REGULAR MEETING OF THE RIVERSIDE DIVISION

TUESDAY, MAY 24, 2016
GENOMICS AUDITORIUM, ROOM 1102A
2:10 p.m.

ORDER OF BUSINESS

1 Minutes
   Regular Meeting of February 23, 2016 .......................................................... 4
   Action Requested: Approval of the Minutes

2 Announcements by the President
   President Janet Napolitano is unable to attend

3 Announcements by the Chancellor at Riverside
   Chancellor Kim A. Wilcox will address the Division and present the Chancellor’s
   Awards for Excellence in Undergraduate Research and Creative Achievement
   to faculty recipients:
   A. Professor Ludwig Bartels, Chemistry .......................................................... 9
   B. Professor Katherine Sweeny, Psychology .................................................... 10

4 Announcements by Vice Chancellors
   None

5 Announcements by the Deans or other Executive Officers
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6 Announcements by the Chair

7 Special Orders
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* Approval of all items on the Consent Calendar requires a single unanimous vote called for as the first order of
business under Special Orders. At the request of any member of the Division, any such item must be withdrawn and
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ae) CNAS – Plant Biology Major ................................................ 103
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Action Requested: Approval of the Consent Calendar

B. Degree reports, received and placed on file† ................................ 112

C. Regular Reports of Standing Committees and Faculties, received and placed on file†
   i) Committee on Committees – Appointments-vacancies of elected positions which CoC filed on a short term basis ...................... 113
   ii) Committee on Courses - Course approvals ........................................ 114
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8 Report of the Representative to the Assembly
   A. Assembly Meeting, February 10, 2016 ........................................ 131
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9 Report of Special Committees
   None

† Reports received and placed on file “are received as presented and require no further action” [bylaw 4.1.3]. Only the reporting committee can change or withdraw these reports; however, at the request of any member of the Division, a report will be moved into its regular order on the agenda (Item 10. Reports of Standing Committees and Faculties) where it may be discussed, and motions relating to the report may be offered.
10 Reports of Standing Committees and Faculties
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   F. Committee on Preparatory Education – proposed change to Bylaw 8.24.1... 146
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   Action Requested: Individual approval of each proposal

11 Petitions of Students
   None

12 Unfinished Business
   None

13 University and Faculty Welfare
   UCR Campus Store Manager Stacy Weidner will address the Division

14 New Business
   None

May 18, 2016

S. See Secretary-Parliamentarian
Riverside Division of the Academic Senate
MEETING
The Riverside Division of the Academic Senate met on Tuesday, February 23, 2016 at 2:10 p.m. in the Genomics Auditorium Room 1102A. Chair J. Wudka presided. The meeting was attended by 36 members of the Riverside Division of the Academic Senate.

MINUTES
The Minutes of the Regular Meeting of December 1, 2015 were approved as presented.

ANNOUNCEMENTS BY THE PRESIDENT
There were no announcements by the President.

ANNOUNCEMENTS BY THE CHANCELLOR AT RIVERSIDE
Chancellor Kim A. Wilcox addressed the Division and thanked the Senate for the cluster hire survey results and recommendation report. He then presented a power point presentation to discuss the following topics:

- Student, staff, faculty growth: 2000 to present
  The student population has grown from 13,063 in 2000 to 21,651 in 2015 (an increase of 8,588). The faculty has grown from 514 in 2000 to 761 in 2015 (an increase of 247). The staff has grown from 2,436 in 2000 to 2,500 in 2015 (an increase of 64).
- Enrollment update
  52,467 undergraduate applications received for fall 2016, up 10.1% from 2015 (up 20% from 2014). 977 additional CA resident undergraduate students will be accepted this Fall (a 19% increase from Fall 2015)
- Chancellor Wilcox reviewed the 6-year graduation rates compared to national averages and noted that UCR continues on a positive trajectory.
- Growth in research funding
  UCR federal research awards have been on a steady rise since 2012. Specifically, federal funding is up 43% from 2012 to 2015, despite an 8% drop in federal research funding during that same time.
- Faculty growth
  In 2013 UCR had 671 ladder-rank/Clinical/LSOE faculty. In 2015 that number increased to 761. The goal is to have 971 faculty by 2020 of which 139 will be cluster hires (882 ladder-rank, 67 clinical, and 22 LSOE).
- Chancellor Wilcox discussed the faculty hiring program process. In April 2014, UCR announced the goal of expanding Senate faculty by 300 over five years. In October 2014, the decision was made to pursue the cluster hire initiative as part of the faculty hiring plan. Since then, 128 proposals were submitted by faculty, 33 clusters were announced, a faculty steering committee was created and search committees were formed. There are currently 118 open recruitments (76 cluster and 42 departmental). The Chancellor acknowledged faculty consternation about the cluster process, and agreed that the pace may have been too fast. He and the Provost are eager to engage with the campus and Senate on the process and timeline for future faculty hiring.
The Chancellor then discussed space on campus. The new Environmental Health and Safety building will be complete in the next two months. UCR is presently outfitting 25,000 square feet of office and dry lab space in the UCPath building which the University owns. Several operations have already moved off campus to the UCPath building, freeing up space on campus. The campus has $63 million to renovate Batchelor and Pierce Halls which should be completed by summer of 2018. There is a floor in the School of Medicine research building that is currently shelled out. The plan is to have this space ready by summer of 2017. The goal is to have the first multidisciplinary research building ready by summer of 2018 and a second multidisciplinary research building ready by fall of 2019 or 2020. Both Chancellor Wilcox and PEVC D’Anieri agreed that the next two years will be a challenge with regard to space and where to put people.

The Chancellor then accepted questions from the floor. A member was concerned that the word diversity in reference to faculty hiring was not discussed. With 118 new hires, the goal of diversifying the faculty to better reflect the population of the students should be a top priority. PEVC D’Anieri noted that the faculty overall is getting more diverse because people who are retiring at the end of their careers are much less diverse than the new hires. One of the goals of the cluster hiring is to allow a greater pool of diverse candidates. Chancellor Wilcox noted that the final hiring decisions are made in the faculty search committees, and that they have some responsibility for ensuring faculty diversity as well.

Another member inquired whether and when the two multidisciplinary research buildings and renovations to Batchelor and Pierce Halls were to be completed and if the campus would be on-target for 2020 in terms of having enough space. Chancellor Wilcox and PEVC D’Anieri noted that it may not be enough but it will be close.

Another member asked about classroom space for new students, and indicated that there is not enough classroom space on campus and that rooms accommodating 100-300 students are less common. Additionally, faculty cannot schedule courses due to lack of classroom space. PEVC D’Anieri noted that there is unused space in buildings on campus that can be utilized for these large classroom groups. He noted that the Pierce Hall renovation will include a classroom accommodating a large group of students. Chancellor Wilcox noted that tentative plans will include classroom space in the second research building.

Another member asked the Chancellor to provide rates of faculty retention. PEVC D’Anieri noted that it’s the faculty member’s decision whether to stay or leave. He noted that the VPAP’s office collected some data and found that UCR’s turnover rate is higher than some of the other campuses. Reasons are not yet known.

ANNOUNCEMENTS BY THE VICE CHANCELLORS
Vice Chancellor for University Advancement Peter Hayashida addressed the Division and presented a power point presentation featuring a campaign update and fundraising efforts. He also reviewed the University Advancement mission: inspire pride, commitment and investment in UCR. And the UCR 2020 Advancement Priorities: build a sustainable culture of philanthropy, heighten UCR’s national profile and plan and execute a comprehensive fundraising campaign.

A campaign is a coordinated fundraising effort designed to increase annual private support that has time constraints, specific goals, including amount raised and defined theme and priorities. All private support during the campaign counts toward the goal, whether or not it was designated as a priority. Different types of campaigns include Comprehensive, Capital, Endowment, and Special.
The Campaign for UC Riverside is considered a Comprehensive campaign (UCR’s first comprehensive campaign this campus has attempted in its 62 year history) and the timeframe will run from 2011 – 2020, to coincide with UCR 2020. The “quiet phase” (raising money behind the scenes) began July 1, 2011 and the “public launch” (announce campaign to the media, donor community and alumni) will take place in October 2016. By this time the goal is have 40-50% of the goal raised. As of February 15, 2016, $138 million has been raised. The theme is “Living the Promise” and UCR’s priorities for the campaign are faculty, students and infrastructure. The campaign will support student success through scholarships and fellowships, support faculty research and endowed chairs and support the building of the resources around the University that help make both the faculty and students successful.

UCR commissioned two research studies from an outside consultant: The Capacity Analysis (completed in 2012) and the Feasibility Study (completed in 2013). These studies revealed that UCR is capable of raising between $300-350 million. The goal will be finalized by summer 2016.

VC Hayashida discussed the relationship between University Advancement (UA) and the office of Research and Economic Development (RED). UA and RED are the two main organizations that track money coming into the University from a variety of external sources. The money is generated by faculty grants, other activities and events. RED reports all contracts and grants regardless of the funding source and UA reports all private support that is non-governmental. There is an overlap where both UA and RED report non-governmental grants.

A member asked if UA has reached out to the departments for their input. VC Hayashida noted that he has given presentations at some of the colleges/schools at the department chairs meetings and his goal it to make it to all colleges/schools.

A member asked if UCR has faculty lectures/talks with potential donors. VC Hayashida noted that UCR does do this. UA is always looking for speakers who have the framework to talk with those who are non-academic.

ANNOUNCEMENTS BY THE DEANS OR OTHER EXECUTIVE OFFICERS
Chair Wudka called upon the Secretary Parliamentarian to provide the report on election results. The Secretary Parliamentarian informed the Division that the results of the 2015-2016 recent elections for the Division, Colleges and Schools could be found on page 6 of the meeting agenda.

There was one position that had no more nominees than vacancies and for which no nominations were received from the floor. The Division authorized the Secretary-Parliamentarian to cast a single ballot for that open position.

ANNOUNCEMENTS BY THE CHAIR
Chair Wudka advised the Division of the following items:
- Adoption of new retirement tier - the Senate recommendation for those departments hiring in the current searches - make sure the candidates sign by June 30, 2016 before the new retirement tier takes effect.
- Joint Committee of the Administration and Academic Senate, co-chaired by Senate Chair Dan Hare and Sheryl Vacca, whose role was to investigate the inter-relation between the Senate grievance and disciplinary processes and those carried by the Administration, including Title IX. The report is out and is currently being reviewed by the Senate. Recommendations will be sent to the President.
• Regents Committee on Intolerance submitted a report which supports first amendment rights. For those of you aware of this issue, it has now been put to rest.

SPECIAL ORDERS
The Consent Calendar was unanimously approved.

The degree reports and regular reports of standing committees and faculties were received and placed on file.

REPORT OF THE REPRESENTATIVE TO THE ASSEMBLY
Riverside Assembly Representative for the year 2015-2016, Professor Mary Gauvain, provided the Division with a written report from the Assembly meeting on December 1, 2015. This report can be found on page 21 of the full agenda. There were no questions from the Division.

REPORTS OF SPECIAL COMMITTEES
There were no reports of Special Committees.

REPORTS OF STANDING COMMITTEES AND FACULTIES
Professor Christopher Chase Dunn introduced and moved for adoption of the Committee on Courses proposed Course Equivalency of Standard and Online Courses, found on page 24 of the full agenda. The motion was approved unanimously.

Professor Stephen Wimpenny introduced the Committee on Educational Policy proposed changes to R6.1 Campus Graduation Requirements, found on page 58 of the full agenda. The motion was approved unanimously.

Professor Leonard Nunney introduced the Committee on Library, Information Technology and Scholarly Communication proposed changes to Bylaw 8.9, found on page 60 of the full agenda. The motion was approved unanimously.

Professor Kenneth Barish introduced the Committee on Planning and Budget proposed changes to Bylaw 8.9, found on page 64 of the full agenda. The motion was approved unanimously.

PETITIONS OF STUDENTS
There were no petitions from the students.

UNFINISHED BUSINESS
There was no unfinished business.

UNIVERSITY AND FACULTY WELFARE
There were no items relating to university and faculty welfare.

NEW BUSINESS
There was no new business.

There being no further business, the meeting was adjourned at 3:07 p.m.

ATTEST:

S. See, Secretary-Parliamentarian
Riverside Division of the Academic Senate

Leondra Jacobs
Recording Secretary
2015-2016 CHANCELLOR’S AWARDS FOR EXCELLENCE IN UNDERGRADUATE RESEARCH AND CREATIVE ACHIEVEMENT

Faculty recipients:

Professor Ludwig Bartels, Chemistry:

In the 16 years since his hiring at UCR Dr. Bartels has mentored close to a hundred undergraduate research students from three colleges and eight departments. Dr. Bartels has developed and supervises the NSF funded Research Experiences for Undergraduates (REU) site (called MacREU), which supports research experiences for an additional 15 students each summer (mostly from Southern California Community Colleges or California State Universities). Dr. Bartels is willing to accept students into his research group with less than stellar GPAs and those same students show notable improvement while they are being mentored by him. Dr. Bartels has also made student diversity a hallmark of his undergraduate research mentoring effort. 40% of the undergraduate students that Dr. Bartels has mentored since 2010 belong to underrepresented groups, the majority being Hispanic. A nominator writes, “As a first generation Hispanic, my parents had considered attending a university to be a grand achievement, and I often saw it as a ceiling to my education until Dr. Bartels told me that I was capable continuing”. Most of Dr. Bartels’ publications since joining UCR have undergraduate co-authors, including one who earned first-authorship on an article in Science, one of the most prestigious journals (now at 200 citations). It is noteworthy that five of the six peer-reviewed articles that Dr. Bartels published in 2015 had UCR undergraduate student co-authors. Dr. Bartels’ undergraduate mentees present their research at conferences, and earn awards locally and in national competition. A nominator writes “I was treated equivalent to a full time graduate student and I felt obligated, as well as empowered, to pull my weight and perform well”. Undergraduate researchers from Bartels’ group proceed to graduate programs in the sciences and engineering or to medical school, and some have founded their own companies. A nominator writes “Working in Dr. Bartels lab made me realize how much I enjoyed research and made me want to take my education to the next level”. In the past three years, four of Dr. Bartels undergraduate research mentees obtained NSF graduate research fellowships based on their work with him.
Professor Katherine Sweeny, *Psychology*:

Professor Sweeny has mentored well over 300 undergraduate students in the less than 8 years at UCR. The research assistants in her lab are highly diverse, with over 80% consisting of underrepresented minorities and, separately considered, over 75% women. Her involvement with her students is deep and very time consuming. She treats her most committed and capable undergraduate researchers much like graduate students, with many one-on-one meetings and hands-on training in asking good research questions, designing unambiguously interpretable studies, analyzing the data, interpreting results, and writing the studies up in publication format. A nominator writes “Dr. Sweeny had never recommended I simply mimic the formatting of successful publications, but instead taught me the structural framework of professional writing and worked closely with me to integrate it into my own work”. Another nominator writes, “her teaching style is unique and integrates both a ‘hands-on’ approach while also providing significant room to understand and learn the methodology of research through trial and exploration.” Dr. Sweeny has mentored seven Honors capstone projects and has been the secondary advisor for an additional 10 Honors capstone projects. She also supervised two senior theses, as well as was the mentor for three students in UCR’s Mentoring Summer Research Internship Program (MSRIP). Professor Sweeny also supervised three Undergraduates in the Community projects, and eight students employed as interns for psychology department course credit. Two of her students have presented papers at national or international scientific conferences, two have presented at the annual UCLA Psychology Undergraduate conference, and six have published in the UCR Undergraduate Research Journal. Additionally, two of her mentees are co-authors on papers that have been submitted for publication in major research journals. Two of her mentees have received Chancellor’s Research Fellowships and another received the Chancellor’s award for Excellence in Undergraduate Research. Many of her students have benefited markedly from Dr. Sweeny’s mentoring, and for several it has been life-changing. A nominator writes, “Dr. Sweeny has been an amazing mentor who has seen potential within me and her students, providing opportunities for us to find it within ourselves. Through her dedication and high standards of excellence, I believe she will continue to mentor, enrich, and inspire the students of today, cultivating the researchers, writers, and professionals of tomorrow.” Several of Dr. Sweeny’s undergraduate researchers proceed to graduate school, law school, or medical school.
2016-2017 RESULTS FROM THE CALL FOR NOMINATIONS

To be received and placed on file:

1. RIVERSIDE DIVISION

A call for Nominations was issued for the following positions:

Chair of the Riverside Division (2 year term)

Two valid nominations received:
- Dylan Rodriguez, Department of Ethnic Studies
- Thomas Cogswell, Department of History

An election was held and the results of the balloting are as follows:

Dylan Rodriguez 130 votes*
Thomas Cogswell 115 votes

*Professor Dylan Rodriguez has been elected to serve as Chair of the Riverside Division.

Vice Chair of the Riverside Division (1 year term)

Two valid nominations received:
- Jodi Kim, Department of Media and Cultural Studies
- John W. Cioffi, Department of Political Science

An election was held and the results of the balloting are as follows:

Jodi Kim 91 votes
John W. Cioffi 145 votes*

*Professor John W. Cioffi has been elected to serve as Vice Chair of the Riverside Division.

Representative to the Assembly (2 year term)

One valid nomination received:
- Thomas Cogswell, Department of History

Committee on Committees (3 year terms)

One representative from BCoE
Two valid nominations received:
- Jianzhong Wu, Department of Chemical Engineering
- Ertem Tuncel, Department of Electrical & Computer Engineering

Ballots will be issued on May 24, 2016 and elections will close on Friday, June 3, 2016. Results will be announced on Monday, June 6, 2016.
Two representatives from CNAS
Two valid nominations received:
- Isgouhi Kaloshian, Department of Nematology
- Sarjeet Gill, Department of Cell Biology & Neuroscience

One representative from CNAS
*To complete John Ellison's term ending in 2018.*
After a second Call for Nominations, no valid nominations were received.

One representative from School of Medicine or School of Public Policy
*To complete Ilhem Messaoudi Powers' term ending in 2018.*
After a second Call for Nominations, no valid nominations were received.

2. **BOURNS COLLEGE OF ENGINEERING**

A call for Nominations was issued for the following positions:

**Chair of the Faculty, BCoE Executive Committee (3 year term)**

One valid nomination received:
- Thomas Stahovich, Department of Mechanical Engineering

**One member, BCOE Executive Committee (to complete a 3 year term)**
Elected from the Department of Bioengineering

One valid nomination received:
- Dimitrios Morikis

3. **COLLEGE OF HUMANITIES, ARTS & SOCIAL SCIENCES**

A call for Nominations was issued for the following positions:

**One Member, CHASS Executive Committee (2 year term)**
Elected from Department of Media and Cultural Studies

One valid nomination received:
- Derek Burrill

**One Member, CHASS Executive Committee (2 year term)**
To be chosen from among Art History, English, History, comparative Literature & Foreign Languages, Philosophy, Religious Studies, Hispanic Studies and Gender and Sexuality Studies

One valid nomination received:
- Matthew King, Department of Religious Studies

**Three Members, CHASS Executive Committee (2 year term)**
To be chosen from among Anthropology, Economics, Ethnic Studies, Political Science, Psychology and Sociology

One valid nomination received:
After a second Call for Nominations, no other valid nominations were received.

4. **COLLEGE OF NATURAL AND AGRICULTURAL SCIENCES**

A call for Nominations was issued for the following position:

**Chair of the Faculty, CNAS Executive Committee** (2 year term)

Two valid nominations received:
- Ward Beyermann, Department of Physics and Astronomy
- Theodore Garland, Department of Biology

Ballots will be issued on May 24, 2016 and elections will close on Friday, June 3, 2016. Results will be announced on Monday, June 6, 2016.

**One Member, CNAS Executive Committee** (3 year term)
Elected from the Department of Earth Sciences

After a second Call for Nominations, one valid nomination was received:
- Sandra Kirtland Turner

**One Member, CNAS Executive Committee** (3 year term)
Elected from the Department of Plant Pathology and Microbiology

One valid nomination was received:
- Shou-wei Ding

**One Member, CNAS Executive Committee** (3 year term)
Elected from the Department of Statistics

One valid nomination was received:
- Shujie Ma

5. **GRADUATE SCHOOL OF EDUCATION**

A call for Nominations was issued for the following positions:

**Chair of the Faculty, GSOE Executive Committee** (3 year term)

One valid nomination received:
- Jan Blacher

**Two Members, GSOE Executive Committee** (2 year term)
Elected from the faculty at large

Two valid nominations received:
- Cathleen Geraghty-Jenkinson
- Gregory Palardy
6. **SCHOOL OF BUSINESS ADMINISTRATION**

A call for Nominations was issued for the following positions:

- **One Member, SOBA Executive Committee (2 year term)**
  Elected from the area of Operations and Supply Chain Management

Two valid nominations received:
- Long Gao
- Elodie Goodman

An election was held and the results of the balloting are as follows:

- Long Gao: 19 votes*
- Elodie Goodman: 13 votes

*Professor Long Gao has been elected to serve as a member to the SoBA Executive Committee.

