSC190	Special Studies	x	x	x	
POSC197	Research for Undergraduates		x	x	

<b>Course Number</b>	<b>Course Title</b>	<b>Fall</b>	<b>Winter</b>	<b>Spring</b>	<b>Summer</b>
POSC198I	Individual Internship	x	x	x	x
PSYC195H	Senior Honors Thesis		x		
PSYC197	Research for Undergraduates	x	x	x	x
PSYC198I	Individual Internship	x	x	x	x
RLST190	Special Studies	x		x	
RLST193	Senior Seminar			x	
SOC 190	Special Studies	x		x	
SOC 195	Senior Thesis	x	x	x	
SOC 197	Research for Undergraduates	x	x	x	x
SOC 198I	Individual Internship			x	
SOC 199H	Senior Honors Research			x	
SPN 190	Special Studies			x	
SPN 192	Tutorial Activities			x	
SPN 193	Senior Seminar		x	x	
SPN 199H	Senior Honors Research			x	
STAT183	Statistical Consulting			x	
STAT198I	Individual Internship			x	
THEA170	Advanced Dramatic Production	x	x	x	
THEA190	Special Studies	x	x	x	
THEA191E	Seminar in Theatre			x	
THEA191J	Seminar in Theatre	x			
THEA191W	Seminar in Theatre				x
THEA198I	Individual Internship	x	x	x	
WMST190	Special Studies		x	x	x
WMST191A	Seminar: Feminist Epistemologies		x		
WMST191B	Seminar: Feminist Research Methods			x	
WMST195	Senior Thesis		x	x	
WMST198G	Group Internship			x	

## **Appendix 2. Sponsored Research Programs**

### **Bourns College of Engineering (BCOE)**

- Undergraduate Research Opportunities
- HSI Undergraduate Research Program
- NASA CaSGC
- NSF IRES – China
- NSF MY BEST BRIDGE

### **College of Humanities, Arts & Social Sciences (CHASS)**

- Gluck Fellows Program of the Arts

### **College of Natural & Agricultural Sciences (CNAS)**

- Chemistry - Kuwana-Sawyer Award
- Chemistry - USDA Eichler Award
- Minority Access to Research Careers (MARC-U)
- Medical Scholars Program
- CNAS Dean's Fellowship
- RISE – CAMP
- RISE – HSI STEM

### **School of Medicine**

- Future Physician Leaders

### **Graduate Division**

- Mentoring Summer Research Internship Program (MSRIP)
- UC Leadership Excellence through Advanced Degrees (UC LEADS)

### **Undergraduate Education**

- Chancellor Research Fellowship
- Honors Program
- Undergraduate Research Quarterly Mini-Grants