7. **SCHOOL OF MEDICINE**

A call for Nominations was issued for the following positions:

- **Four Members, SOM Executive Committee (2 year term)**
  Elected from the Clinical Sciences

Four valid nominations received:
- Scott Allen
- Paul Eric Lyons
- Andrew Subica
- Greer Sullivan

The results from the Call for Nominations and Elections have been posted on the Academic Senate website.
To be adopted:

**PRESENT:**

Business Informatics
Undergraduate Program
Major Requirements

1) Lower-division requirements (56 units)
   a) ENGR 001M
   b) BUS 020
   c) CS 010 or CS 010V, CS 012 or CS 012V
      or CS 013, CS 014, CS 061
   d) CS 011/MATH 011
   e) ECON 002, ECON 003
   f) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, and MATH 031

2) Upper-division requirements (93 units)
   a) ENGR 101M
   b) BUS 103, BUS 104/STAT 104, BUS 106/ECON 134
   c) CS 100, CS 141, CS 153, CS 165
   d) At least two courses from CS 164, CS 166, CS 172, CS 180
   e) CS 111/MATH 111
   f) ENGR 180W
   g) SOC 150
   h) STAT 155
   i) Sixteen (16) units of upper-division

Computer Science technical electives, which must be distinct from the courses used to satisfy the above major requirements. These 16 units may be chosen from those courses listed as upper-division requirements or technical electives for the Computer Science major. At least three courses must be in the Department of Computer Science and Engineering.

j) Twenty-four (24) units of Business Administration technical electives, including at least 8 units of courses listed in the Information Systems concentration within the Business Administration major. These 24 units must be distinct from the courses used to satisfy the above major requirements and may be chosen from any of

**PROPOSED:**

Computer Science with Business Applications
Undergraduate Program
Major Requirements

1) Lower-division requirements (56 units)
   a) ENGR 001M
   b) BUS 020
   c) CS 010 or CS 010V, CS 012 or CS 012V
      or CS 013, CS 014, CS 061
   d) CS 011/MATH 011
   e) ECON 002, ECON 003
   f) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, and MATH 031

2) Upper-division requirements (85 units)
   a) ENGR 101M
   b) BUS 103, BUS 104/STAT 104, BUS 106/ECON 134
   c) CS 100, CS 141, CS 153, CS 165
   d) At least two courses from CS 164, CS 166, CS 172, CS 180
   e) CS 111/MATH 111
   f) ENGR 180W
   g) SOC 150
   h) STAT 155
   i) Sixteen (16) units of upper-division

Computer Science technical electives, which must be distinct from the courses used to satisfy the above major requirements. These 16 units may be chosen from those courses listed as upper-division requirements or technical electives for the Computer Science major. At least three courses must be in the Department of Computer Science and Engineering.

j) Sixteen (16) units of Business Administration technical electives, including at least 8 units of courses listed in the Information Systems concentration within the Business Administration major. These 16 units must be distinct from the courses used to satisfy the above major requirements and may be chosen from any of the
the available Business Administration courses, with
the following restrictions: no credit will be given
for BUS 101, only one of BUS 171 and CS 180 can
be taken for credit, only one of BUS 173 and CS
166 can be taken for credit, only one of BUS 175
and CS 164 can be taken for credit, and only one of
BUS 125 and CS 177 can be taken for credit.

Students may petition for exceptions to the above
degree requirements. Exceptions to Computer
Science course requirements must be approved by
the Computer Science and Engineering
undergraduate advisor or chair.

Visit the Student Affairs Office in the College of
Engineering or www.engr.ucr.edu/studentaffairs
for a sample program.

**JUSTIFICATION:**
The CSE faculty voted to change the program name of Business Informatics to better reflect the overall
content and direction of the major as it relates to both Business and Computer Science within BCOE.
(Approved by the faculty of the Department of Computer Science and Engineering on March 9, 2016.)

The Computer Science and Engineering faculty re-examined the upper division requirements and felt that
reducing the business elective units was appropriate, still having students take a substantial number of
business courses, but also providing a good balance between CS and Business courses.

**APPROVALS:**
Approved by the faculty of the Department of Computer Science and Engineering: March 30, 2016
Approved by the Executive Committee of the Bourns College of Engineering: April 13, 2016
Approved by the Committee on Educational Policy: May 9, 2016
To be adopted:

Proposed Changes to Chemical Engineering Major

### Present:
**Major Requirements**

**Chemical Engineering**

Students must choose either a Biochemical Engineering, Chemical Engineering or Nanotechnology option.

1. Lower-division requirements (63 units)
   - a) BIOL 005A, BIOL 05LA
   - b) CHEM 001A, CHEM 001B, CHEM 001C
   - c) CHEM 01LA, CHEM 01LB, CHEM 01LC
   - d) CS 010
   - e) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046
   - f) PHYS 040A, PHYS 040B, PHYS 040C

2. Upper-division requirements (75 units)
   - a) CEE 158
   - b) CHEM 112A, CHEM 112B, CHEM 112C
   - c) CHE 100, CHE 110A, CHE 110B, CHE 114, CHE 116, CHE 117, CHE 118, CHE 120, CHE 122, CHE 160B, CHE 160C, CHE 175A, CHE 175B
   - d) CHE 130/ENVE 130, CHE 160A/ENVE 160A
   - e) ENGR 118

3. Option requirements: choose one option
   - a) Biochemical Engineering option (20 units)
     - 1) BCH 110A
     - 2) BIOL 121/MCBL 121
     - 3) CEE 010
     - 4) CHE 124, CHE 124L
     - 5) Four (4) units of technical electives chosen from CEE 132, CEE 135, CHE 140, CHE 150, CHE 171, ENVE 121
   - b) Chemical Engineering option (18 units)
     - 1) CEE 010, CEE 125
     - Twelve (12) units of technical electives chosen from CEE 132, CEE 135, CHE 140, CHE 150, CHE 171, ENVE 121

### Proposed:
**Major Requirements**

**Chemical Engineering**

Students must choose either a Biochemical Engineering, Chemical Engineering or Nanotechnology option.

1. Lower-division requirements (63 units)
   - No Change

2. Upper-division requirements (75 units)
   - No Change

3. Option requirements: choose one option
   - No Change
c) Nanotechnology option (21 units)
   (1) CEE 010
   (2) CHE 105
   (3) CHE 161
   (4) CEE 135
   (5) Eight (8) units of technical electives
       chosen from CHE 102, CHE 131, ENVE 133, ME 114, MSE 160, MSE 161

Visit the Student Affairs Office in the College of Engineering or student.engr.ucr.edu for a sample program.

Justification:
1. Electrochemical Engineering (CHE 131) is a four unit course with content relevant to many chemical engineering industries, complements other listed technical electives (e.g., CHE 102, CEE 135, and CEE 132), complements the core curriculum (e.g., CHE 100, 122, and 130), and provides student with fundamental knowledge in engineering of electrochemical processes.
2. Analytical Methods (CEE 125) is a four unit course that is currently listed as a required course for the Chemical Engineering option. The content is relevant to the Chemical Engineering option, but should not be mandatory for all students in the option as it limits students in the selection of other technical elective options.
3. To meet the minimum of 18 units for the option the number of units from technical electives must be sixteen (16) with an additional two (2) units from the required CEE 010 course.

Approvals:
Approved by the faculty of the Department of Chemical & Environmental Engineering: November 18, 2015
Approved by the Executive Committee of the College of Engineering: February 26, 2016
Approved by the Committee on Educational Policy: March 10, 2016
To be adopted:

Proposed Changes to Computer Science Undergraduate Requirements

PRESENT:
Major Requirements
Computer Science Major
1) Lower-division requirements (61 units)
   a) ENGR 001-I
   b) CS 010 or CS 010V, CS 012 or CS 012V or CS 013, CS 014, CS 061
   c) CS 011/MATH 011
   d) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 031
   e) PHYS 040A, PHYS 040B, PHYS 040C
   f) One course of 4 or more units in an engineering discipline outside the field of computer science to be selected in consultation with a faculty advisor. (Either a lower-division or an upper-division course may be used to satisfy this requirement.)

2) Upper-division requirements (86 units minimum)
   a) ENGR 101-I
   b) CS 100, CS 141, CS 150, CS 152, CS 153, CS 161, CS 179 (E-Z)
   c) CS 120A/EE 120A, CS 120B/EE 120B
   d) CS 111/MATH 111
   e) ENGR 180W
   f) STAT 155
   g) Two courses from MATH 046, MATH 120, MATH 126, PHIL 124

PROPOSED:
Major Requirements
Computer Science Major
No Change

2. Upper-division requirements (86 units minimum)
   a) ENGR 101-I
   b) CS 100, CS 141, CS 150, CS 152, CS 153, CS 161, CS 179 (E-Z)
   c) CS 120A/EE 120A, CS 120B/EE 120B
   d) CS 111/MATH 111
   e) ENGR 180W
   f) STAT 155
   g) At least 28 units of technical electives to be chosen from an approved list of courses which currently includes CS 122A, CS 122B, CS 130, CS 134, CS 145, CS 160, CS 162, CS 164, CS 165, CS 166, CS 168, CS 169, CS 170, CS 171, CS 172, CS 177, CS 179 (E-Z) (4 units maximum), CS 180, CS 181, CS 182, CS 183, CS 193 (4 units maximum), EE 140, MATH 120, MATH 126, MATH 135A, MATH 135B, PHIL 124.
h) At least 28 units of technical electives to be chosen from an approved list of courses which currently includes CS 122A, CS 122B, CS 130, CS 133, CS 134, CS 145, CS 151, CS 160, CS 162, CS 164, CS 165, CS 166, CS 168, CS 169, CS 170, CS 171, CS 172, CS 177, CS 179 (E-Z) (4 units maximum), CS 180, CS 181, CS 182, CS 183, CS 193 (4 units maximum), EE 140, MATH 120, MATH 135A, MATH 135B.

The technical electives selected must be distinct from those used to satisfy the requirements specified in 2.a)–h) above.

Visit the Student Affairs Office in the College of Engineering or student.engr.ucr.edu for a sample program.

The technical electives selected must be distinct from those used to satisfy the requirements specified in 2.a)–f) above, with at least half of the units selected from Computer Science courses.

No Change

JUSTIFICATION:
The faculty examined and conducted a regular analysis of our requirements. In doing so, we came to the conclusion that the courses in the (g) category (select two of four courses, which were math and logic courses) no longer deemed "required" status, given the direction the field of computer science has taken over the past decade and the direction that the field is heading. Thus, we moved two of (g)'s four courses into the list of allowable technical electives; the third was already listed there, and the fourth was lower-division so not allowable as a technical elective (and not really appropriate as a technical elective anyways). We decided the number of technical elective units (28) was still appropriate to properly train and expose students, and thus if students might need additional units to graduate, they could choose from any of the excellent courses offered across campus (or choose additional courses from the technical elective list if they wish). However, with the additional courses in the technical elective list, we decided to require that at least half the technique elective units come from CS courses, because while the math and logic courses that already existed and that were recently added are all excellent and appropriate for technical elective credit for a CS major, we also want to ensure every student has an appropriate exposure to upper-division CS-focused coursework.

APPROVALS:
Approved by the faculty of the Department of Computer Science and Engineering: February 10, 2016
Approved by the Executive Committee of the Bourns College of Engineering: February 26, 2016
Approved by the Committee on Educational Policy: March 11, 2016
To be adopted:

Proposed Changes to Business Economics

PRESENT:

The major requirements for a B.A. degree in Business Economics are as follows:

1. Lower-division requirements (five courses [at least 22 units])
   a) ECON 002, ECON 003
   b) BUS 020
   c) MATH 008B or MATH 009A or MATH 09HA, MATH 009B

2. Upper-division requirements (12 courses [at least 54 units])
   a) ECON 104A, ECON 104B
   b) ECON 105A, ECON 105B
   c) ECON 101, ECON 107
   d) Five additional upper-division courses in Economics worth 4 or 5 units each, including at least two courses from ECON 108, ECON 130, ECON 135, BUS 153/ECON 153, BUS 160/ECON 160, BUS 162/ECON 162, ECON 163. Two 2-unit courses can satisfy one 4- or 5-unit elective course.
   e) One course chosen from POSC 182, PSYC 142, SOC 151

Note Up to 4 units of internship credit may be counted toward the upper-division electives in Business Economics.

PROPOSED:

The major requirements for a B.A. degree in Business Economics are as follows:

1. Lower-division requirements (five courses [at least 22 units])
   a) ECON 002, ECON 003
   b) BUS 020
   c) MATH 009A or MATH 09HA, MATH 009B

2. Upper-division requirements (12 courses [at least 54 units])
   a) ECON 104A, ECON 104B
   b) ECON 105A, ECON 105B
   c) ECON 101, ECON 107
   d) Five additional upper-division courses in Economics worth 4 or 5 units each, including at least two courses from ECON 108, ECON 130, ECON 135, BUS 153/ECON 153, BUS 160/ECON 160, BUS 162/ECON 162, ECON 163. Two 2-unit courses can satisfy one 4- or 5-unit elective course.
   e) One course chosen from POSC 182, PSYC 142, SOC 151

Note Up to 4 units of internship credit may be counted toward the upper-division electives in Business Economics.

JUSTIFICATION:

The Math Department is deleting Math 8B. This change will keep the major updated with these changes.
APPROVALS:

Effective: Fall 2016
Approved by the Undergraduate Program committee in Economics: Oct. 30, 2015
Approved by the faculty of the Department of Economics: Oct. 30, 2015
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: April 6, 2016
Approved by the Committee on Educational Policy: April 29, 2016
To be adopted:

Proposed Changes to Economics Major

PRESENT:
Economics studies the production and distribution of goods and services, as well as the way in which productive activity helps shape social existence. Economists are concerned with the factors determining national income, inflation, unemployment, output, growth and inequality (macroeconomics), as well as the behavior of individual decision-making units like households and firms (microeconomics). Economists are also concerned with the role of markets, money and interest rates, the forces affecting international trade, and many other problems of production and distribution. Economics is the basis for many careers, some of which require only a B.A. degree while others require more advanced work. Possible careers include business, government, education and law.

The B.A. is the most general degree offered in economics. It is appropriate background for a wide variety of purposes, including graduate study and professional schools. However, those planning to attend a graduate program in economics may need more quantitative training than the B.A. requires. Students who are considering attending a graduate program in economics should consult with their undergraduate advisor. The Business Economics B.A. degree provides more specific preparation for careers in business administration or management or for graduate work in business.

PROPOSED:
Economics studies the production and distribution of goods and services, as well as the way in which productive activity helps shape social existence. Economists are concerned with the factors determining national income, inflation, unemployment, output, growth and inequality (macroeconomics), as well as the behavior of individual decision-making units such as households and firms (microeconomics). Economists are also concerned with the role of markets, money and interest rates, the forces affecting international trade, and many other problems of production and distribution. Economics is the basis for many careers, some of which require only a B.A. degree while others require more advanced work. Possible careers include business, government, education and law.

The B.A. is the most general degree offered in economics. It is appropriate background for a wide variety of purposes, including graduate study and professional schools. However, those planning to attend a graduate program in economics may need more quantitative training than the B.A. requires. Students who are considering attending a graduate program in economics should consult with their undergraduate advisor. The Business Economics B.A. degree provides more specific preparation for careers in business administration or management or for graduate work in business.

Transfer Admissions
Students transferring as juniors or seniors to UCR into any of the Economics majors must have completed a calculus course equivalent to UCR’s Math 9A. The effective date of 2018 is proposed to give students the appropriate time to prepare for the proposed changes.
Justification:
As economics is a calculus-based discipline, students who have not studied calculus are ill prepared for the major and unable to take the required microeconomics sequence.

The department obtained data for the 85 students who transferred into the economics department in Fall 2010. We asked for this year to give the students ample time to graduate. We classified a student as unsuccessful if their exit action was academic dismissal (5 students), status lapse (5 students), cancellation (3 students), or not yet graduated (2 students). We also included the 12 transfer students with very delayed graduation (in 13W, 13S, or 13U). Overall 32% of the transfer students were unsuccessful.

25 students had a non-calculus math class (Math 004, Math 005, or Math 008B) as their highest entering math class. Of these, 15 students (60%) were unsuccessful. Of those students subject to academic dismissal, 80% had Math 004, Math 005 or Math 008B as their highest math class.

20 students had Stat 048 as their highest math class: 30% of these students were unsuccessful.

The remaining 40 students had calculus or higher (Math 09 A/B/C, Math 10 or Math 22) as their highest math class. Of these students, only 5 (12.5%) were unsuccessful.

Given the stark contrast in the success rate for the students who do and do not have a calculus-based class upon entry into the major, we would like to impose a math requirement of Math 09A (or equivalent) for transfer students.

Approvals:
Department/Committee/Program Faculty: April 8, 2015
Faculty of the Department of Economics: April 10, 2015
Executive Committee College of Humanities, Arts, and Social Sciences: November 18, 2015
Reviewed by the Committee on Undergraduate Admissions: January 20, 2016
Committee on Educational Policy: April 29, 2017
To be adopted:

Proposed Changes to Economics/Administrative Studies

PRESENT:
In order to receive a B.A. degree in Economics/Administrative Studies students must fulfill the following requirements:

**Economics requirements** (12 courses, 55 units)
1. ECON 002, ECON 003
2. ECON 104A, ECON 104B, ECON 105A
3. Four additional upper-division courses in Economics worth 4 or 5 units each, including at least two that have either ECON 104A or ECON 105A or ECON 107 as a prerequisite. Two 2-unit courses can satisfy one 4-unit course.
4. ECON 101, ECON 107
5. One of MATH 008B, MATH 009A, MATH 009HA, or equivalent

**Note** Up to 4 units of internship credit may be counted toward the upper-division electives in Economics.

**Administrative Studies requirements** (37 units)
1. Lower-division courses (17 units)
   a) BUS 010, BUS 020
   b) STAT 048 or equivalent (may be used to satisfy breadth requirements)
   c) CS 008 (may be used to satisfy breadth requirements)
2. Upper-division requirements (20 units)
   a) Two courses (8 units) from the list below:
      (1) ECON 102 or ECON 104A or ECON 162/BUS 162
      (2) PSYC 140 or PSYC 142
      (3) SOC 150 or SOC 151 or SOC 171
      (4) POSC 181 or POSC 182 or POSC 183
      (5) ANTH 127 or ANTH 131
   These two courses must be outside the discipline of Economics and cannot be courses included as part of the three-course Business

PROPOSED:
In order to receive a B.A. degree in Economics/Administrative Studies students must fulfill the following requirements:

**Economics requirements** (12 courses, 55 units)
1. ECON 002, ECON 003
2. ECON 104A, ECON 104B, ECON 105A
3. Four additional upper-division courses in Economics worth 4 or 5 units each, including at least two that have either ECON 104A or ECON 105A or ECON 107 as a prerequisite. Two 2-unit courses can satisfy one 4-unit course.
4. ECON 101, ECON 107
5. One of MATH 009A, MATH 009HA, or equivalent

**Note** Up to 4 units of internship credit may be counted toward the upper-division electives in Economics.

**Administrative Studies requirements** (37 units)
No change.
Administration track or their cross-listed equivalents.

b) A three-course track (12 units) in Business Administration courses from one of the following:

(1) Organizations (General): BUS 100, BUS 107, BUS 176/SOC 176, BUS 158/ANTH 105, SOC 150, SOC 151
(2) Human Resources Management/Labor Relations: BUS 100, BUS 107, ECON 152, BUS 153/ECON 153, BUS 155, BUS 157, PSYC 142
(3) Business and Society: BUS 100, BUS 102, BUS 107, PHIL 116, POSC 182, POSC 186
(4) Marketing: BUS 103, and two from BUS 112, BUS 113, BUS 114, BUS 117
(5) Managerial Accounting/Taxation: BUS 108, and two from BUS 166, BUS 168A, BUS 168B
(7) Finance: BUS 106/ECON 134 and two from BUS 134, BUS 136, BUS 137, BUS 138, BUS 139
(8) Management Information Systems: BUS 101, BUS 171, BUS 173
(9) Production Management: BUS 104/STAT 104, and two from BUS 105, BUS 122, BUS 127/STAT 127

Note: In filling the dual requirements of the major students may not count more than two courses toward both parts of their total requirements. (This limitation applies to specified Economics requirements and specified Administrative Studies requirements, but does not apply to the

**Justification:**

The Math Department has revised their calculus courses. They will replace Math 8B with Math 6A & 6B in preparation for students to take Math 9A. This affects the Econ Admin Major only in that Math 8B must be removed as a deleted course.

**Approvals:**

Approved by the Undergraduate Program committee in Economics: Oct. 30, 2015
Approved by the faculty of the Department of Economics: Oct. 30, 2015
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: April 6, 2016
Approved by the Committee on Educational Policy: April 29, 2016
To be adopted:

Proposed Changes to Economics

**PRESENT:**

The major requirements for the B.A. degree in Economics are as follows:

1. Lower-division requirements (4 courses [at least 18 units])
   - a) ECON 002, ECON 003
   - b) MATH 009A or MATH 09HA, MATH 009B

2. Upper-division requirements (12 courses [at least 54 units])
   - a) ECON 104A, ECON 104B
   - b) ECON 105A, ECON 105B
   - c) ECON 101, ECON 107
   - d) One four or five unit course with ECON 104B or ECON 105B or ECON 107 as a prerequisite.
   - e) Five additional upper-division courses in Economics worth 4 or 5 units each, including at least three that have either ECON 104A or ECON 105A or ECON 107 as a prerequisite. Two 2-unit courses can satisfy one 4- or 5-unit course.

**PROPOSED:**

The major requirements for the B.A. degree in Economics are as follows:

1. Lower-division requirements (4 courses [at least 18 units])
   - a) ECON 002, ECON 003
   - b) MATH 009A or MATH 09HA, MATH 009B

2. Upper-division requirements (12 courses [at least 54 units])
   - a) ECON 104A, ECON 104B
   - b) ECON 105A, ECON 105B
   - c) ECON 101, ECON 107
   - d) One four or five unit course with ECON 104B or ECON 105B or ECON 107 as a prerequisite.
   - e) Five additional upper-division courses in Economics worth 4 or 5 units each, including at least three that have either ECON 104A or ECON 105A or ECON 107 as a prerequisite. Two 2-unit courses can satisfy one 4- or 5-unit course.

**Note** Up to 4 units of internship credit may be counted toward the upper-division electives in Economics.

**Justification:**

The Math Dept is deleting Math 8A and 8B. This change will keep the major updated.

**Approvals:**

Effective: Fall 2016

Approved by the Undergraduate Program committee in Economics: Oct. 30, 2015
Approved by the faculty of the Department of Economics: Oct. 30, 2015
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: April 6, 2016
Approved by the Committee on Educational Policy: April 29, 2016
EXECUTIVE COMMITTEE
COLLEGE OF HUMANITIES, ARTS AND SOCIAL SCIENCES

REPORT TO THE RIVERSIDE DIVISION
MAY 24, 2016

To be adopted:

Proposed Changes to Economics Minor

PRESENT:
The minor in Economics provides a background in this discipline. Students take basic microeconomic and macroeconomic theory courses, and then are given freedom of choice in pursuing upper-division courses of great interest.

All candidates for the minor in Economics must take

1. Lower-division requirements (5-10 units):
   ECON 004 or ECON 002, and ECON 003

2. Upper-division requirements (at least 26 units):
   a) ECON 102 or ECON 104A, ECON 103 or ECON 105A
   b) Four additional upper-division courses (at least 16 units) in Economics

See Minors under the College of Humanities, Arts, and Social Sciences in the Colleges and Programs section of this catalog for additional information on minors.

PROPOSED:
The minor in Economics provides a background in this discipline. Students take basic microeconomic and macroeconomic theory courses, and then are given freedom of choice in pursuing upper-division courses of great interest.

All candidates for the minor in Economics must take

1. Lower-division requirements (10 units):
   ECON 002, and ECON 003

2. Upper-division requirements (at least 26 units):
   a) ECON 102 or ECON 104A, ECON 103 or ECON 105A
   b) Four additional upper-division courses (at least 16 units) in Economics

See Minors under the College of Humanities, Arts, and Social Sciences in the Colleges and Programs section of this catalog for additional information on minors.

Justification:
The Department of Economics is deleting ECON 004 per NOFY. It needs to be removed as an optional lower division course in the Economics minor.

Approvals:

Approved by the Undergraduate Program committee in Economics: Oct. 30, 2015
Approved by the faculty of the Department of Economics: Oct. 30, 2015
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: April 6, 2016
Approved by the Committee on Educational Policy: April 29, 2016
EXECUTIVE COMMITTEE
COLLEGE OF HUMANITIES ARTS AND SOCIAL SCIENCES
REPORT TO THE RIVERSIDE DIVISION
MAY 24, 2016

To be adopted:

Proposed Changes to History Major

PRESENT:

Major Requirements
The History Department offers B.A. degrees in History, History/Administrative Studies, and History/Law and Society.

Change of Major
Students switching to the History, History/Administrative Studies, or the History/Law and Society Major must have completed three History courses with a grade of “C” or better.

History Major
The major requirements for the B.A. degree in History are as follows:
1. Lower-division requirements (12 units)
   a) one world history course
   b) HIST 19WV or HIST 99W (with at least a grade of “C”)
   c) one elective History course
2. Upper-division requirements (40 units)
   a) Twenty-eight (28) units of upper-division history courses, with at least three courses in one area of concentration from the following fields:
      Ancient and Medieval Europe
      United States
      Latin America
      Asia, Africa, and the Middle East
   b) Twelve (12) units of HIST 197, Research for Undergraduates, with at least one course in the student’s area of concentration.

PROPOSED:

Major Requirements
The History Department offers B.A. degrees in History, History/Administrative Studies, and History/Law and Society.

Change of Major
Students switching to the History Major must have completed two History courses with a grade of “C” or better. Students switching to the History/Administrative Studies, or the History/Law and Society Major must have completed three History courses with a grade of “C” or better. Advanced Placement units earned can be applied towards one course when determining major change eligibility.

History Major
The major requirements for the B.A. degree in History are as follows:
1. (no change)
2. (no change)
fields outside the area of concentration.
Students who choose United States as their area of concentration are strongly advised to take HIST 017A, HIST 017B as preparation for upper-division courses in American history.

Lower-division courses taken elsewhere may be counted toward the lower-division requirement, and advance placement units earned in high school may count toward its fulfillment as well. Please consult with the academic advisors for further details.

Each History major is urged to consult with the academic advisors for quarterly advising and to meet with the Undergraduate Advisor at least once time each year. Appointments can be made through the academic advisors.

**Justification:**
It has come to our attention that our current requirements for changing into the major may be an impediment to students trying to enter History. We would like to alleviate that barrier. History/Administrative Studies and History/Law and Society will remain unchanged as their current entry requirements appear to be working for their purposes. Finally, we would like to put a policy into place regarding AP History credit; this will ensure that our incoming majors will have spent at least one quarter in a course in the department before joining the major.

**Approvals:**
Approved by the faculty of the Department of History: January 27, 2016
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: February 24, 2016
Approved by the Committee on Educational Policy: April 29, 2016
EXECUTIVE COMMITTEE  
COLLEGE OF HUMANITIES ARTS AND SOCIAL SCIENCES  

REPORT TO THE RIVERSIDE DIVISION  
MAY 24, 2016  

To be adopted:  

Proposed Changes to Media & Cultural Studies Major  

PRESENT:  

Major  

The Department of Media and Cultural Studies offers the B.A. in Media and Cultural Studies, an interdisciplinary examination of film, video, television, multimedia, and visual culture with a primary emphasis on history and theory and a secondary focus on production.  

PROPOSED:  

Major  

The Department of Media and Cultural Studies offers the B.A. in Media and Cultural Studies, an interdisciplinary examination of film, video, television, multimedia, visual and digital cultures with a primary emphasis on history and theory and a secondary focus on creative intervention in media environments through production.  

The Media and Cultural Studies major combines the breadth of an interdisciplinary major with a precise focus on visual media. Its interdisciplinary structure brings together approaches to visual media that would usually be separated by discipline. Students have a unique opportunity to acquire critical skills in the reading and analysis of media texts together with those involved in various modes of media production. This applied experience includes training in creative, documentary, and ethnographic video; photography; multimedia production; and screenwriting. Familiarity with media, either for its academic or industrial applications, enhances one’s understanding of any field in the humanities or social sciences today.  

The Media and Cultural Studies focuses an interdisciplinary lens on the analysis of the dynamic relationship between media and society with special emphasis on race, gender, class, sexuality, and ethnicity as well as political economy and globalization. Our students critically engage in major debates about social and environmental justice within both global and local contexts. They also learn through practicing creative interventions in media ecologies, for example, creative, documentary, and ethnographic video; photography; multimedia and digital production; and journalism. Media literacies are essential for the making of engaged global citizens, capable of moving flexibly between the applied and the critical, the professional and the scholarly, the empirical and the theoretical.  

Major Requirements  

1. Lower-division requirements (5 lower-division courses [at least 20 units]):  
   a) Introduction to Media and Cultural Studies: MCS 001  

   Students are required to take MCS 001 and must receive a “C-/above” in this course to declare MCS as their major. The department will consider grade petitions on a case-by-case basis.
b) Introduction to Media Studies: MCS 005 and Introduction to Cultural Studies: MCS 010.

c) Two additional courses (at least 8 units) from the following: AHS 008, ART 003, ART 070 (E-Z), AST 048/CHN 048, CRWT 040, CS 008, CS 010, DNCE 014, DNCE 019, ENGL 033, MCS 004/ART 004, MCS 006/ART 006, MCS 009/MUS 007, MCS 015, MCS 020, MCS 021/CPLT 021, MCS 022/AST 022/JPN 022, MCS 023/AHS 020, MCS 024/CPLT 024, MCS 026/CPLT 026/EUR 026, MCS 036/CPLT 027, MCS 038/CLA 045, MCS 040/MUS 007, MCS 042/GER 045, MCS 043/RUSN 045, MCS 044/ITAL 045, MCS 045/FREN 045, MCS 046/SPN 046, MCS 047/AST 047/KOR 047/MCS 049/AST 064/VNM 064, CRWT 066/MCS 066/TFDP 066, TFDP 010, TFDP 021/ENGL 021.

2. Upper-division requirements (minimum 10 upper-division courses [at least 40 units]):

   a) Any upper division MCS course or chosen from:


   b) Any 3 of the following 5 courses

   ART 004/MCS 004, MCS 005, MCS 010, MCS 020, AHS 020/MCS 023.

   c) One additional course (at least 4 units) from the following:


2. Upper-division requirements (minimum 9 upper-division courses [at least 36 units]):

   a) 6 upper division MCS courses (strongly recommended to be taken with MCS faculty) chosen from [24 units total]


b) Two additional courses outside of MCS chosen from [8 units total]

AHS 182, AHS 188, ANTH 121, ANTH 163, ANTH 180A, CPLT 110, CPLT 143/FREN 143, CRWT 151, CRWT 155, CRWT 174, DNCE 131, DNCE 132, DNCE 134, DNCE 135, ENGL 102, ENGL 121 (E-Z), ENGL 122 (E-Z)/LGBS 122 (E-Z), ENGL 142 (E-Z), ETST 170/WRLT 170, ETST 175/GSST 175, HIST 191X, LNST 168/ANTH 168/ETST 148, MUS 126/ANTH 177/GSST 126, MUS 140/HISA 139, MUS 153/LGBS 153, PHIL 111, POSC 146, SOC 154, SOC 168, SOC 169, SPN 102A, SPN 102B, TFDP 115, TFDP 122, TFDP 160, TFDP 177, TFDP 191W

c) One production course chosen from [4 units total]


No more than four units of MCS 190 and a total of four units of MCS 1981 may be applied towards the minimum requirement.

d) No more than four units of MCS 190 or MCS 193 and a total of four units of MCS 1981 may be applied towards the minimum requirement.

Justification:

1) The description for the major is long overdue, particularly because the UCR catalogue still contains the three curricular tracks that were inherited from the Film and Visual Culture Program (defunct since 2008 and which is now MCS).

2) To eliminate repetition and streamline our courses, ONE gateway course instead of THREE is now required of all majors. To declare the major, students are required to take MCS 001: Introduction to Media and Cultural Studies and complete the course with a C-/above. MCS 001 will provide the appropriate base upon which both lower and upper division classes in the major will further build and develop. Offered year round (including the summer), this class is specifically designed to introduce students a broad overview of the histories, theories, and methodologies comprised in the study of media and culture.
3) To raise academic standards and better emphasize our faculty strengths, we have increased the number of lower-division courses that students must take with MCS faculty. In addition to MCS 001, students must take any three of the following: ART 004/MCS 004, MCS 005, MCS 010, MCS 020, AHS020/MCS 023. Lower division courses provide students a solid foundation in the fields of cultural studies, media studies, visual culture, film, art, and digital media, so that they may do more advanced work in the major.

4) ART 004/MCS 004: Introduction to Moving Images is now one of the five required lower-division courses students must take for the major.

5) To cultivate interest outside of department, we require students take one additional course outside of the department at the lower division level.

6) The following courses have been deleted from our lower division requirements because we stress that MCS students take classes with core MCS faculty throughout their undergraduate career, but particularly in the beginning stages of the major. To this end, we have eliminated AHS 008, ART 003, ART 070 (E-Z), AST 048/CHN 048, CRWT 040, CS 008, CS 010, DNCE 014, DNCE 019, ENGL 033, MCS 026/CPLT 026/EUR 026, MCS 036/CPLT 027, MCS 038/CLA 045, MCS 042/GER 045, MCS 043/RUSN 045, MCS 044/ITAL 045, MCS 045/FREN 045, MCS 046/SPN 046, MCS 047/AST 047/KOR 047, MCS 049/AST 064/VNM 064, MCS 066/CRWT 066/TFDP 066, TFDP 010, TFDP 021/ENGL 021.

7) MCS 024: World Cinema has been eliminated because no one in the department teaches this.

8) MCS 26 is not a viable class number.

9) MCS 38: Ancient World in Film has been eliminated because no one in the department teaches this.

10) Upper division requirements are reduced from 40 units to 36. Because of the recent growth in the number of MCS faculty, the committee discussed the need to assert the core faculty’s distinctive approach to media and cultural studies. We do this by strongly recommending that students take 5 upper division classes with MCS faculty, thereby cultivating a relationship with faculty as mentors and internship supervisors. To this end, we have eliminated any classes or cross-listed classes that core MCS faculty or affiliate faculty are no longer teaching.

11) MCS 133: The Effects of Mass Media was deleted because there is no faculty interest in teaching this subject.

12) MCS 145I: Liberal Hollywood and “Social” Problems was deleted because the faculty who had proposed this course is no longer teaching it.

13) To cultivate interest outside of the department, we require that students take three additional courses outside of MCS at the upper division level. These courses strongly resonate with faculty and affiliate faculty research and teaching interests.

14) Our curriculum objective considers the need to better prepare students for work in the media and cultural industries. Consequently we add one production course requirement so that students acquire practical knowledge in media making.
15) We provide students with three options to better prepare for a life after MCS, whether this is graduate school and/or a career in the media/cultural industries. Students may work closely with MCS faculty through the following classes: MCS 190: Independent study; MCS 193: Senior Seminar; and MCS 198I: Internship. No more than 4 units from MCS 190 or MCS 193 may be applied towards the minimum requirement. A total of 4 units of MCS 198I may be applied towards the minimum requirement.

**Approvals:**
Approved by the faculty of the Department of Media & Cultural Studies: November 28, 2015
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: February 24, 2016
Approved by the Committee on Educational Policy: April 29, 2016
EXECUTIVE COMMITTEE
COLLEGE OF HUMANITIES ARTS AND SOCIAL SCIENCES

REPORT TO THE RIVERSIDE DIVISION
MAY 24, 2016

To be adopted:

Proposed Changes to Media & Cultural Studies Minor

PRESENT:

Minor

The Media and Cultural Studies minor provides an interdisciplinary examination of film, television, digital multimedia, and visual culture, with an emphasis on history and theory, rather than production, in order to develop media literacy.

PROPOSED:

Minor

The Media and Cultural Studies minor provides an interdisciplinary examination of film, video, television, multimedia, visual and digital cultures with a primary emphasis on history and theory and a secondary focus on creative intervention in media environments through production.

1. Lower-division requirements (2 lower-division courses [at least 8 units]):
   a) MCS 001
   Students are required to take MCS 001 and must receive a “C-/above” in this course to declare MCS as their minor. The department will consider grade petitions on a case-by-case basis.
   b) 1 lower division course chosen from the following:
      ART 004/MCS 004, MCS 005, MCS 010, MCS 020, AHS 020/MCS 023

2. Upper-division requirements (a minimum of 4 courses [at least 16 units]):
   a) Any upper division MCS course or chosen from:
      AHS 115/LNST 115, AHS 134, AHS 166/GSST 169, AHS 181, AHS 182, AHS 188, ANTH 102/AHS 102, ANTH 121, ANTH 137, ANTH 163, ANTH 180A, ANTH 180B, CPLT 110, CPLT 143/FREN 143, CPLT 166/AST 166/VNM 166, CPLT 180V, CPLT 181/FREN 181, CRWT 151, CRWT 155, CRWT 174, MCS 102, ANTH 103/MCS 103, ENGL 104/ MCS 104, MCS 105, MCS 106, MCS 107, MCS 110 (E-Z), MCS 111, GSST 112/LGBS 112/MCS 112, CPLT 134/GER 134/JPN 134/MCS 114, MCS 115, GER 118 (E-Z)/MCS 118 (E-Z), MCS 120, MCS 122, GSST 124/MCS 123/SEAS 175, MCS 124, LNST 125 (E-Z)/MCS 125 (E-Z)/SPN 125 (E-Z), CPLT 126/GER 126/MCS 126, GSST 166/MCS 127, MCS 128, MCS 129, MCS 130, ART 131/MCS 131, MCS 132, MCS 134, ART

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b) No more than two media production courses (8 units) may be used towards the total of five upper division courses chosen from:

- ART 140,
- ART 145,
- ART 146 (E-Z),
- ART 155,
- ART 167,
- ART 168,
- ART 169 (E-Z),
- ART 175,
- CRWT 151,
- CRWT 155,
- CRWT 174,
- CS 133,
- CS 143,
- MCS 131/ART 131,
- MCS 134,
- MCS 135/ART 135,
- MCS 136/ART 136,
- MCS 150/ART 150,
- MCS 161/DNCE 161,
- MCS 162/DNCE 162,
- MUS 139,
- MUS 173,
- TFDP 101,
- TFDP 102,
- TFDP 109,
- TFDP 145,
- TFDP 132,
- TFDP 133,
- TFDP 135,
- TFDP 138,
- TFDP 141,
- TFDP 144,
- TFDP 145,
- TFDP 155,
- TFDP 156A,
- TFDP 156B,
- TFDP 157,
- TFDP 160,
- TFDP 166A,
- TFDP 166B,
- TFDP 166C,
- TFDP 167,
- TFDP 168,
- TFDP 169,
- TFDP 191I,
- TFDP 191W

See Minors under the College of Humanities, Arts, and Social Sciences in the Colleges and Programs section of this catalog for additional information on minors.

**Justification:**

1) The description for the minor is long overdue, particularly because the UCR catalogue still contains the three curricular tracks that were inherited from the Film and Visual Culture Program (defunct since 2008 and is now MCS).
2) To eliminate repetition and streamline our courses, ONE gateway course instead of THREE is now required of all majors. To declare the major, students are required to take MCS 001: Introduction to Media and Cultural Studies and complete the course with a C-/above. MCS 001 will provide the appropriate base upon which both lower and upper division classes in the major will further build and develop. Offered year round (including the summer), this class is specifically designed to introduce students a broad overview of the histories, theories, and methodologies comprised in the study of media and culture.

3) To raise academic standards and better emphasize our faculty strengths, we have increased the number of lower-division courses that students must take with MCS faculty. They must be MCS 001: Introduction to Media and Cultural Studies and any one of the following: ART 004/MCS 004, MCS 005, MCS 010, MCS 020, AHS 020/MCS 023.

4) ART 004/MCS 004: Introduction to Moving Images is now one of the five required lower-division courses students must take for the major.

5) While lower division requirements have increased by four units, our upper division requirements are reduced from 20 units to 16 units. This change reflects our emphasis for students to take lower division courses so that they acquire a foundation for their upper division courses.

6) MCS 133/ SOC138: The Effects of Mass Media was deleted because there is no faculty interest in teaching this subject.

7) MCS 142/ GSST 122 / SEAS 172: Gender in Southeast Asian Diasporic Literature and Film. The title has been changed to “MCS 142: Southeast Asian Diasporic Literature and Film.”

8) MCS 145I/ ENGL 145I: Liberal Hollywood and “Social” Problems was deleted because the faculty who had proposed this course is no longer teaching it.

9) So that students have a better chance of graduating with MCS as a minor, we have allowed that one production course instead of two production courses can count towards the minor.

Approvals:
Approved by the faculty of the Department of Media & Cultural Studies: November 28, 2016
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: February 24, 2016
Approved by the Committee on Educational Policy: April 29, 2016
To be adopted:

Proposed Changes to Middle East and Islamic Studies Major

**PRESENT:**
The major requirements for the B.A. in Middle East and Islamic Studies are as follows: – (60 units of required courses):

1. Language requirement: 6 courses (24 units) Students are required to fulfill the language requirement by taking 6 classes in a language in MEIS (Arabic, Persian, Turkish, Hebrew, Urdu) or pass the proficiency requirement by taking a test administered by the department. Currently UCR offers only Arabic but students can take language classes either abroad (i.e. AUC in Cairo, Boğaziçi University in Istanbul), or in other UC campuses (UCLA, Irvine) upon the approval of MEIS director.

2. MEIS Senior Seminar. One (4 units) taught by MEIS faculty preceded by a gateway or upper division course on the same topic.

3. Required courses: 3 courses (12 units) (at least one should be taken from area I and one from area II)
   - I. Survey courses:
     - ARLC 101, RLST 111, RLST 113, HIST 121, HIST 124
   - II. Specialized courses
     - POSC 156, GSST168, GBST/ANTH 169

4. Select five from the elective courses – (20 units of elective courses)

**PROPOSED:**
The major requirements for the B.A. in Middle East and Islamic Studies are as follows: - (56 units of required courses):

[no change]

2. Required courses: 3 courses (12 units) (at least one should be taken from area I and one from area II)
   - I. Survey courses:
     - ARLC 155/CPLT 155/MEIS 155/RLST 157, RLST 111, HIST 121, HIST 124
   - II. Specialized courses
     - ANTH169/GBST 169, ANTH 168/GSST 168, HIST 125, HIST 126

3. Select five from the elective courses – (20 units of elective courses).

**Arabic Literatures and Cultures**
ARLC 120, ARLC 151/CPLT 151/MEIS 151, ARLC 152/CPLT 152, ARLC 154/CPLT 154/PHIL 128, ARLC 156/CPLT 156/MEIS 156/RLST 156, ARLC 158/CPLT 158/MEIS

[no change]
158/RLST 158

**Anthropology**
ANTH 136, ANTH 140I

**Asian Studies**
AST 167/CPLT 167

**Comparative Ancient Civilizations**
CPAC 121/CLA 121/POSC 121

**Creative Writing**
CWPA 256

**Economics**
ECON 170E

**Gender and Sexuality Studies**
GSST 151, GSST 109/ANTH 109, GSST 162/RLST 162

**Global Studies**
GBST 191

**History**
HIST 030, HIST 111, HIST 125, HIST 126

**Middle East and Islamic Studies**
MEIS 199

**Media and Cultural Studies**
MCS 172

**Political Science**
POSC 107, POSC 120, POSC 133, POSC 152

**Religious Studies**
RLST 116, RLST 121, RLST 130

**Anthropology**
ANTH 136/SEAS 136, ANTH 140I

**Asian Studies**
AST 167/CPLT 167/SEAS 167

**Comparative Ancient Civilizations**
[no change]

**Creative Writing**
[no change]

**Economics**
[no change]

**Gender and Sexuality Studies**
GSST 151/ANTH 188, GSST 109/ANTH 109, GSST 162/RLST 162

**Global Studies**
[no change]

**History**
HISE 117, HISE 160

**Middle East and Islamic Studies**
MEIS 199 (taken senior year with the prior approval of the instructor or MEIS director)

**Media and Cultural Studies**
[No change]

**Political Science**
[No Change]

**Religious Studies**
RLST 113, RLST 112, RLST 116, RLST 121, RLST 130, RLST 148, RLST 149/SEAS 149

**Theatre, Film and Digital Production**
TFDP 177
Justification:

1. The MEIS major no longer requires the MEIS 199 senior seminar. This class is included in the elective list and is optional for students. If the student wishes to take this course as part of their electives, it is recommended to take the course during their senior year. Enrolling in the MEIS 199 will require pre-approval from the MEIS director or the instructor of the course to ensure the student has appropriate background.

2. Removing the senior seminar requirement reduces the total required units to 56 (from 60).

3. The content of HIST 124, HIST 125 and HIST 126 is appropriate for required specialized courses. These have been added to the Area I & II section and deleted from the elective list.

4. The content of RLST 113 is more appropriate for elective options. It has been moved from Area I to the elective list.

5. ARLC 001: Intro to Arabic Literatures and Cultures was deleted and modified to ARLC 155/CPLT 155/MEIS 155/RLST 157: Intro to Arabic Literature, but was left out of the required courses list.

6. The MEIS content majors allow students to double count up to two courses as there is minimal MEIS content for students to choose from.

7. The MEIS major has added courses to the elective options: RLST 112: Islam in America, RLST 148: Religions of the Silk Road, RLST 149: South Asian Religions, HISE 160: India and the British Empire, and HISE 117: The Decline and Fall of the Roman Empire. These courses are being added in order to give students a larger variety of options in order to complete the program. All courses have MEIS content.

8. The MEIS minor has removed POSC 156 as a requirement as the professor (Ebru Erdem) who offered the courses is no longer at UCR.

9. HIST 111 has been deleted as it is no longer relevant to the major.

10. Adding the dash between 140 and I to match minor.

11. AST 167/CPLT 167 is also cross listed with SEAS 167. GSST 151 is cross listed with ANTH 188. RLST 149 is cross listed with SEAS 149.

12. TFDP 177 is relevant to the major and has been added to the list. It has always been a part of the designated emphasis.

Approvals:

Approved by the faculty of the Department of Middle East and Islamic Studies: May 28, 2015
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: March 9, 2016
Approved by the Committee on Educational Policy: May 3, 2015
EXECUTIVE COMMITTEE
COLLEGE OF HUMANITIES ARTS AND SOCIAL SCIENCES

REPORT TO THE RIVERSIDE DIVISION
MAY 24, 2016

To be adopted:

Proposed Changes to Middle East and Islamic Studies Minor

PRESENT:

1. Select two from the required courses (8 units)
   GBST 169/ANTH 169, HIST 121, POSC 156, RLST 111, RLST 113, GSST 168

2. Select four from the elective courses (16 units)
   a) Arabic Literatures and Cultures
      ARLC 120, ARLC 151/CPLT 151/MEIS 151, ARLC 152/CPLT 152, ARLC 154/CPLT 154/PHIL 128, ARLC 156/CPLT 156/MEIS 156/RLST 156
   b) Anthropology
      ANTH 136, ANTH 1404
   c) Asian Studies
      AST 167/CPLT 167
   d) Comparative Literature
      CPLT 153
   e) Gender and Sexuality Studies
      GSST151, GSST 162/RLST162
   f) History
      HIST 124, HIST 125, HIST 126
   g) Middle East and Islamic Studies
      MEIS 199
   h) Political Science
      POSC 107, POSC 120, POSC 133, POSC 152
   i) Religious Studies
      RLST 116, RLST 124, RLST 149, RLST 150, RLST 151, RLST 155

PROPOSED:

1. Select two from the required courses (8 units)
   ANTH168/GSST 168, ANTH 169/GBST 169, ARLC 155/CPLT 155/MEIS 155/RLST 157, HIST 121, HIST 124, RLST 111

2. Select four from the elective courses (16 units)
   a) [no change]
   b) Anthropology
      ANTH 136/SEAS 136, ANTH 140-I
   c) Asian Studies
      AST 167/CPLT 167/SEAS 167
   d) [no change]
   e) Gender and Sexuality Studies
      GSST 151/ANTH 188, GSST 162/RLST 162
   f) History
      HISE 117, HISE 160, HIST 125, HIST 126
   g) [no change]
   h) [no change]
   i) Religious Studies
      RLST 112, RLST 113, RLST 116, RLST 126/HIST 127, RLST 148, RLST 149/SEAS 149, RLST 150/SEAS 150, RLST 151, RLST 155
See Minors under the College of Humanities, Arts, and Social Sciences in the Colleges and Programs section of this catalog for additional information on minors.

**Justification:**

1. ARLC 001: Intro to Arabic Literatures and Cultures was deleted and modified to ARLC 155/CPLT 155/MEIS 155/RLST 157: Intro to Arabic Literature, but was left out of the required courses list.

2. RLST 113: Topics in Modern Islam is more appropriate as an elective rather than a required course.

3. HIST 124: Women in Middle Eastern and Islamic History is more appropriate as a required course rather than an elective.

4. The ANTH 140-I requirement was mis-labeled as ANTH 1401 in the catalog.

5. The MEIS major has added courses to the elective options: RLST 148: Religions of the Silk Road, RLST 149: South Asian Religions, HISE 160: India and the British Empire, and HISE 117: The Decline and Fall of the Roman Empire. These courses are being added in order to give students a larger variety of options in order to complete the program. All courses have MEIS content.

6. RLST 124K was listed but is no longer an option as it has not been offered in many years. RLST 112: Islam in America is an option, but was left out of the list in the catalog.

7. The MEIS minor has removed POSC 156 as a requirement as the professor (Ebru Erdem) who offered the courses is no longer at UCR.

8. GSST 168 is cross listed with ANTH 168. ANTH 136 is cross listed with SEAS 136. AST 167/CPLT 167 is also cross listed with SEAS 167. GSST 151 is cross listed with ANTH 188. RLST 127 is cross listed with HIST 127. RLST 149 is cross listed with SEAS 149. RLST 150 is cross listed with SEAS 150.

**Approvals:**

Approved by the faculty of the Department of Middle East and Islamic Studies: April 27, 2015
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: March 9, 2016
Approved by the Committee on Educational Policy: April 29, 2016
To be adopted:

Proposed Changes to Selection Criteria – Transfer Applicants into Psychology

**PRESENT:**

**PROPOSED:**

**College of Humanities, Arts and Social Sciences.**

Admission is selective based on GPA in all transferrable coursework with a minimum GPA of 2.4. Neuroscience, and Psychology applicants must have a minimum GPA of 2.7 in all transferable college coursework. For further information call Student Academic Affairs at (951) 827-3683.

**College of Humanities, Arts and Social Sciences.**

Admission is selective based on GPA in all transferrable coursework with a minimum GPA of 2.4. Neuroscience and Psychology applicants must have a minimum GPA of 2.7 in all transferable college coursework. Psychology applicants must also have a minimum of one UC transferable mathematics course equivalent to Math 004 or higher. For further information call Student Academic Affairs at (951) 827-3683.

**Justification:**

Over the past five years, 2010 Fall through 2014 Fall, 38% (124/328) of psychology transfer students who did not complete one UC transferable mathematics course equivalent to Math 4 or higher prior to admission tested into ARC 35. ARC 35 is a remedial math workshop designed to refresh math skills in order to prepare students to enroll in university level math coursework. These psychology transfer students who did not complete one UC transferable math course prior to transfer are failing in the psychology major at an average rate equal to 65% (42% - 90% ≈ 14 students per year)\(^1\). These students are then discontinued from their major late in their junior or senior year, thus making it difficult to transition to a new major and graduate in four years. In the last four years, 28% (≈ 25 students) of these psychology transfer students lapsed and no longer attend UCR\(^2\).

\(^1\)Compared to only 5% of students who did complete one UC transferable math course prior to transfer.

\(^2\)Compared to only 7% of students who did complete one UC transferable math course prior to transfer.

**Approvals:**

Approved by the faculty of the Department of Psychology: November 10, 2015
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: February 24, 2016
Reviewed by the Committee on Undergraduate Admissions: March 16, 2016
Approved by the Committee on Educational Policy: April 29, 2016
To be adopted: Proposed Changes to Psychology Change of Major Criteria

PRESENT:

Change of Major Criteria

Students switching to the Psychology or Psychology/Law and Society must have completed the following courses with grades of C- or better and have been in good academic standing for two quarters or more.

1. Lower Division requirements
   a. PSYC 001, PSYC 002 and PSYC 011

Transfer students and others entering the major after achieving sophomore standing must complete the requirements within one year by enrolling in applicable courses every quarter until the requirement is met. Students who do not complete the lower-division requirements in this timely fashion and with at least the minimum required grade average will not be permitted to continue in the Psychology major. Students must check course descriptions for prerequisite requirements.

PROPOSED:

Change of Major Criteria

Students switching to the Psychology or Psychology/Law and Society must have completed the following courses with grades of C- or better and have been in good academic standing for two quarters or more.

1. Lower Division requirements
   a. PSYC 001, PSYC 002, PSYC 011 and MATH 004 or higher

Transfer students and others entering the major after achieving sophomore standing must complete the requirements within one year by enrolling in applicable courses every quarter until the requirement is met. Students who do not complete the lower-division requirements in this timely fashion and with at least the minimum required grade average will not be permitted to continue in the Psychology major. Students must check course descriptions for prerequisite requirements.

Justification:
The proposed change makes explicit that MATH 004 or higher is a prerequisite to change into the Psychology or Psychology/Law and Society majors, a requirement that currently exists but only as a prerequisite to the required PSYC 011 course.

If approved, the Change of Major criteria will explicitly parallel the also proposed and accompanying “Change to Selection Criteria – Transfer Applications into Psychology”.

Approvals:
Approved by the faculty of the Department of Psychology: November 10, 2015
Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: February 24, 2016
Reviewed by the Committee on Undergraduate Admissions: March 16, 2016
Approved by the Committee on Educational Policy: April 29, 2016
To be adopted:

Proposed Changes to Theatre, Film and Digital Production Major

**PRESENT:**

**Major Requirements**
The major requirements for the B.A. degree in Theatre, Film, and Digital Production are as follows:

**Track 1: General Theatre**

Upper-division requirements (64 units)
1. Literature, History, Criticism requirement
   a) TFDP 100, TFDP 120A, TFDP 120B, TFDP 120C
   b) Twelve (12) units from TFDP 115, TFDP 121, TFDP 122, TFDP 124A, TFDP 124B, TFDP 125 (E-Z), TFDP 126A, TFDP 126B, TFDP 127, TFDP 191 (E-Z), or any other course in dramatic literature approved by the Chair

2. Performance, Direction, Playwriting, Screenwriting, Design, and Theatre Technology requirement
   a) TFDP 101, TFDP 102, TFDP 109
   b) Twelve (12) units from TFDP 110A, TFDP 110B, TFDP 111A, TFDP 111B, TFDP 112E, TFDP 113 (E-Z), TFDP 132, TFDP 133, TFDP 135, TFDP 141, TFDP 142, TFDP 143, TFDP 144, TFDP 145, TFDP 150A, TFDP 150B, TFDP 164A/CRWT 164A, TFDP 164B/CRWT 164B, TFDP 164C/CRWT 164C, TFDP 166A, TFDP

**PROPOSED:**

**Major Requirements**
The major requirements for the B.A. degree in Theatre, Film, and Digital Production are as follows:

**Lower-division requirements (9 units)**
1. TFDP 099
2. TFDP 020
3. Either TFDP 010, TFDP 021, TFDP 022, TFDP 050, TFDP 066, or TFDP 067

**Track 1: Literature, History, Criticism and Dramaturgy**

Upper-division requirements (40/44 units)
1. Literature, History, Criticism requirement (20 units)
   a) Literature, History, and Criticism emphasis (12 units): TFDP 100, TFDP 120A, TFDP 120B
      1) Eight (8) additional units from TFDP 121, TFDP 122, TFDP 123, TFDP 124A, TFDP 124B, TFDP 125 (E-Z), TFDP 127, TFDP 191 (E-Z)
   b) Dramaturgy emphasis (12 units): TFDP 100, TFDP 120A, TFDP 120B
      1) Eight (8) additional units from TFDP 121, TFDP 122, TFDP 123, TFDP 124A, TFDP 124B, TFDP 125 (E-Z), TFDP 127, TFDP 191 (E-Z)

3. Production requirement Twelve (12) units of TFDP 170 with two (2) units from each of the following areas: sets, costumes, and lighting/sound. Six of these units must be taken in residence.

Track 2: Writing for the Performing Arts

Upper-division requirements (66 units)
1. TFDP 100, TFDP 101, TFDP 109, TFDP 170 (2 units)

2. Literature, History, Criticism (16) units from CPLT 146, CPLT 149, ENGL 117A, ENGL 117B, ENGL 117C, ENGL 117T, ENGL 129A, ENGL 129B, ENGL 129C, TFDP 120A, TFDP 120B, TFDP 120C, TFDP 121

3. Performance, Playwriting, Screenwriting, Production (24) units from TFDP 164A, TFDP 164B, TFDP 164C, TFDP 166A, TFDP 166B, TFDP 166C


Track 3: Film Making

Upper-division requirements (25 units)
1. TFDP 101, TFDP 102, TFDP 109 (12 units)

2. Literature, History, Criticism (16) units from CPLT 146, CPLT 149, ENGL 117A, ENGL 117B, ENGL 117C, ENGL 117T, ENGL 129A, ENGL 129B, ENGL 129C, TFDP 120A, TFDP 120B, TFDP 120C, TFDP 121

3. Film Making (19) units from TFDP 155, TFDP 156A, TFDP 156B, TFDP 157

Track 2: Writing for the Performing Arts

Upper-division requirements (44 units)
1. Literature, History, and Criticism (12 units)
   a) TFDP 120A, TFDP 120B (8 units)
   b) Four (4) units from TFDP 122, TFDP 123, TFDP 124A, TFDP 124B, TFDP 125 (E-Z), TFDP 127, TFDP 191 (E-Z)

2. Writing for the Performing Arts (24 units)
   a) TFDP 164A, TFDP 164B, TFDP 164C
   b) TFDP 166A, TFDP 166B, TFDP 166C

3. Four (4) additional units from TFDP 110A, TFDP 110B, TFDP 114, TFDP 150A, TFDP 150B, TFDP 163, TFDP 167, TFDP 168, TFDP 198

Track 3: Film Making

Upper-division requirements (48 units)
1. Film Making (20) units from TFDP 155, TFDP 156A, TFDP 156B, TFDP 157

2. Screenwriting (12) units from TFDP 166A, TFDP 166B, TFDP 166C

3. Four (4) units from TFDP 101, TFDP 102, TFDP 109, TFDP 115, TFDP 150A, TFDP 150B, TFDP 157
4. Screenwriting (12) units from TFDP 166A, TFDP 166B, TFDP 166C


6. Production requirement
Eight (8) units of TFDP 170. Six of these units must be taken in residence.

Track 4: Acting and Directing

Upper-division requirements (52 units)
1. Acting/Directing (20 units)
a) Acting emphasis: TFDP 109, TFDP 110A, TFDP 110B (12 units)
   1) Eight (8) additional units from TFDP 111A, TFDP 111B, TFDP 111C, TFDP 1112 (E-Z), TFDP 113 (E-Z), TFDP 138
b) Directing emphasis: TFDP 109, TFDP 150A, TFDP 150B (12 units)
   1) Eight (8) additional units from TFDP 111A, TFDP 111B, TFDP 111C, TFDP 1112 (E-Z), TFDP 113 (E-Z), TFDP 138

2. Literature History and Criticism (16 units)
a) TFDP 100, TFDP 120A, TFDP 120B (12 units)
b) Four (4) units from TFDP 121, TFDP 122, TFDP 123, TFDP 124A, TFDP 124B, TFDP 125(E-Z), TFDP 115, TFDP 191(E-Z)


4. Production requirement (12) units from TFDP 170, TFDP 171, TFDP 172, TFDP 173, TFDP 174, or TFDP 175

Track 5: Production and Design

Upper-division requirements (44 units)
1. Production and Design (16 units)
   a) TFDP 101 (4 units)
   b) Twelve (12) units from TFDP 131, TFDP 132, TFDP 133, TFDP 135, TFDP 136, TFDP 142, TFDP 143, TFDP 144, TFDP 145, TFDP 149, TFDP 180 (E-Z)

2. Literature, History, and Criticism (12 units)
   a) TFDP 100 (4 units)
   b) Eight (8) units from TFDP 120A, TFDP 120B, TFDP 121, TFDP 122, TFDP 124A, TFDP 124B, TFDP 125 (E-Z), TFDP 191 (E-Z)

3. Four (4 units) from TFDP 109, TFDP 115, TFDP 150A, TFDP 150B, TFDP 163, TFDP 165A, TFDP 165B, TFDP 167, TFDP 168, TFDP 198

4. Production requirement (12) units from TFDP 170, TFDP 171, TFDP 172, TFDP 173, TFDP 174, or TFDP 175

**Justification:**
In the fall of 2015, Associate Dean Peter Graham and Associate Vice Provost Ken Baerenklau asked all UCR departments to evaluate our curricula, aiming to bring our upper division courses down to no more than 45 units. The department of Theatre, Film and Digital Production undertook this request, called “Challenge 45” with a great deal of seriousness. We met several times and evaluated our program in relation to other, comparable programs across the UC. What we found resulted in our making some adjustments to our curriculum. Mainly, those adjustments involved:

- Lowering the upper division units within a range close to 45 units
- Adding 9 units of lower division requirements (previously there had been none) that are consistent across all of our 5 tracks of study. These requirements offer our students the foundational knowledge that will enhance and improve their studies in all areas of emphasis the department offers.

To this end, we have submitted one of our keystone classes, Production Techniques in Theatre, Film, and Television to be renumbered from upper division (TFDP 102) to lower division (TFDP 020). The class was submitted for renumbering in January 2016 in order to meet the deadline for the renumbering to be implemented by Fall 2016. We have three primary reasons for this change:

1) Lower division courses would allow students to take production techniques within their first two years of study and therefore be more prepared for the demands of practice-based production courses (TFDP 170-175). In other words, students would have studied the basics of production techniques in lighting, costume and set design in their first two years in the program and then be able to implement this study in practice-based research they complete as part of their production work.

2) Offering a lower division version of the course would allow transfer students to use comparable courses they have taken in community college and receive credit for those classes.
3) Most equivalent UC programs in Theatre as well as Film offer a production techniques course in the lower division level. Currently, we have no such lower-division course.

In addition, based on our Departmental retreat, which took place in 2013, and based on continuing conversations among the faculty, we also are pursuing two additional changes:

- The implementation of a 5-track curricula (previously there was a 3-track curricula) with the tracks being:
  - Acting & Directing
  - Film Making
  - Writing for the Performing Arts
  - Literature, History, Criticism & Dramaturgy
  - Production & Design

  In this new structure, our former General Theatre track has been eliminated and diversified into three new tracks: Literature, History, Criticism and Dramaturgy; Acting and Directing; Design and Production. These three new tracks allow our students to undertake an educational experience that is more specific to their career goals, while still retaining the flexibility to satisfy their interest in areas of theatre study outside of their tracks.

- Differentiating and more accurately labeling learning that takes place in praxis or production into 6 separate categories: TFDP 170 (performance in production), TFDP 171 (technical production), 172 (design in production), 173 (management/direction in production), 174 (dramaturgy for production) and 175 (Fabrication in production). This involved allowing students in various tracks to have their courses in production (TFDP 170-175) on a repeated basis, since each production, from Shakespeare to the Classical repertoire is a vastly different performance and production experience.

**Approvals:**
Approved by the faculty of the Department of Theatre, Film, and Digital Production: February 5, 2016
Approved by the Executive Committee of the College of CHASS: February 24, 2016
Approved by the Committee on Educational Policy: April 29, 2016
Executive Committee
College of Humanities, Arts, and Social Sciences

Report to the Riverside Division
May 24, 2016

To be adopted:

Proposed Changes to Theatre, Film and Digital Production Minor

Present:

Minor
The minor in Theatre, Film and Digital Production follows the structure of the major requirements by exposing students to each of the areas that are essential to the creation of theatre, with the opportunity to take an additional course for depth or more exposure. The inclusion of TFDP 170 (Advanced Dramatic Production) gives the students the opportunity to put course work into the proper context and provides them with a practical understanding of the workings and problems of production. The minor in Theatre, Film and Digital Production provides students with a basic understanding in major areas of study including theatre literature, performance, and design. It also introduces the nonmajor to the discipline, providing breadth for those students majoring in unrelated disciplines.

Requirements for the minor (20 units)
1. TFDP 100, TFDP 101, TFDP 109
2. Four (4) units of TFDP 170 (This 2-unit course must be taken twice, in two different areas, 2 units of which must be in residence.)
3. One 4-unit upper-division course selected from the department’s Literature, History, Criticism area or the Performance, Direction, Playwriting, Screenwriting, Design, and Theatre Technology area.

See Minors under the College of Humanities, Arts, and Social Sciences in the Colleges and Programs section of this catalog for additional information on minors.

Proposed:

Minor
The minor in Theatre, Film and Digital Production follows the structure of the major requirements by exposing students to each of the areas that are essential to the creation of theatre, with the opportunity to take an additional course for depth or more exposure. The inclusion of production courses TFDP 170, TFDP 171, TFDP 172, TFDP 173, TFDP 174 and TFDP 175 gives the students the opportunity to put course work into the proper context and provides them with a practical understanding of the workings and problems of production. The minor in Theatre, Film and Digital Production provides students with a basic understanding in major areas of study including theatre literature, performance, and design. It also introduces the nonmajor to the discipline, providing breadth for those students majoring in unrelated disciplines.

Requirements for the minor (20 units)
1. TFDP 100, TFDP 101, TFDP 109
2. Four (4) units from TFDP 170, TFDP 171, TFDP 172, TFDP 173, TFDP 174 or TFDP 175
3. One 4-unit upper-division course selected from the department’s Literature, History, Criticism area or the Performance, Direction, Playwriting, Screenwriting, Design, and Theatre Technology area.

See Minors under the College of Humanities, Arts, and Social Sciences in the Colleges and Programs section of this catalog for additional information on minors.

Justification:
TFDP 170 - Advanced Dramatic Production was our catch-all class for student coursework done on our
play and film productions, including such roles as acting, directing, scene shop, writing, set and costume design, dramaturgy, etc. Last year we deleted TFDP 170 and expanded it into 5 more specific classes so that the roles that students performed would be explicit on their transcripts. These classes are: TFDP 170 - Performance in production; TFDP 171 - Technical Production; TFDP 172 - Design in Production, TFDP 173 - Management/Direction in Production; TFDP 174 - Dramaturgy for Production and TFDP 175 - Fabrication in Production. The changes to the minor reflect this more specific approach to our production units.

**Approvals:**
Approved by the faculty of the Department of Theatre, Film, and Digital Production: February 5, 2016
Approved by the Executive Committee of the College of CHASS: February 24, 2016
Approved by the Committee on Educational Policy: April 29, 2016
To be adopted:

Proposed Changes to Chemistry Undergraduate Program
Bachelor of Science in Chemistry: Environmental Chemistry Option

PRESENT:

Environmental Chemistry Option
Students must consult with their Chemistry advisor before electing this option.

1. Lower-division requirements (72-73 units)
   a) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC (or CHEM 01HA and CHEM 1HLA, CHEM 01HB and CHEM 1HLB, CHEM 01HC and CHEM 1HLC), CHEM 005
   b) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046
   c) PHYS 040A, PHYS 040B, PHYS 040C
   d) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C

2. Upper-division requirements (73-75 units)
   A minimum grade of “C-” for any upper-division course used to fulfill the requirements for the Environmental Chemistry option.
   a) CHEM 110A, CHEM 110B, CHEM 111, CHEM 112A, CHEM 112B, CHEM 112C, CHEM 113, CHEM 125, CHEM 135/ENSC 135/ENTX 135, CHEM 136/ENSC 136/ENTX 136/SWSC 136, CHEM 114 or CHEM 140, CHEM 150A, CHEM 166, CHEM 191
   b) One course from ENSC 104/SWSC 104 or GEO 137
   c) One course from BCH 100, BCH 110A or CHEM 143

PROPOSED:

No Change

1. Lower-division requirements (84 units)
   a) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC (or CHEM 01HA and CHEM 1HLA, CHEM 01HB and CHEM 1HLB, CHEM 01HC and CHEM 1HLC), CHEM 005, CHEM 12A, CHEM 12B, CHEM 12C (or CHEM 12HA, CHEM 12HB, CHEM 12HC)
   b) MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046
   c) No change
   d) No change

2. Upper-division requirements (57-58 units)
   A minimum grade of “C-” for any upper-division course used to fulfill the requirements for the Environmental Chemistry option.
   a) CHEM 110A, CHEM 110B, CHEM 111, CHEM 113, CHEM 125, CHEM 135/ENSC 135/ENTX 135, CHEM 136/ENSC 136/ENTX 136/SWSC 136, CHEM 114 or CHEM 140, CHEM 150A, CHEM 166, CHEM 191
   b) No change
   c) No change
d) Two additional courses from CHEM 150B, CHEM 197, CHEM 199, ENSC 100, ENSC 101, ENST 102, ENSC 104/SWSC 104, ENSC 140/SWSC 140, ENSC 142, ENSC 155, ENSC 163, ENTX 101, GEO 132, GEO 137, GEO 157 (4 units total from CHEM 197 and/or CHEM 199)

d) Two additional courses from CHEM 150B, CHEM 197, CHEM 199, ENSC 100, ENSC 101, ENSC 102, ENSC 140/SWSC 140, ENSC 163, ENTX 101, GEO 132, GEO 157 (4 units total from CHEM 197 and/or CHEM 199)

**JUSTIFICATION:**

Organic Chemistry series is currently an upper division course listing that is taken by all CNAS sophomore students. Further study of other UC campuses chemistry programs have provided additional support of moving Organic Chemistry into a lower division category. The curriculum is an introductory course that teaches basic fundamental study in organic chemistry. The move will help all CNAS majors by reducing the upper division requirement between 36 to 60 units and give other majors a chance to strengthen their own program.

Math Department is eliminating Math 008B.

ENSC 142 and ENSC 155 have been deleted.

d) Remove ENSC 104/SWSC 104 and GEO 137 due to duplication from b) requirement.

**APPROVALS:**

Approved by the faculty of the Department of Chemistry: November 25, 2015
Approved by the Executive Committee of the College of Natural and Agricultural Sciences: February 9, 2016
Approved by the Committee on Educational Policy: April 27, 2016
EXECUTIVE COMMITTEE  
COLLEGE OF NATURAL AND AGRICULTURAL SCIENCES  
REPORT TO THE RIVERSIDE DIVISION  
MAY 24, 2016  

To be adopted:  
Proposed Changes to Chemistry Undergraduate Program  
Bachelor of Science in Chemistry: Chemical Physics Option  

PRESENT:  
Chemical Physics Option  
Students must consult with their Chemistry advisor before electing this option.  

PROPOSED:  
No Change  

1. Lower-division requirements (67-69 units)  
a) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC (or CHEM 01HA and CHEM 1HLA, CHEM 01HB and CHEM 01HLC), CHEM 005  
b) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046  
c) PHYS 041A, PHYS 041B, PHYS 41C or PHYS 040A, PHYS 040B, PHYS 040C, and PHYS 041C  

2. Upper-division requirements (72 units) A minimum grade of “C-” for any upper-division course used to fulfill the requirements for the Chemical Physics option.  
a) CHEM 110A, CHEM 110B, CHEM 111, CHEM 112A, CHEM 112B, CHEM 112C, CHEM 113, CHEM 114, CHEM 150A, CHEM 150B, CHEM 191  
b) Twenty-one (21) units of upper-division course work in Mathematics or Physics (110 or above excluding 190 series)  
c) Nine (9) additional units in physical chemistry  

JUSTIFICATION:  
Organic Chemistry series is currently an upper division course listing that is taken by all CNAS
sophomore students. Further study of other UC campuses chemistry programs have provided additional support of moving Organic Chemistry into a lower division category. The curriculum is an introductory course that teaches basic fundamental field study in organic chemistry. The move will help all CNAS majors by reducing the upper division requirement between 36 to 60 units and give other majors a chance to strengthen their own program.

Math Department is eliminating Math 008B.

**APPROVALS:**
Approved by the faculty of the Department of Chemistry: November 25, 2016
Approved by the Executive Committee of the College of Natural and Agricultural Sciences: February 9, 2016
Approved by the Committee on Educational Policy: April 27, 2016
To be adopted:

Proposed Changes to Chemistry Undergraduate Program
Bachelor of Arts in Chemistry

PRESENT:

1. Lower-division requirements (51–52 units)
   a) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC (or CHEM 01HA and CHEM 1HLA, CHEM 01HB and CHEM 1HLB, CHEM 01HC and CHEM 1HLC), CHEM 005
   b) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A
   c) PHYS 040A, PHYS 040B, PHYS 040C (or PHYS 002A, PHYS 002B, PHYS 002C, PHYS 02LA, PHYS 02LB, PHYS 02LC)

2. Upper-division requirements (38–48 units) A minimum grade of “C-” for any upper-division course used to fulfill the requirements for the B.A. degree.
   a) CHEM 110A, CHEM 110B, CHEM 112A, CHEM 112B, CHEM 112C, CHEM 113, CHEM 125, CHEM 150A, CHEM 191, and either CHEM 111 or CHEM 140 or CHEM 166
   b) Ten (10) additional upper-division units in Chemistry if the year of organic chemistry is taken at a community college

PROPOSED:

1. Lower-division requirements (63 units)
   a) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC (or CHEM 01HA and CHEM 1HLA, CHEM 01HB and CHEM 1HLB, CHEM 01HC and CHEM 1HLC), CHEM 005, CHEM 12A, CHEM 12B, CHEM 12C (or CHEM 12HA, CHEM 12HB, CHEM 12HC)
   b) MATH 009A, MATH 009B, MATH 009C, MATH 010A
   c) No change

2. Upper-division requirements (36 units) A minimum grade of “C-” for any upper-division course used to fulfill the requirements for the B.A. degree.
   a) CHEM 110A, CHEM 110B, CHEM 112A, CHEM 112B, CHEM 112C, CHEM 113, CHEM 125, CHEM 150A, CHEM 191, and either CHEM 111 or CHEM 140 or CHEM 166
   b) Ten (10) additional upper-division units
To be adopted:

Proposed Changes to Chemistry Undergraduate Program
Bachelor of Science in Chemistry

PRESENT:

3. Lower-division requirements (59-60 units)
   a) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC (or CHEM 01HA and CHEM 1HLA, CHEM 01HB and CHEM 1HLC), CHEM 005
   b) MATH 008B or MATH 009A, MATH 009B, MATH 009C, and three out of the following: MATH 010A, MATH 010B, MATH 031, MATH 046
   c) PHYS 040A, PHYS 040B, PHYS 040C

4. Upper-division requirements (53-54 units) A minimum grade of “C-” for any upper-division course used to fulfill the requirements for the B.S. degree.
   c) CHEM 110A, CHEM 110B, CHEM 111, CHEM 112A, CHEM 112B, CHEM 112C, CHEM 113, CHEM 125, CHEM 150A, CHEM 191
   d) Two laboratory courses from CHEM 114 or CHEM 140, CHEM 166, BCH 162
   e) One course from BCH 100, BCH 110A, CHEM 143
   f) One 4-unit course from CHEM 135/ENSC 135/ENTX 135, CHEM 136/ENSC 136/ENTX 136/SWSC 136, CHEM 150B, CHEM 197, CHEM 199. CHEM 197 and CHEM 199 must be taken for a grade and a written report submitted.

PROPOSED:

3. Lower-division requirements (71-72 units)
   a) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC (or CHEM 01HA and CHEM 1HLA, CHEM 01HB and CHEM 1HLC), CHEM 005, CHEM 12A, CHEM 12B, CHEM 12C (or CHEM 12HA, CHEM 12HB, CHEM 12HC)
   b) MATH 009A, MATH 009B, MATH 009C, and three out of the following: MATH 010A, MATH 010B, MATH 031, MATH 046
   c) No change

4. Upper-division requirements (41-43 units) A minimum grade of “C-” for any upper-division course used to fulfill the requirements for the B.S. degree.
   c) CHEM 110A, CHEM 110B, CHEM 111, CHEM 125, CHEM 150A, CHEM 191
   d) No change
   e) No change
   f) No change
**Justification:**

Organic Chemistry series is currently an upper division course listing that is taken by all CNAS sophomore students. Further study of other UC campuses chemistry programs have provided additional support of moving Organic Chemistry into a lower division category. The curriculum is an introductory course that teaches basic fundamental field study in organic chemistry. The move will help all CNAS majors by reducing the upper division requirement between 36 to 60 units and give other majors a chance to strengthen their own program.

Math Department is eliminating Math 008B.

(BA Degree): b) was updated in order to comply with NR2.4 Major Requirements “A major shall consist of not fewer than 36 nor more than 60 upper division units.” The present requirement (b) “Ten (10) additional upper-division units in Chemistry if the year of organic chemistry is taken at a community college” was presumably due to UCR organic chemistry, CHEM 112, was a upper division course while organic chemistry from community colleges often seen as a lower division course, and thus extra upper division chemistry units were needed to make up for CHEM 112. Since UCR organic chemistry, CHEM 112, is moved to lower division, CHEM 12, the proposed requirement (b) will keep the same requirements for all BA students in chemistry major. Both initially UCR students and community college transfers students will have the same academic trajectory.

**Approvals (BA):**

Approved by the faculty of the Department of Chemistry: February 8, 2016  
Approved by the Executive Committee of the College of Natural and Agricultural Sciences: February 9, 2016  
Approved by the Committee on Educational Policy: April 27, 2016

**Approvals (BS):**

Approved by the faculty of the Department of Chemistry: November 25, 2015  
Approved by the Executive Committee of the College of Natural and Agricultural Sciences: February 9, 2016  
Approved by the Committee on Educational Policy: April 27, 2016
To be Adopted: Proposed Changes to Biology

Present: Major Requirements
Some of the following requirements for the major in Biology may also fulfill the College’s breadth requirements. Consult with a department advisor for course planning.

1. Life Sciences core curriculum (68-72 units)
   a) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC
   c) CHEM 112A, CHEM 112B, CHEM 112C
   d) PHYS 002A, PHYS 002B, PHYS 002C, PHYS 02LA, PHYS 02LB, PHYS 02LC
   e) STAT 100A
   f) BCH 100 or BCH 110A

   The core curriculum must be completed with a grade point average of 2.0 or better and no grade lower than “C-.” If a grade of D or F is received in two core curriculum courses, either in separate courses or repetitions of the same course, the student will not be permitted to continue in the major.

2. Upper-division requirements (36 units)
   a) BIOL 102
   b) Thirty-two (32) additional Biology units to be taken in consultation with a faculty advisor

3. Other requirements
   For the Bachelor of Arts only (0-16 units): The foreign language requirement may be fulfilled by completing level four or the demonstration of equivalent proficiency in one foreign language.
   For the Bachelor of Science only (16 units): An additional 16 units in upper-division biology courses and/or substantive courses in a field or fields related to the major. A list of acceptable courses is available in the CNAS Academic Advising Center.

Programs of Specialization
The Life Sciences core curriculum (item 1 above)
fulfills many of the requirements for admission to graduate schools in biology or professional schools in the medical and health science fields. In addition to Introductory Genetics (BIOL 102, 4 units), a wide choice is available for the remaining 32 upper-division units required for the Biology major (item 2.b) above) and the 16 additional units related to the field of the major (B.S. degree, item 3 above). Each student selects upper-division and related courses depending on the type of school and career chosen (e.g., education, medicine, pharmacy, dentistry, optometry, veterinary medicine, nursing, physical therapy, public health, graduate school in one of the fields below).

In planning an academic program to prepare for teaching or one of the medical fields, present and prospective Biology majors are referred to relevant topics in the Biological Sciences section of this catalog. That section has information for those planning to attend graduate school in education to obtain a teaching credential (subsection, Teaching Credential) and/or a master’s or Ph.D. degree in education (subsection, Preparation for Graduate School). Also included are guidelines to help students select courses to prepare for admission to professional schools in the medical field (subsections, Medical Biology, Suggestions for Elective Units for Medical/Health Professions, Admission Requirements for Medical and Health Professional Schools). Additional information about required course work and admission tests (MCAT, OAT, VCAT, PCAT, GRE) can be obtained from Career Services (Veitch Student Center) and the Health Professions Advising Center (visit 1114 Pierce Hall or hpac.ucr.edu).

Suggested courses of study are provided below for those interested in various biological fields. These programs meet most of the requirements for admission to corresponding graduate schools for those students who wish to pursue a master’s and/or Ph.D. degree. The faculty advisor assists in selecting combinations of courses appropriate for advanced study in the fields below and others. Students considering graduate study are encouraged to do undergraduate research and take courses in computer science and statistics.

In some cases, a course of study differing substantially from the examples given below will best meet the needs of the student. In consultation
with a faculty advisor, a student may prepare a
program in some other biological specialization
such as animal behavior, evolution/development
or developmental biology.

**Cell and Molecular Biology**

BIOL 102, BIOL 105, BIOL 107A, BIOL 107B, BIOL 109 or
BIOL 153/BCH 153/BPSC 153, CBNS 101 or
BIOL 113 and BIOL 114, BIOL 119, BIOL 121/MCBL 121, BIOL 121L/MCBL 121L,
BIOL 122/MCBL 122, BIOL 123/MCBL 123/
PLPA 123, BIOL 124/MCBL 124, BIOL 128/CBNS 128, BIOL 155/BPSC 155, BIOL 168, BCH 100 or the BCH 110A, BCH 110B,
and BCH 110C sequence, BCH 102, CBNS 108,
CBNS 150/ENTX 150, CHEM 005, CHEM 109, STAT 100A and STAT 100B

(No change.)

**Ecology and Population Biology**

BIOL 102, BIOL 104/BPSC 104, BIOL 105, BIOL 108, BIOL 116, BIOL 116L, BIOL 117, BIOL 160, BIOL 160L, BIOL 174, either BIOL 175 or
BIOL 143/BPSC 143, the MATH 009A, MATH 009B, and MATH 009C sequence, STAT 100A and STAT 100B.
Also recommended: BIOL 151, BIOL 161A, BIOL 163, BPSC 146, MATH 046, BIOL 165/BPSC 165, BIOL 166

(No change.)

**Molecular Genetics**

BIOL 102, BIOL 105, BIOL 107A, BIOL 107B, BIOL 108, BIOL 109 or

(No change.)

**Zoology and Physiology**

BIOL 100/ENTM 100, BIOL 102, BIOL 105, CBNS 101 or BIOL 113 and BIOL 114, BIOL 151, BIOL 152/GEO 152, BIOL 157, BIOL 159, BIOL 160, BIOL 160L, BIOL 161A, BIOL 161B, BIOL 162/ENTM 162, BIOL 168, BIOL 171, BIOL 171L, BIOL 173/ENTM 173, BIOL 174, BIOL 175, BIOL 178, BCH 100, CBNS 106, CBNS 108, CBNS 116, CBNS 169. Students are also encouraged to take laboratory courses (e.g., BCH 102). Also recommended: a course in ecology (e.g., BIOL 116, BIOL 116L), STAT 100A and STAT 100B

(No change.)
Justification:
The MATH008A/B sequence is being replaced with the MATH006A/B sequence. Because MATH 006A/B is a pre-requisite for MATH 009A, our requirements will start with MATH 009A. This change also reflects the CHEM 112A/B/C renumbering to 12A/B/C.

APPROVALS:
Approved by the faculty of the Department of Biology: November 12, 2015
Approved by the Executive Committee of the College of Natural and Agricultural Sciences: January 5, 2016
Approved by the Committee on Educational Policy: May 11, 2016
To be adopted:

Proposed Changes to Cell, Molecular, and Developmental Biology Major

**PRESENT:**

**Major Requirements**
Some of the following requirements for the Cell, Molecular and Developmental Biology major may also fulfill the College’s breadth requirements. Consult with an advisor for course planning.

1. Life Sciences core curriculum (72-76 units)
   a) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC
   c) CHEM 112A, CHEM 112B, CHEM 112C
   d) PHYS 002A, PHYS 002B, PHYS 02LA, PHYS 02LB, PHYS 002C, PHYS 02LC
   e) MATH 009A, MATH 009B
   f) STAT 100A
   g) BCH 100, or BCH 110A and BCH 110B

2. Upper-division requirements (48 units)
   a) Major core (16 units) BIOL 102, BIOL 107A, CBNS 101, CBNS 108.
   b) Major electives (32 units from the following).

   **Cellular emphasis.** At least one of the following is required: BIOL 113; BIOL 114; BIOL 121/MCBL 121, BIOL 128/CBNS 128; BPSC 135; CBNS 116; CBNS 120/PSYC 120.

   **Molecular emphasis.** At least one of the following is required: BCH 180A; BCH 180B; BIOL 107B; BIOL 119; BIOL 124/MCBL 124; BIOL 155/BPSC 155; CBNS 150/ENTX 150.

   **Developmental emphasis.** At least one of the following is required: BIOL 132/BPSC 132; BIOL 138/BPSC 138; BIOL 168; CBNS 121/PSYC 121; CBNS 169.

   **Laboratory course:** Two courses in a biological science are required. Courses including at least 3 hours of lab per week are

**PROPOSED:**

**Major Requirements**
Some of the following requirements for the Cell, Molecular and Developmental Biology major may also fulfill the College’s breadth requirements. Consult with an advisor for course planning.

1. Life Sciences core curriculum (72-76 units)
   a) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC
   c) CHEM 12A, CHEM 12B, CHEM 12C
   d) PHYS 002A, PHYS 002B, PHYS 02LA, PHYS 02LB, PHYS 002C, PHYS 02LC
   e) MATH 009A, MATH 009B
   f) STAT 100A
   g) BCH 100, or BCH 110A and BCH 110B

2. Upper-division requirements (48 units)
   a) Major core (16 units) BIOL 102, BIOL 107A, CBNS 101, CBNS 108.
   b) Major electives (32 units from the following).

   **Cellular emphasis.** At least one of the following is required: BIOL 113; BIOL 114; BIOL 121/MCBL 121, BIOL 128/CBNS 128; BPSC 135; CBNS 116; CBNS 120/PSYC 120; CBNS 165

   **Molecular emphasis.** At least one of the following is required: BCH 180A; BCH 180B; BIOL 107B; BIOL 119; BIOL 124/MCBL 124; BIOL 155/BPSC 155; CBNS 150/ENTX 150.

   **Developmental emphasis.** At least one of the following is required: BCH 183; BIOL 123/MCBL 123; BIOL 132/BPSC 132; BIOL 138/BPSC 138; BIOL 168; CBNS 121/PSYC 121; CBNS 169.

   **Laboratory course:** Two courses in a biological science are required. Courses including at least 3 hours of lab per week are
eligible, including combined lecture and lab classes. Eligible classes include BCH 102; BCH 153/BIOL 153/BPSC 153; BIOL 121L/MCBL 121L; BIOL 132/BPSC 132 or BIOL 138/BPSC 138; CBNS 120L/PSYC 120L; and others. Students in the Health Science Track may substitute one laboratory course with a course in ethics.

Note A maximum of 8 units of 190-199 courses, including no more than 4 units of 198 courses, may be counted towards this requirement.

3. Depth requirement (16 units). For B.A. students, this requirement can be fulfilled with additional courses in Humanities and Social Sciences, and Foreign Languages. For the B.S. degree, students are required to take an additional 16 units of course work in natural sciences (including a biological or chemical science) or mathematics. Additional major elective units beyond the 32 required in 2b may be applied to this requirement.

4. Health Science track. Students wishing to apply to medical, dental or veterinary professional schools must follow the requirements listed above, but are encouraged to select from the following courses. For B.A. students, some of these will fulfill their Humanities and Social Sciences and Foreign Languages requirements. Please consult the faculty adviser.

i. Foreign language: three courses are recommended.

ii. Community service: a maximum of 4 units may be counted towards the 180 unit graduation requirement, using CBNS 198-1 or equivalent.

iii. Ethics: A course is strongly recommended, such as PHIL 009 or PHIL 167.

iv. Two upper-division classes in Psychology are recommended, such as CBNS 126/PSYC 126; CBNS 127/PSYC 127; PSYC 129; PSYC 178; or PSYC 179.

v. When selecting electives in the natural sciences, students are recommended to include classes in an area of microbiology (e.g. BIOL 157, BIOL 171, ENSC 133/MCBL 133/SWSC 133, ENSC 141/MCBL 141/SWSC 141, BIOL 104/BPSC 104; BIOL 132/BPSC 132; BIOL 138/BPSC 138; BIOL 143/BPSC 143; BIOL 161A; CBNS 120L/PSYC 120L; MCBL 125; and others. Students in the Health Science Track may substitute one laboratory course with a course in ethics.

Note A maximum of 8 units of 190-199 courses, including no more than 4 units of 198 courses, may be counted towards this requirement.

(No changes.)

(No changes.)
121/MCBL 121, BIOL 123/MCBL 123/PLPA 123, BIOL 124/MCBL 124, BIOL 134/PLPA 134), and in anatomy, zoology, or physiology (BIOL 151, BIOL 161A, BIOL 175, BIOL 176).

Sample Program Outlines

1. Bachelor of Science Degree (Disciplinary track)

The sample program for B.S. students provides a solid science background for students interested in research or teaching careers in biomedical science. Undergraduate laboratory research is strongly recommended as an important element in the program.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
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<tr>
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<tr>
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<td><strong>Total Units</strong></td>
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Sample Program Outlines

1. Bachelor of Science Degree (Disciplinary track)

The sample program for B.S. students provides a solid science background for students interested in research or teaching careers in biomedical science. Undergraduate laboratory research is strongly recommended as an important element in the program.

<table>
<thead>
<tr>
<th>Freshman Year</th>
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<tbody>
<tr>
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<table>
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<td>Course</td>
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<td>Winter</td>
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**Junior Year**

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<td>CBNS 101</td>
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</table>

(No change)
**Senior Year** | **Fall** | **Winter** | **Spring**
---|---|---|---
CBNS 108 | 04 | 4 |  
Major Elect. & Depth reqs (e.g. BIOL 113, 168; BIOL 132/BPSC 132; BPSC 135; CBNS 120/PSYC 120; CBNS 169) | 8 | 04 | 08 | 
Human/Soc. Sci Elect. | 4 | 4 | 04 |  
XXX 190, 197, 198, 199 | 2 | 3 | 3 |  
Total Units | 14 | 15 | 49 | 

**Freshman Year** | **Fall** | **Winter** | **Spring**
---|---|---|---
NASC 093 | 2 |  

**2. Bachelor of Science Degree (Health Science track)**
The sample program for B.S. students with a professional emphasis provides a very strong science background, with recommended elective course choices emphasizing biomedical pertinence. Additionally, a foreign language is recommended, as well as Community Service (for course credit). Further breadth may be developed by electing Humanities and Social Science course options within the major depth requirement.

---

- **Fall Year**
  - ENGL 001C | 4 |
  - CBNS 108 | 4 |
  - Major Elect. & Depth reqs (e.g. BIOL 113, 168; BIOL 132/BPSC 132; BPSC 135; CBNS 120/PSYC 120; CBNS 169) | 8 | 8 | 4 |
  - Human/Soc. Sci Elect. | 4 | 4 |
  - XXX 190, 197, 198, 199 | 2 | 3 | 3 |
  - Total Units | 14 | 15 | 15 |

---

- **Freshman Year**
  - NASC 093 | 2 |
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Total Units: 15 14 13

(No change.)
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**Senior Year**

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<td>Major Elect. &amp; Depth reqs (e.g. BIOL 113, 168; BIOL 132/BPSC 132; BPSC 135; CBNS 120/PSYC 120; CBNS 169)</td>
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<td>04</td>
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<tr>
<td>Foreign Language</td>
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<tr>
<td>XXX 190, 197, 198, 199</td>
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**Senior Year**

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<td>Total Units</td>
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3. Bachelor of Arts Degree (Disciplinary or Health Science tracks)

The sample program for B.A. students provides a broad-based education that builds on the strong foundation in science, with emphasis in humanities, social sciences, and foreign language.

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<th>Spring</th>
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<tr>
<td>MATH 009A, 009B</td>
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<tr>
<td><strong>Total Units</strong></td>
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<td><strong>14</strong></td>
<td><strong>13</strong></td>
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<table>
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<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
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<tr>
<td>ENGL 001C</td>
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<td>CHEM 112A, 112B, 112C</td>
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<tr>
<td></td>
<td>Fall</td>
<td>Winter</td>
<td>Spring</td>
</tr>
<tr>
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<tr>
<td>BIOL 107A</td>
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<td>CBNS 101</td>
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<tr>
<td>BCH 100</td>
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(No change.)

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<tbody>
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<td>CBNS 108</td>
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Total Units 17 13 17
Major Elect. & Depth reqs (e.g. BIOL 113, 168; BIOL 132/BPSC 132; BPSC 135; CBNS 120/PSYC 120; CBNS 169) 8 4 4

STAT 100A 5

Human/Soc. Sci Elect. 4 8

XXX 190, 197, 198, 199 2 3

Total Units 14 16 16

Major Elect. & Depth reqs (e.g. BIOL 113, 168; BIOL 132/BPSC 132; BPSC 135; CBNS 120/PSYC 120; CBNS 169) 8 4 4

STAT 100A 5

Human/Soc. Sci Elect. 4 8

XXX 190, 197, 198, 199 2 3

Total Units 14 16 16

**Justification:**
These changes represent alterations to the requirements and course options for the CMDB undergraduate major. Most involve adding elective courses that we neglected to include in the original catalog copy, plus some new courses developed since the major was first proposed. We also made minor changes to the sample programs for the BS and BA degrees, by correcting one error (a class offered in Spring was listed in the Winter) and by moving ENGL 001C from the sophomore to the senior year to reflect reality. CHEM 112A,B,C has been renumbered to 12A, B, C, therefore the changes have been made to reflect the renumbering.

**Approvals:**
Approved by the faculty of the Department of CMDB: June 19, 2015
Approved by the Executive Committee of the College of Agricultural and Natural Sciences: January 5, 2016
Approved by the Committee on Educational Policy: May 11, 2016
PRESENT:

**Major Requirements**

The major requirements for both the B.A. and the B.S. degrees in Entomology are as follows:

1. **Lower-division requirements (51–52 units)**
   a) BIOL 005A, BIOL 05L A, BIOL 005B, BIOL 005C
   b) PHYS 002A, PHYS 002B, PHYS 002C, PHYS 02LA, PHYS 02LB, PHYS 02LC
   c) MATH 008B or MATH 009A, MATH 009B
   d) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC

2. **Upper-division requirements (74 units)**
   a) ENTM 100/BIOL 100, ENTM 107, ENTM 173/BIOL 173, ENTM 180, and 4 units in any combination of ENTM 190, ENTM 197, ENTM 199, or ENTM 199H
   b) Twenty-four (24) additional units of entomology electives, which may include up to 2 additional units of ENTM 190, ENTM 197, ENTM 199 or ENTM 199H
   c) BCH 100
   d) BIOL 102
   e) BIOL 107A
   f) CHEM 112A, CHEM 112B, CHEM 112C
   g) STAT 100A

BIOL 151 and BIOL 175 are suggested in order to acquire a background in the life sciences appropriate for an Entomology major.

For students intending to specialize at the graduate level in insect toxicology or insect physiology, biochemistry, and molecular biology, it is recommended that the BCH 110A, BCH 110B, and BCH 110C sequence and BCH 102 be substituted in place of an equal number of upper-division course

PROPOSED:

**Major Requirements**

The major requirements for both the B.A. and the B.S. degrees in Entomology are as follows:

1. **Lower-division requirements (59 units)**
   a) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C
   b) PHYS 002A, PHYS 002B, PHYS 002C, PHYS 02LA, PHYS 02LB, PHYS 02LC
   c) MATH 009A, MATH 009B
   d) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC, CHEM 12A, CHEM 12B, CHEM 12C

2. **Upper-division requirements (51 units)**
   a) ENTM 100/BIOL 100, ENTM 107, ENTM 173/BIOL 173, ENTM 180, and 4 units in any combination of ENTM 190, ENTM 197, ENTM 199, or ENTM 199H
   b) Sixteen (16) additional units of entomology electives, which may include up to 2 additional units of ENTM 190, ENTM 197, ENTM 199 or ENTM 199H
   c) BCH 100
   d) BIOL 102
   e) BIOL 107A
   f) STAT 100A

BIOL 151 and BIOL 175 are suggested in order to acquire a background in the life sciences appropriate for an Entomology major.

For students intending to specialize at the graduate level in insect toxicology or insect physiology, biochemistry, and molecular biology, it is recommended that the BCH 110A, BCH 110B, and BCH 110C sequence and BCH 102 be substituted in place of an equal number of upper-division course
units in life sciences. Due to course content overlap, credit is not awarded for BCH 110A, BCH 110B, or BCH 110C if it has already been awarded for BCH 100.

Sample Program

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<th>Spring</th>
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**Junior Year**

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**Fall**

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**Senior Year**

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<td>BIOL 102</td>
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<td>ENTM 107</td>
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<td>Biology/ Entomology Electives</td>
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<td><strong>Total Units</strong></td>
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**Justification:**

The proposed changes to the Entomology undergraduate major are in response to a request from UCOP that programs review curricula with a goal of reducing upper division (UD) unit requirements. The ENTM 180 capstone class was added as part of the response to the WASC accreditation review of the campus undergraduate programs. Research units and the new capstone class are integral to the unique nature of the degree and provide students with necessary training to succeed in graduate school or Entomologist careers in the future. These 6 units are critical to distinguish our student experience as they pursue advanced degrees or professional careers and should be viewed as exceptional. The total number of required upper division units is reduced from 59 to 51 (the 45 unit cap plus the 6 exceptional upper division units for ENTM 180 and ENTM 19X). To achieve this goal, the number of additional required units of upper division entomology electives is reduced by 8 units from 24 to 16. The total number of units required for graduation remains at 180, so students are advised to continue to enroll in entomology upper division electives to complete their university unit requirement.
From a previous faculty approval (11/5/15): With the introduction of MATH 006A and MATH 006B, our program requirements will now begin with calculus. ENTM 125 approved in CRAMS Winter 2010 replaces ENTM 128. Additionally, the Chemistry 112 series was renumbered to 12.

**Approvals:**
Approved by the faculty of the Department of Entomology: February 16, 2016
Approved by the Executive Committee College of Natural and Agricultural Sciences: April 25, 2016
Approved by the Committee on Educational Policy: April 27, 2016
The Department of Entomology offers a minor in Entomology designed to allow the student the freedom to pursue areas of particular interest. The minor consists of no less than 20 and no more than 28 units of Entomology courses to be selected as follows:

1. ENTM 100/BIOL 100

2. Select from the following upper-division Entomology courses to complete unit requirement: ENTM 106, ENTM 107, ENTM 109, ENTM 112/BIOL 112/BPSC 112, ENTM 114, ENTM 124, ENTM 126, ENTM 127/BIOL 127, ENTM 128, ENTM 129, ENTM 129L, ENTM 133, ENTM 162/BIOL 162, ENTM 173/BIOL 173, ENTM 180, ENTM 190, ENTM 197, ENTM 199, ENTM 199H

3. No more than 4 units of ENTM 190, ENTM 197, ENTM 199, or ENTM 199H, either solely or in combination, may be applied toward the unit requirement.

4. Of the specified upper-division units, a minimum of 16 must be unique to the minor and may not be used to satisfy major requirements.

See Minors under the College of Natural and Agricultural Sciences in the Colleges and Programs section of this catalog for additional information on minors.

**Justification:**
With the introduction of MATH 006A and MATH 006B, our program requirements will now begin with calculus. ENTM 125 approved in CRAMS Winter 2010 replaces ENTM 128.

**Approvals:**
Approved by the faculty of the Department of ENTM: November 5, 2015
Approved by the Executive Committee of the College of Agricultural and Natural Sciences: January 5, 2016
Approved by the Committee on Educational Policy: April 27, 2016
EXECUTIVE COMMITTEE
COLLEGE OF NATURAL AND AGRICULTURAL SCIENCE

REPORT TO RIVERSIDE DIVISION
MAY 24, 2016

To be adopted:

Proposed changes to the undergraduate major requirements in Environmental Sciences

PRESENT:
Major Requirements

The major requirements for both the B.A. and the B.S. degrees in Environmental Sciences are as follows: Students must fulfill MATH 008B or MATH 009A; MATH 009B; CHEM 001A, CHEM 001B, CHEM 001C; BIOL 002 or BIOL 005A; BIOL 003 or BIOL 005A; ENSC 001, ENSC 002, ENSC 006, or ENSC 143A, ENSC 100, ENSC 101, and ENSC 102 with a grade point average of 2.0 or better and no grade lower than a C-. If a grade lower than a C- is received in 2 or more core courses required for the major, either in separate courses or repetitions of the same course, the student may be discontinued from the major. Students must, under such circumstances, petition the department to remain in the major. Students are also required to choose one of the options and satisfactorily complete the option requirements. Students in Environmental Sciences are required to demonstrate adequate progress towards earning the degree. Adequate progress is defined as completion of MATH 009B prior to the beginning of the Winter Quarter of the second year of residence or Junior standing (>90 units) and at least one course from ENSC 100, ENSC 101, or ENSC 102 must be completed prior to the end of the third year of residence or senior standing (>135 units).

Note To gain maximum benefit from participating in the Undergraduate Research and Environmental Internship Programs, students intending to enroll in ENSC 197 and ENSC 198-I should contact their advisor during the quarter prior to enrollment in these courses.

PROPOSED:
Major Requirements

The major requirements for both the B.A. and the B.S. degrees in Environmental Sciences are as follows: Students must fulfill MATH 009A; MATH 009B; CHEM 001A, CHEM 001B, CHEM 001C; BIOL 002 or BIOL 005A; BIOL 003 or BIOL 005B; ENSC 001, ENSC 002, ENSC 006, or ENSC 143A, ENSC 100, ENSC 101, and ENSC 102 with a grade point average of 2.0 or better and no grade lower than a C-. If a grade lower than a C- is received in 2 or more core courses required for the major, either in separate courses or repetitions of the same course, the student may be discontinued from the major. Students must, under such circumstances, petition the department to remain in the major. Students are also required to choose one of the options and satisfactorily complete the option requirements. Students in Environmental Sciences are required to demonstrate adequate progress towards earning the degree. Adequate progress is defined as completion of MATH 009B prior to the beginning of the Winter Quarter of the second year of residence or Junior standing (>90 units) and at least one course from ENSC 100, ENSC 101, or ENSC 102 must be completed prior to the end of the third year of residence or senior standing (>135 units).

Note To gain maximum benefit from participating in the Undergraduate Research and Environmental Internship Programs, students intending to enroll in ENSC 197 and ENSC 198-I should contact their advisor during the quarter prior to enrollment in these courses.
Core Requirements

1. Lower-division requirements (41-42 units)
   a) ENSC 001, ENSC 002
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC
   c) MATH 005 or MATH 008A, MATH 008B or MATH 009A, MATH 009B
   d) POSC 010

2. Upper-division requirements (14 units):
   ENSC 100, ENSC 101, ENSC 102, ENSC 191

Environmental Toxicology Option (70-79 units)

1. BIOL 005A, BIOL 05LA, BIOL 005B
2. CHEM 005 or BIOL 005C; CHEM 112A, CHEM 112B, CHEM 112C
3. ENTX 101, ENTX 154
4. PHYS 002A, PHYS 002B, PHYS 002C
5. PHYS 02LA, PHYS 02LB, PHYS 02LC are recommended
6. ENSC 006/ECON 006 or ENSC 143A/ ECON 143A (ECON 003 prerequisite)
7. BCH 100 or both BCH 110A and BCH 110B; BIOL 102 or BIOL 121/MCBL 121; BCH 110C or BIOL 107A
8. STAT 100A and STAT 100B

Core Requirements

1. Lower-division requirements (41-42 units)
   a) ENSC 001, ENSC 002
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC
   c) MATH 009A, MATH 009B
   d) POSC 010

2. Upper-division requirements (14 units):
   ENSC 100, ENSC 101, ENSC 102, ENSC 191

Environmental Toxicology Option (70-79 units)

1. BIOL 005A, BIOL 05LA, BIOL 005B
2. CHEM 005 or BIOL 005C; CHEM 12A, CHEM 12B, CHEM 12C
3. ENTX 101, ENTX 154
4. PHYS 002A, PHYS 002B, PHYS 002C
5. PHYS 02LA, PHYS 02LB, PHYS 02LC are recommended
6. ENSC 006/ECON 006 or ENSC 143A/ ECON 143A (ECON 003 prerequisite)
7. BCH 100 or both BCH 110A and BCH 110B; BIOL 102 or BIOL 121/MCBL 121; BCH 110C or BIOL 107A
8. STAT 100A and STAT 100B
Natural Science Option (65-71 units)

1. BIOL 005A, BIOL 05LA, BIOL 005B
2. PHYS 002A, PHYS 002B, PHYS 002C
3. PHYS 02LA, PHYS 02LB, PHYS 02LC are recommended
4. CHEM 112A, CHEM 112B
5. GEO 001 or GEO 002
6. ENSC 006/ECON 006 or ENSC 143A/ ECON 143A (ECON 003 prerequisite)
7. STAT 100A and STAT 100B
8. Elective Courses:
   a) At least one course from BIOL 005C, CHEM 005, CHEM 112C, MATH 009C
   b) A total of at least five courses from the following (at least three must be Environmental Sciences


Social Science Option (85-90 units)

1. BIOL 002, BIOL 003
2. GEO 001 or GEO 002
3. ECON 003

Natural Science Option (65-71 units)

1. BIOL 005A, BIOL 05LA, BIOL 005B
2. PHYS 002A, PHYS 002B, PHYS 002C
3. PHYS 02LA, PHYS 02LB, PHYS 02LC are recommended
4. CHEM 112A, CHEM 112B
5. GEO 001 or GEO 002
6. ENSC 006/ECON 006 or ENSC 143A/ ECON 143A (ECON 003 prerequisite)
7. STAT 100A and STAT 100B
8. Elective Courses:
   a) At least one course from BIOL 005C, CHEM 005, CHEM 112C, MATH 009C
   b) A total of at least five courses from the following (at least three must be Environmental Sciences


Social Science Option (85-90 units)

1. BIOL 002, BIOL 003
2. GEO 001 or GEO 002
3. ECON 003
4. ENSC 143A/ECON 143A, ENSC 143B/ECON 143B, ENSC 143C/ECON 143C, ENSC 172, ENSC 174

5. ECON 101 or ECON 107 or SOC 110

6. STAT 100A and STAT 100B

7. Elective Courses:
   
a) At least one course from ENSC 133/MCBL 133, ENSC 140, ENSC 141/MCBL 141, ENSC 142, ENSC 144/ENVE 144, ENSC 155, ENSC 163, BPSC 134/ENSC 134, ENSC 104, ENSC 107, ENSC 138/GEO 138, ENSC 197, ENSC 198-I

b) A total of at least six courses from the following:

   Economics: ECON 102, ECON 103, ECON 104A, ECON 105A, ECON 116, ECON 129, ECON 146, ECON 148, ECON 156, ECON 160/BUS 160, ECON 181, ECON 182, ECON 183

   Society and culture: ANTH 110, ANTH 129, ANTH 132, ANTH 134, ANTH 135, ANTH 142, ANTH 170, ANTH 186/LNST 166, PHIL 117, PHIL 137, SOC 137, SOC 143/URST 143, SOC 182/URST 182, SOC 184

   Regulation and law: ECON 119, POSC 101, POSC 106S, POSC 127, POSC 166, POSC 181, POSC 182, POSC 183

   Management/Analytics: BUS 104/STAT 104, BUS 122, BUS/ECON 162, ECON 110, ECON 111, ECON 112, GEO 157, GEO 160, MATH 120, SOC 111
Justification:
Changes in math requirements were made in response to the recent discontinuation of MATH 008A and MATH 008B by the Department of Mathematics. Changes in chemistry requirements were made in response to the reclassification of organic chemistry (CHEM 112 A, B &C) to lower division courses by the Department of Chemistry. ENSC 103, *Environmental Pollution and Health*, was recently approved for Spring 2016 and the ENSC Department would like to add it as elective for both the Environmental Toxicology and Natural Sciences tracks in the ENSC undergraduate major. A small change was made in the first paragraph of the Major Requirements to correct a typo: *BIOL 003 or BIOL 005B* are required for the major. BIOL 003 is the equivalent of BIOL 005B – not BIOL 005A. Additionally, Core Requirements should not be underlined (typo corrected), and the duplicate courses listed in error under the Natural Science Option 8b are being deleted.

Approvals:
Approved by the faculty of the Department of Environmental Sciences: December 1, 2015
Approved by the Executive Committee College of Natural and Agricultural Sciences: March 4, 2016
Approved by the Committee on Educational Policy: April 27, 2016
To be adopted:

Proposed Changes to Geology Major Requirements

PRESENT:

General Geology Option (53 units)
1. GEO 100, GEO 116, GEO 118,

2. GEO 102A (1-9) units in one quarter), or GEO 102A and GEO 102B (9 units in two quarters), or GEO 102A, GEO 102B, and GEO 102C (maximum of 9 units in three quarters)

3. One course from GEO 157, GEO 160, GEO 161, GEO 162, GEO 169
4. One course from GEO 124, GEO 132, GEO 136, GEO 137
5. One course from GEO 140, GEO 144, GEO 145, GEO 147.
6. GEO 151 or GEO 152/BIOL 152
7. Eight (8) additional units of related upper-division courses approved by the undergraduate advisor

Geobiology Option (53 units)
1. BIOL 005B, BIOL 005C
2. GEO 100, GEO 116, GEO 118,
3. GEO 102A (9 units in one quarter) or GEO 102A and GEO 102B (9 units in two quarters), or GEO 102A, GEO 102B, and GEO 102C (maximum of 9 units in three quarters)
4. Three courses from GEO 151, GEO 152/BIOL 152, GEO 160, GEO 169
5. Four (4) additional units of related upper-division courses approved by the undergraduate advisor

PROPOSED:

(No change.)

(No change.)

(No change.)

(No change.)

(No change.)

(No change.)

(No change.)

2. GEO 102A (8 units in one quarter), and GEO 102B (1 unit summer field camp).

(No change)

(No change)

(No change)

(No change)

(No change)

JUSTIFICATION:

This class, commonly referred to as “Summer Field” serves as a capstone experience for those Geology majors in the General Geology option, the Geobiology option, and the Geophysics option. Herein we propose several changes, which are dealt with in sequence.
1. **Reduction from 14 to 9 units:** In recent years students have taken the class at one of a variety of external field camps run by other universities where the students undertake field mapping of sedimentary, igneous, and metamorphic rocks. A maximum credit of 14 units may be awarded for the class, but the units provided by the camps do not exceed 9 units. Accordingly, the undergraduate advisor routinely has to write letters “waiving, without reservation, the 5 unit short fall.” By reducing the maximum number of units to 9 this persistent and time consuming requirement will be avoided.

Field camp is a continuous and exacting “total immersion” experience for the students, who commonly work in the field all day followed by follow-up sessions extending into the evening. The decision to rate our own GEO 102 course at 14-units is decades old. It reflected a time when all mapping work was done in GEO 102 over a 6 week period, but now we have two classes earlier in the sequence, GEO 101 and GEO 115 that provide a strong background for taking GEO 102, and justify the overall unit reduction. Furthermore, estimating exactly how many units are justified is necessarily inexact: Students complete hundreds of hours of field work, rated like a lab at 3 hours per unit, plus the seminar-style evening sessions in which they are taught to draft professional maps and reports, which can be variously rated as 1 or 3 hours per unit depending whether the style on any given evening better resembles a lecture, discussion or lab. An alternative calculation considers that some of the field work is an outdoor lecture, with students doing follow-up; this leads to higher unit totals and ignores the presence of instructors at all hours of the course. For a “live-in” field course there may be no easy distinction between a discussion section and "group office hours" or between a lecture and a “working picnic lunch.” Colleges inevitably differ in their unit calculation for these courses. This change was first approved by Department of Earth Sciences on 3 November 2014.

2. **Change from the GEO 102 A-C (1-14 units) series to a GEO 102A (8 units), GEO 102B (1 unit) series.** The Committee on Courses voted, on 22 October 2015 to approve this change, with the Chair writing on 23 October “The Committee unanimously voted to recommend that the department adopt the 8-1 option listed in the proposal that would require students to enroll in GEO 102A for 8 units in the spring and enroll in GEO 102B for 1 unit in the summer. The Committee recommends that the department work to submit a course change proposal in CRAMS to change the units of GEO 102A and GEO 102B so that they account for this option and clearly state in the course proposals and syllabi that field work for the courses will be completed in the summer so that students are informed, especially when enrolling in the course for spring. A course proposal will also need to be submitted in CRAMS to delete GEO 102C.”

3. **Change of prerequisites:** With the proposed course changes to GEO 102A-B as a class that can now be tailored to the specific structure of the UCR program in geology rather than the “outsourced” classes students currently take, GEO 100 (Igneous & Metamorphic Petrology) will remain as a prerequisite. GEO 101 (Field Geology) should be added as a prerequisite as it will provide the necessary fundamental field geology skills needed for this advanced field course that will build on skills acquired. GEO 116 (Structural Geology) should be added as a prerequisite as it will provide the necessary background in earth deformation (e.g. faults, fractures, and folds) to allow the students to interpret some of the geologic structures they will see. GEO 118 (Sedimentology and Stratigraphy) will remain a prerequisite as it continues to provide the necessary background in sedimentary rocks to prepare students for the more complex field mapping this course will require.

4. **Addition of Course Material and Service Fee.** The change from an “outsourced” GEO 102A-C series to the newly proposed “in-house” GEO 102A-B requires the addition of a Course Material and Service Fee to cover significant field expenses. The appropriate meetings and communications have been conducted with the UCR Earth Sciences student body concerning this fee and it is presently in review at the Dean’s Office. The total cost of the course per student including UC fees and the Course Material Fee is on the order of $2200, a drastic reduction from the $4500-6800 (commercially driven) rate that our students must pay to attend an external institution’s field camp. This fee is necessary for this course to be sustainable.
APPROVALS:
Approved by the Department of Earth Sciences: November 10, 2015
Approved by the CNAS Executive Committee: January 5, 2016
Approved by the Committee on Educational Policy: April 27, 2016
To be Adopted: Proposed Changes to Mathematics

PRESENT:
Change of Major Criteria
All courses taken to fulfill major requirements must be completed with grades of C- or better after repeats.

Freshman (0-44.9 units earned)
Completion of the following with grade of “C-“ or better and must be in good academic standing. (2.0 quarter and cumulative GPA).
MATH 008B or MATH 009A

Sophomores (45-89.9 earned units)
Completion of the following with grade of “C-“ or better and must be in good academic standing. (2.0 quarter and cumulative GPA).
MATH 008B or MATH 009A
MATH 009B
MATH 009C or MATH 010A

Juniors & Seniors (90 or more earned units)
Completion of the following with grade of “C-“ or better and must be in good academic standing. (2.0 quarter and cumulative GPA).
MATH 008B or MATH 009A
MATH 009B
MATH 009C
MATH 010A
MATH 031
Major change requests are reviewed during the 2nd, 3rd, 4th & 10th weeks of each quarter. Students are required to complete degree programs without exceeding 216 earned units.

PROPOSED:
(No change.)

Freshman (0-44.9 units earned)
Completion of the following with grade of “C-“ or better and must be in good academic standing. (2.0 quarter and cumulative GPA).
MATH 009A

Sophomores (45-89.9 earned units)
Completion of the following with grade of “C-“ or better and must be in good academic standing. (2.0 quarter and cumulative GPA).
MATH 009A
MATH 009B
MATH 009C or MATH 010A

Juniors & Seniors (90 or more earned units)
Completion of the following with grade of “C-“ or better and must be in good academic standing. (2.0 quarter and cumulative GPA).
MATH 009A
MATH 009B
MATH 009C
MATH 010A
MATH 031
Major change requests are reviewed during the 2nd, 3rd, 4th & 10th weeks of each quarter. Students are required to complete degree programs without exceeding 216 earned units.

(No change.)

Transfer Selection Criteria
Applicants to majors in the College of Natural and Agricultural Sciences are selected on the basis of academic preparation, as assessed by their GPA and the strength of preparation for the intended major. A GPA of at least 2.70 is required. (This is a baseline GPA for consideration and not a guarantee of admission.)
In addition, applicants will need to complete college courses comparable to at least two of the following UCR year-long sequences in order to meet selection criteria for this major.

Courses must be completed with “C” grades or better:

MATH 009A, MATH 009B, and MATH 009C (mandatory)

And at least one sequence from:
1. BIOL 005A/BIOL 05LA and BIOL 005B (and BIOL 005C, if articulated)
2. CHEM 001A, CHEM 01LA, CHEM 001B, CHEM 01LB, CHEM 001C, and CHEM 01LC
3. PHYS 040A, PHYS 040B, and PHYS 040C
4. MATH 010A, MATH 010B, and MATH 046

Courses must be completed with a letter grade, with no grade lower than a “C.” Students should visit assist.org for updated and comprehensive major preparation requirements.

**University Requirements**
See Undergraduate Studies section.

**College Requirements**
See College of Natural and Agricultural Sciences, Colleges and Programs section.

**Major Requirements for the Bachelor of Arts and Bachelor of Science in Mathematics**
To fulfill the Natural Sciences requirement, the Department of Mathematics requires the following:

1. One of the year sequences
   a) BIOL 002, BIOL 003, BIOL 005C
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC
   c) PHYS 040A, PHYS 040B, PHYS 040C
2. Either one course in the physical sciences listed above if (a) above is completed or one course in the biological sciences if (b) or (c) above is completed

The major requirements for the B.A. and B.S. degrees in Mathematics are as follows:

**For the Bachelor of Arts**
1. Lower-division requirements: MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 031, MATH 046

**For the Bachelor of Arts**
1. Lower-division requirements: MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 031, MATH 046
2. Four (4) units of either CS 010 or one upper-division course in Statistics
3. A minimum of 36 units of upper-division mathematics, excluding courses in the MATH 190–199 series

For the Bachelor of Science
Lower-division requirements for all programs are MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 031, MATH 046, CS 010 (CS 012 is recommended).

1. Pure Mathematics program (56 units)
   a) Thirty-six (36) units of upper-division mathematics to include at least 24 units from MATH 131, MATH 132, MATH 145A, MATH 145B, MATH 151A, MATH 151B, MATH 151C, MATH 171, MATH 172
   b) At least three courses from (a) above must be from MATH 145A, MATH 145B, MATH 151A, MATH 151B, MATH 151C
   c) Courses in the MATH 190–199 series are excluded
   d) Twenty (20) additional units of upper-division mathematics, upper-division computer science, or other related courses approved by the undergraduate advisor (For students who wish to pursue graduate work, courses in complex variables, differential equations, and probability may be particularly useful.)

2. Applied Mathematics programs
   MATH 131, MATH 135A and MATH 135B, or MATH 149A and MATH 149B. MATH 146A, MATH 146B, MATH 146C and the courses in one of the following options:
   a) General Applied Mathematics option
      (1) MATH 150 or MATH 151A
      (2) MATH 168
      (3) Students will select 16 units from MATH 120, MATH 121, MATH 126, MATH 141, MATH 147, MATH 148, MATH 149A, MATH 149B, MATH 149C, MATH 150B, MATH 151B, MATH 165A, MATH 165B
   b) Biology option
      (1) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C
      (2) MATH 149A
      (3) Three courses from MATH 120, MATH 121, MATH 135A, MATH 135B, MATH 149B, MATH 149C
      (4) BIOL 102, BIOL 105, BIOL 108

2. Four (4) units of either CS 010 or one upper-division course in Statistics
3. A minimum of 36 units of upper-division mathematics, excluding courses in the MATH 190–199 series

For the Bachelor of Science
Lower-division requirements for all programs are MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 031, MATH 046, CS 010 (CS 012 is recommended).

(No change.)
(5) Four (4) additional units of upper-
division biology

c) Chemistry option
(1) CHEM 001A, CHEM 001B, CHEM
001C, CHEM 01LA, CHEM 01LB, CHEM
01LC
(2) PHYS 040A, PHYS 040B, PHYS 040C
(3) Four courses from MATH 120, MATH
135A, MATH 135B, MATH 149A, MATH
149B, MATH 149C, MATH 165A, MATH
165B
(4) CHEM 110A, CHEM 110B, CHEM 111,
CHEM 113
(5) Four (4) additional units of upper-
division chemistry

d) Economics option
(1) MATH 120, MATH 121, MATH 149A,
MATH 149B, MATH 149C
(2) Five upper-division economics courses
(at least 20 units) to consist of ECON 102A
and four courses to be chosen from ECON
102B, ECON 103A, ECON 103B, ECON
107, ECON 108, ECON 110, ECON 111,
ECON 134/BUS 106, ECON 135, ECON
143A/ENSC 143A, ECON 143B/ENSC
143B, ECON 143C/ENSC 143C, ECON
156, ECON 206

e) Environmental Sciences option
(1) CHEM 001A, CHEM 001B, CHEM
001C, CHEM 01LA, CHEM 01LB, CHEM
01LC
(2) ECON 006/ENSC 006
(3) GEO 001 is recommended
(4) MATH 149A
(5) Three courses from MATH 120, MATH
121, MATH 135A, MATH 135B, MATH
149B, MATH 149C, CS 177, STAT 155
(6) ENSC 100/SWSC 100, ENSC 101,
ENSC 102
(7) Eight (8) additional units of upper-
division environmental sciences

f) Physics option
(1) MATH 135A, MATH 165A, MATH
165B
(2) Either MATH 120 or MATH 171
(3) PHYS 130A, PHYS 130B
(4) Either PHYS 135A, PHYS 135B, PHYS
136 or PHYS 156A, PHYS 156B

g) Statistics option
(1) MATH 120, MATH 149A, MATH
149B, MATH 149C
(2) Either STAT 130 or STAT 146
(3) STAT 161, STAT 170A, STAT 170B

h) Statistics option
(1) MATH 120, STAT 160A, STAT 160B,
STAT 160C
(2) Either STAT 130 or STAT 146
(3) STAT 161, STAT 170A, STAT 170B,
3. **Computational Mathematics** program
   a) MATH 011/CS 011, MATH 131, MATH 120, MATH 132, MATH 135A, MATH 135B
   b) CS 012, CS 014, CS 141, CS 150
   c) One additional CS course to be chosen from the list of approved technical elective courses.
   d) Twenty-four (24) units of technical electives to be chosen from:
      (1) CS 111, MATH 121, MATH 126, MATH 146A, MATH 146B, MATH 146C, MATH 149A, MATH 149B, MATH 149C, MATH 171
      (2) CS 130, CS 133, CS 166, CS 170, CS 177

Major Requirements for the Bachelor of Science in Mathematics for Secondary School Teachers

1. Lower-division Mathematics requirements (24 units)
   MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 031, MATH 046

2. Upper-division Mathematics requirements (36 units)
   a) MATH 131, MATH 133, MATH 140, MATH 144, MATH 153
   b) MATH 150A or MATH 151A
   c) Three courses from: MATH 132, MATH 136, MATH 137, MATH 138A, MATH 145A, MATH 145B, MATH 149A, MATH 149B, MATH 149C, MATH 150B, MATH 151B, MATH 151C, MATH 171, MATH 172

3. Additional Mathematics and related disciplines requirements (12 units)
   a) CS 010
   b) CS 011/MATH 011
   c) STAT 155

4. Natural Sciences (16-20 units)
   a) BIOL 002 or BIOL 003 or BIOL 005A and BIOL 05LA
   b) CHEM 001A and CHEM 01LA or CHEM 001HA and CHEM 1HLA
   c) PHYS 040A
   d) CHEM 001B and CHEM 01LB or CHEM 001HB and CHEM 1HLB or PHYS 040B or an additional laboratory Biological science course

5. Social Sciences (16 units)
   a) One course in ECON or POSC
   b) One course in ANTH
c) One course in PSYC
d) One course in SOC

6. Mathematics Education and Education requirements (18 or 19 units): EDUC 104, MATH 104, EDUC 003 or EDUC 004 or EDUC 109, EDUC 009, EDUC 110, EDUC 139

7. Recommended Courses LING 020 or LING 021, EDUC 116, EDUC 174, EDUC 175

6. Mathematics Education and Education requirements (18 or 19 units): EDUC 104, EDUC 003 or EDUC 004 or EDUC 100B or equivalent, EDUC 109/EDUC 109S, EDUC 110, EDUC 139

7. Recommended Courses LING 020 or LING 021, EDUC 116, EDUC 174, EDUC 175/EDUC 175S

Justification:
1. The MATH008A/B sequence is being replaced with the MATH006A/B sequence. Because MATH 006A/B is a pre-requisite for MATH 009A, our requirements will start with MATH 009A.
2. MATH 149ABC is no longer accepted by the Statistics department in lieu of MATH 149ABC for subsequent Statistics courses, and four of these courses are required by our Applied Math Statistics option majors. Therefore, to avoid a duplication of credit, these students need to take STAT160ABC.
3. The Computer Science Department has deleted CS 133 from its catalog
4. The Mathematics Department no longer has the faculty to teach MATH 104, and it has been submitted for deletion. EDUC 104 will continue to be taught by the School of Education.
5. The School of Education has proposed EDUC 109S and EDUC 175S to be equivalent to EDUC 109 and EDUC 175.

Approvals:
Approved by the faculty of the Department of Mathematics: November 4, 2015
Approved by the Executive Committee of the College of Natural and Agricultural Sciences: January 5, 2016
Approved by the Committee on Educational Policy: April 27, 2016
To be adopted:

Proposed Changes to the Minor in Mathematics

PRESENT:

Minor
The following are the requirements for a minor in Mathematics.

1. Lower-division courses (20 units): MATH 008B
   or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B

2. Upper-division requirements: 24 units of upper-division mathematics courses. Of the specified upper-division units, a minimum of 16 must be unique to the minor and may not be used to satisfy major requirements and no more than 4 units in courses numbered 190–199.

Students with a minor in Mathematics should consult with a faculty advisor in Mathematics to construct a specific program consistent with their goals.

See Minors under the College of Natural and Agricultural Sciences in the Colleges and Programs section of this catalog for additional information on minors.

PROPOSED:

Minor
The following are the requirements for a minor in Mathematics.

1. Lower-division courses (20 units): MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B

2. Upper-division requirements: 24 units of upper-division mathematics courses. Of the specified upper-division units, a minimum of 16 must be unique to the minor and may not be used to satisfy major requirements and no more than 4 units in courses numbered 190–199.

Students with a minor in Mathematics should consult with a faculty advisor in Mathematics to construct a specific program consistent with their goals.

See Minors under the College of Natural and Agricultural Sciences in the Colleges and Programs section of this catalog for additional information on minors.

Justification:
The MATH008A/B sequence is being replaced with the MATH006A/B sequence. Because MATH 006A/B is a pre-requisite for MATH 009A, our requirements will start with MATH 009A.

APPROVALS:
Approved by the faculty of the Department of Mathematics: November 5, 2015
Approved by the Executive Committee of the College of Natural and Agricultural Sciences: January 5, 2016
Approved by the Committee on Educational Policy: April 27, 2016
PROPOSED:

Major Requirements
Some of the following requirements for the Microbiology major may also fulfill the College’s breadth requirements. Consult with an advisor for course planning.

1. Core Curriculum (72-77 units)
   Students must complete all required core curriculum courses with a grade of “C-” or better and with a cumulative GPA in the courses of at least 2.0. Grades of “D” or “F” in two required courses, either separate courses or repetitions of the same course, are grounds for discontinuation from the major.
   a) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C
   b) CHEM001A, CHEM001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC
   c) CHEM 112A, CHEM 112B, CHEM 112C
   d) PHYS 002A, PHYS 002B, PHYS 02LA, PHYS 02LB, PHYS 002C, PHYS 02LC
   e) MATH 008B or MATH 009A, MATH 009B
   f) STAT 100A
   g) BCH 100, or BCH 110A and BCH 110B

2. Upper-Division Requirements (37 units)
   a) Major Core (19 units): BIOL 102, BIOL 107A, MCBL 121/BIOL 121, MCBL 121/L/BIOL 121, MCBL 125
   b) Major Electives. A minimum of 18 units from the following to be selected in consultation with a faculty advisor: BIOL 128/CBNS 128, BIOL 157, BIOL 158, CBNS 101, ENSC 120/NEM 120, MCBL 120/BIOL 120/PLPA 120, MCBL 120L/BIOL 120L/PLPA 120L, MCBL 122/BIOL 122, MCBL 123/BIOL 123/PLPA 123, MCBL 124/BIOL 124, MCBL 141/ENSC 141, MCBL 188, MCBL 197, PLPA 134/BIOL 134, PLPA 134/L/BIOL 134L
3. Other Requirements
For the Bachelor of Science degree, an additional 16 units in upper-division microbiology courses and/or substantive courses in a field or fields related to the major. Acceptable courses include BCH 102, BCH 110C, BIOL 107B, BIOL 109, BIOL 119, ENSC 133/MCBL 133, MCBL 190, MCBL 198-1; a more complete list of acceptable courses is available at the CNAS Undergraduate Academic Advising Center.
For the Bachelor of Arts degree, the foreign language requirement may be fulfilled by completing level-four coursework or by demonstrating the equivalent proficiency in one foreign language.

4. Bachelor of Science Sample Program¹

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¹ Bachelor of Science Sample Program

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(No change.)

**Notes:**

1. Some students will take courses in summer session to (i) reduce the unit load during the normal academic year (ii) complete the degree requirements in less than four years or (iii) enable the acquisition of a minor or double major in four years.

2. No more than 4 units can be applied toward the Major Electives unit requirement, unless approved by the Microbiology Steering Committee.

3. No more than 4 units can be applied toward the Other Requirements unit requirement, unless approved by the Microbiology Steering Committee.

4. Students are encouraged to take a class in ethics.

**Justification:**
The MATH008A/B sequence is being replaced with the MATH006A/B sequence. Because MATH 006A/B is a pre-requisite for MATH 009A, our requirements will start with MATH 009A. This change also reflects the CHEM 112A/B/C renumbering to CHEM 12A/B/C.

**Approvals:**
Approved by the faculty of the Department of Biology: November 13, 2015
Approved by the Executive Committee of the College of Natural and Agricultural Sciences: January 5, 2016
Approved by the Committee on Educational Policy: May 11, 2016
PRESENT:  
Major Requirements  

The major requirements consist of a core curriculum and additional requirements for various B.S. degrees. The core requirements for the B.A. and B.S. degrees in Physics are as follows:

1. Lower-division requirements (69 units) 
   a) One of the following sequences: PHYS 041A, PHYS 041B, PHYS 041C, or PHYS 040A, PHYS 040B, PHYS 040C, PHYS 040D, PHYS 040E. The first sequence is preferred for the B.S. in Physics.
   b) PHYS 39 
   c) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046 
   d) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC 
   e) CS 010 or CS 010V. A higher-level CS course may satisfy the CS 010 requirement with approval.

2. Upper-division requirements (46 units) 
   a) PHYS 130A, PHYS 130B, PHYS 132, PHYS 135A, PHYS 135B, PHYS 156A, PHYS 156B 
   b) PHYS 139L (5 units), PHYS 142L (5 units) or PHYS142W (5 units). Note that PHYS142W satisfies the ENGL 1C requirement. 
   c) 8 units of upper division Physics electives. 
      Upper division math, science of engineering may be substituted with approval. A student may take up to a maximum of 4 units of undergraduate research (PHYS 195A, PHYS 195B, PHYS 195C, and/or PHYS 195D). This may include a Physics internship at an approved government or industrial laboratory.

PROPOSED:  
Major Requirements  

The major requirements consist of a core curriculum and additional requirements for various B.S. degrees. The core requirements for the B.A. and B.S. degrees in Physics are as follows:

1. Lower-division requirements (70 units) 
   a) No change. 
   b) No change. 
   c) MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046 
   d) No change. 
   e) No change.

2. Upper-division requirements (41 to 42 units) 
   a) No change. 
   b) PHYS 139L (5 units), PHYS 142L (4 units) or PHYS142W (5 units). Note that PHYS142W satisfies the ENGL 1C requirement. 
   c) 4 units of upper division Physics electives. 
      Upper division math, science of engineering may be substituted with approval.

Physics : Standard Track (B.S. degree) 
1. Additional upper-division requirements (24 units)
a) PHYS 133, PHYS 136
b) PHYS 142L (additional 5 units, 1 quarter)
   Approved undergraduate research (PHYS 195A, PHYS 195B, PHYS 195C, PHYS 195D) in
   physics or an internship (PHYS 198-I) in
   physics at a government or industrial laboratory
   can be used in place of up to 5 units of PHYS
   142L.
c) 8 additional units of upper division Physics
electives. PHYS 156C is highly recommended
for those planning to go to graduate school in
physics.

Physics: Biophysics Track (B.S. degree)
1. Additional lower-division requirements (42
   units)
a) BIOL 005A, BIOL 005B, BIOL 005C, BIOL
   05LA
b) CHEM 12A, CHEM 12B
2. Additional upper-division requirements (24
   units)
a) CHEM 112A, CHEM 112B which may be used
to satisfy the core requirement 2c.
b) 16 additional upper-division units taken from
   CHEM 112C, BCH 110A, BCH 110B, BCH
   110C or BIOL 107A (other upper division
   CHEM/BIOL/BCH may be substituted upon
   approval)

Physics Education Track (B.S. degree only)
1. Additional lower-division requirements (10
   units)
a) EDUC 003, EDUC 004
b) LING 020 or LING 021
2. Additional upper-division requirements (46
   units)
a) EDUC 110, EDUC 177A, and either EDUC
   172 or EDUC 174.
3. Upper-division recommendations (4 units)
a) EDUC 104/MATH 104

Physics: Applied Physics and Engineering Track
(B.S degree)
1. Additional upper-division requirements (24
   units)
a) PHYS 142L (additional 5 units, 1 quarter)
   Approved undergraduate research (PHYS
   195A, PHYS 195B, PHYS 195C, PHYS 195D)
   b) One additional quarter of either PHYS 142L (4
      units) or PHYS 142W (5 units). Approved
      undergraduate research (PHYS 195A, PHYS
   195B, PHYS 195C, PHYS 195D) in physics or
   an internship (PHYS 198-I) in physics at a
   government or industrial laboratory can be used
   in place of up to 4 units of PHYS 142L.
c) No change.
in physics or an internship (PHYS 198-I) in physics at a government or industrial laboratory can be used in place of up to 5 units of PHYS 142L.

b) 8 additional units of upper division Physics electives.

c) 8 units of upper division Engineering electives.

Students seeking an emphasis in environmental physics or chemical physics should consult with an advisor. The physics electives may be selected on an individual basis to stress one of these concentrations.

Students continuing on to graduate school are encouraged to take additional upper-division courses in Mathematics, such as MATH 146A, MATH 146B, MATH 146C, MATH 165A, MATH 165B, and MATH 113.

Students may wish to earn a Minor in Mathematics which requires an additional 24 units of upper division math.

To graduate, a minimum grade point average of 2.00 (C) is necessary overall and in the upper-division courses taken for the major (courses listed under 2.).

Justification:
The Physics and Astronomy Department has revised the degree requirements based on our review of the undergraduate requirements prompted by the Major Requirements Project. A summary of the changes and their rationale is provided in the attached report. The justification for every single change follows:

- Major Requirements, 1 unit total was changed from 69 to 70, correcting a mistake.
- Major Requirements 1c, Math 8B was removed because it no longer exists.
- Major Requirements 2 unit total updated to reflect the change in 2c, the change in units for Phys 132 from 5 to 4, and the change in the units for Phys 142L from 5 to 4. The old total was also off by 1 unit and should have been 47. Please see attachments if you want a check of the revised sums.
- Major Requirements 2b, The Phys142L requirement was replaced by either Phys 142W or 142L. The physics content of these is the same. Phys 142W has additional writing instruction.
- Major Requirements 2c, The number of required elective units was reduced from 8 to 4. This is part of the overall effort to reduce the number of required upper division units for each track of the major. As part of this change, we removed the option of using undergraduate research to satisfy this requirement. Undergraduate research may still be used to satisfy half of the Phys 142 requirement.
- Standard Track 1 unit total was updated from 21 to “16 to 17” to reflect the removal of one required course (Phys 133) and the change in units for Phys 142L from 5 to 4.
- Standard Track 1a, Phys 133 is no longer required. It is an elective.
• Standard Track 1b, the Phys 142L requirement is now 142W (5 units) or 142L (4 units). Since the minimum total Phys 142 requirement is now 8 units (2x142L), we changed the substitution units for Phys 195 from 5 to 4 to correspond to half of the minimum required.
• Biphysics Track, 1 unit total was updated from 12 to 25 units, due to the CHEM 112 to 12 changes. CHEM 12C was added as an explicit requirement, in addition to CHEM 12AB, since it is a prerequisite for all of the classes in section 2a of the Biophysics Track.
• Biophysics Track, 1b, See above about CHEM 112 to 12.
• Biophysics Track, 2 units were adjusted to take into account CHEM 112 becoming CHEM 12 and also the reduction in what was the 2b requirement (16 to 8 units).
• Biophysics Track, the new 2a is the old 2b, except the requirement is now 8 instead of 16 units. This unit reduction is part of the overall effort to reduce the number of required upper division units for each track of the major.
• Education Track, 1b, added a helpful comment.
• Education track, 2 units were reduced from 16 to 8. The old 16 units was incorrect, since it counted the recommended EDUC 104, which was a recommendation, not a requirement. In addition to that, we changed what should have been 12 to 8 as part of the overall effort to reduce the number of required upper division units for each track of the major.
• Education track, 3, this recommendation was eliminated because, upon reflection, this was not a good recommendation and the course is no longer offered anyway.
• Engineering Track, 1 unit total was updated to reflect the PHYS 142L unit change and the reduction in requirements by 4 units.
• Engineering Track 1a, updated to reflect the change in 142L units and the existence of 142W. Since the minimum total Phys 142 requirement is now 8 units, we changed the substitution units for Phys 195 from 5 to 4 to correspond to half of the minimum required.
• Engineering Track 1b, reduced the requirement from 8 to 4 units as part of the overall effort to reduce the number of required upper division units for each track of the major.

**Approvals:**
Approved by the faculty of the Department of Physics and Astronomy: January 12, 2016
Approved by the Executive Committee College of Natural and Agricultural Sciences: April 19, 2016
Approved by the Committee on Educational Policy: May 11, 2016
To be adopted:

Proposed changes to the undergraduate major requirements in Plant Biology.

**PRESENT:**

**Major Requirements**

The major requirements for the B.S. and B.A. degrees in Plant Biology are as follows:

1. Life Sciences core requirements (68-72 units)

   Students must complete all required courses with a grade of “C-” or better and with a cumulative GPA in the core courses of at least 2.0. Grades of “D” or “F” in two core courses, either separate courses or repetitions of the same course, are grounds for discontinuation from the major.

   a) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC, CHEM 112A, CHEM 112B, CHEM 112C
   c) MATH 008B or MATH 009A, MATH 009B (MATH 009C recommended)
   d) PHYS 002A, PHYS 002B, PHYS 002C, PHYS 02LA, PHYS 02LB, PHYS 02LC
   e) STAT 100A
   f) BCH 100 or BCH 110A (BCH 110A is strongly recommended)

**PROPOSED:**

**Major Requirements**

The major requirements for the B.S. and B.A. degrees in Plant Biology are as follows:

1. Life Sciences core requirements (69-73 units)

   Students must complete all required courses with a grade of “C-” or better and with a cumulative GPA in the core courses of at least 2.0. Grades of “D” or “F” in two core courses, either separate courses or repetitions of the same course, are grounds for discontinuation from the major.

   a) BIOL 005A, BIOL 05LA, BIOL 005B, BIOL 005C
   b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC, CHEM 12A, CHEM 12B, CHEM 12C
   c) MATH 009A, MATH 009B (MATH 009C recommended)
   d) PHYS 002A, PHYS 002B, PHYS 002C, PHYS 02LA, PHYS 02LB, PHYS 02LC
   e) STAT 100A
   f) BCH 100 or BCH 110A (BCH 110A is strongly recommended)

*Note for the B.S. degree, courses in Statistics and Biochemistry taken as part of the core may count toward the 16 units from an area of specialization. For the B.A. degree, courses in Statistics and Biochemistry taken as part of the core may not count toward the 12 units required from an area of specialization.*
2. Upper-division requirements (40-52 units)

A GPA of at least 2.0 in upper-division courses taken in the field of the major is a graduation requirement. A student is subject to discontinuation from the major whenever the GPA in upper-division course work is below 2.0. Students finding themselves in this circumstance must meet with an advisor.

a) BIOL 102
b) BPSC 104/BIOL 104 (may be waived with consent of the faculty advisor)
c) BIOL 132/BPSC 132, BIOL 143/BPSC 143, BPSC 133

d) At least 8 units for B.S. or 4 for B.A. from the following: BIOL 100/ENTM 100, BIOL 120/MCBL 120/PLPA 120, BIOL 120L/MCBL 120L/PLPA 120L, BIOL 121/MCBL 121, BIOL 121L/MCBL 121L, BIOL 123/MCBL 123, BIOL 124/MCBL 124, BIOL 134/PLPA 134, BIOL 134L/PLPA 134L, BIOL 159/NEM 159, BPSC 134/ENSC 134, ENSC 120/NEM 120, ENTM 124

e) Two (2) units of BPSC 195H, BPSC 197, BPSC 198-I, or BPSC 199
f) BPSC 193 with a grade of C- or better

g) For the B.S. 16 additional units from one of the four areas of specialization (consult with a faculty advisor) and additional upper-division courses in biological sciences and related areas from any of the areas of specialization lists, and students may apply a maximum of 6 units of BPSC 190 and/or BPSC 195H and/or BPSC 197 and/or BPSC 198-I and/or BPSC 199. Requirements a) through g) must be at least 52 units in total.

For the B.A. 12 additional units from one of the four areas of specialization (consult with a faculty advisor).

Note Students planning a B.A. degree should schedule the required language courses in place of a series of electives.

Areas of Specialization

Individual student career goals may be achieved by selecting an area of specialization within the

2. Upper-division requirements (36 units for the B.S., 31 units for the B.A)

A GPA of at least 2.0 in upper-division courses taken in the field of the major is a graduation requirement. A student is subject to discontinuation from the major whenever the GPA in upper-division course work is below 2.0. Students finding themselves in this circumstance must meet with an advisor.

a) BIOL 102
b) BPSC 104/BIOL 104

c) BIOL 132/BPSC 132, BIOL 143/BPSC 143, BPSC 133

d) For the B.S. only Two (2) units of BPSC 195H, BPSC 197, BPSC 198-I, or BPSC 199

e) BPSC 193 with a grade of C- or better
f) For the B.S. At least 11 additional units from one of the four areas of specialization (consult with a faculty advisor). Students may apply a maximum of 6 units of BPSC 190 and/or BPSC 195H and/or BPSC 197 and/or BPSC 198-I and/or BPSC 199.

For the B.A. At least 8 additional units from one of the four areas of specialization (consult with a faculty advisor).

Note Students planning a B.A. degree should schedule the required language courses in place of a series of electives.

Areas of Specialization

Individual student career goals may be achieved by selecting an area of specialization within the
diverse disciplines of botany and plant sciences. Adjustments within these programs can be made to accommodate students’ interests. Students must consult with a faculty advisor to clarify educational goals and to plan a program of study.

1. Plant Cellular, Molecular, and Developmental Biology
   a) BPSC 135
   b) Additional units from the following to meet either the B.S. or B.A. requirement: BCH 102, BCH 110B, BCH 110C or BIOL 107A, BCH 153/BIOL 153/BPSC 153, BCH 162, BCH 183/BPSC 183, BIOL 107B, BIOL 113, BIOL 114, BIOL 121/MCBL 121, BIOL 121L/MCBL 121L, BIOL 123/MCBL 123/PLPA 123, BIOL 155/BPSC 155, BIOL 168, BPSC 138/BIOL 138, BPSC 185, CBNS 101, CBNS 108

2. Plant Genetics, Breeding, and Biotechnology
   a) BPSC 150
   b) Additional units from the following to meet either the B.S. or B.A. requirement: BCH 153/BIOL 153/BPSC 153, BIOL 105, BIOL 107A, BIOL 107B, BIOL 108, BIOL 119, BIOL 148/BPSC 148, BIOL 155/BPSC 155, BPSC 135, BPSC 158, BPSC 185, CBNS 108, STAT 100B

3. Ecology, Evolution, and Systematics
   a) BPSC 146
   b) Additional units from the following to meet either the B.S. or B.A. requirement: ANTH 170/BPSC 170, BIOL 105, BIOL 108, BIOL 112/BPSC 112/ENTM 112, BIOL 116, BIOL 116L, BIOL 138/BPSC 138, BIOL 165/BPSC 165, BPSC 134/ENSC 134, BPSC 158, BPSC 166, BPSC 185, ENSC 100, GEO 151, GEO 153, GEO 169

4. Plant Pathology, Nematology, and Pest Management
   a) BIOL 120/MCBL 120/PLPA 120
b) Additional units from the following to meet either the B.S. or B.A. requirement:
BCH 183/BPSC 183, BIOL 121/MCBL 121, BIOL 121L/MCBL 121L, BIOL 124/MCBL 124, BPSC 146, BPSC 150, BPSC 158, BPSC 166, ENSC 134/BPSC 134, ENTM 100/BIOL 100, ENTM 109, ENTM 124, ENTM 127/BIOL 127, ENTM 129, ENTM 129L, ENSC 100, ENSC 120/NEM 120, NEM 159/BIOL 159, PLPA 120L/BIOL 120L/MCBL 120L, PLPA 123/MCBL 123, PLPA 134/BIOL 134, PLPA 134L/BIOL 134L, ENSC 104

b) Additional units from the following to meet either the B.S. or B.A. requirement:
BCH 183/BPSC 183, BIOL 121/MCBL 121, BIOL 121L/MCBL 121L, BIOL 124/MCBL 124, BPSC 146, BPSC 150, BPSC 158, BPSC 166, ENSC 134/BPSC 134, ENTM 100/BIOL 100, ENTM 109, ENTM 124, ENTM 127/BIOL 127, ENTM 129, ENTM 129L, ENSC 100, ENSC 120/NEM 120, NEM 159/BIOL 159, PLPA 120L/BIOL 120L/MCBL 120L, PLPA 123/MCBL 123, PLPA 134/BIOL 134, PLPA 134L/BIOL 134L, ENSC 104

5. Individualized specialization
For students who wish to pursue cross-disciplinary education in plant biology. Course selection can be individualized, but needs to be approved by faculty advisor.

Justification:
The proposed changes to the Plant Biology undergraduate major are in response to a request from UCOP that programs review curricula with a goal of limiting upper division (UD) unit requirements to 45. Prior to our evaluation, the B.S. degree UD requirements, which include life science core classes STAT100A and BCH100 (9 units) = 52-61 units (depending on whether a student used STAT and BCH to fulfill section "g" requirements). Proposed changes to reduce the UD total to 45: 1) eliminate section d (related UD electives); 2) reduce section g (specialization) units to 11 and automatically count STAT and BCH toward the degree requirements. Prior to our evaluation, the B.A. degree requirements, which include core classes STAT100A and BCH100 (9 units) = 50. Proposed changes, which reduce the UD total to 40: 1) eliminate section d (related UD electives); 2) eliminate section e (research) 3) reduce section g (specialization) units to 8. These changes will simplify the requirements for PLBL students and do not compromise the quality of the B.S. and B.A. degrees.

Other changes:
"1a" change from "68-72 units" to "69-73" is a correction of error; "2b": removal of statement "(may be waived with consent of the faculty advisor)"; the intent is that BPSC104 be waived only in unusual circumstances, but there has been an increase in requests to waive this recently, so we think it best to remove this statement. We understand that this can be waived by the UG advisor even if the statement is not in the catalog.

Approvals:
Approved by the faculty of the Department of Botany and Plant Sciences: January 25, 2016
Approved by the Executive Committee College of Natural and Agricultural Sciences: April 5, 2016
Approved by the Committee on Educational Policy: April 27, 2016
EXECUTIVE COMMITTEE
COLLEGE OF NATURAL AND AGRICULTURAL SCIENCE

REPORT TO RIVERSIDE DIVISION
MAY 24, 2016

To be adopted:

Proposed changes for Bachelor of Science and Bachelor of Arts in Statistics

PRESENT:
For the Bachelor of Arts

1. Core requirements (24 – 25 units)
   a) CS 10, MATH 008B, MATH 009A, MATH 009B, MATH 009C, MATH 10A
   b) MATH 031

2. Upper-division requirements (36 units)
   a) Thirty-six (36) units of upper-division course work
      (1) STAT 147, STAT 157, STAT 160A, STAT 160B, STAT 160C, STAT 170A, STAT 170B, STAT 171
      (2) Four (4) units of STAT 183 taken at the end of Senior year

Note: An introductory Statistics class such as STAT 048, or STAT 100A is strongly recommended

PROPOSED:
For the Bachelor of Arts

1. [no change]
   a) CS 10, MATH 009A, MATH 009B, MATH 009C, MATH 10A
   b) [no change]

2. [no change]

For the Bachelor of Science

1. Core requirements (24 – 25 units)
   a) CS 10, MATH 008B, MATH 009A, MATH 009B, MATH 009C, MATH 10A
   b) MATH 031

2. Upper division requirements (52 units)
   a. Thirty six (36) units of upper division course work
      (1) STAT 147, STAT 157, STAT 160A, STAT 160B, STAT 160C, STAT 170A, STAT 170B, STAT 171
      (2) Four (4) units of STAT 183 taken during Senior year

For the Bachelor of Science

Sixteen (16) units of additional course work chosen, with the approval of the major advisor from STAT/BUS 104, STAT 127/BUS 127, STAT 130, STAT 140, STAT 146, STAT 161, or from related fields.
Note: An introductory Statistics class such as STAT 048, or STAT 100A is strongly recommended.

Statistical Computing Option

The requirements for this option are in addition to the requirements for the B.S. in Statistics, except that the option requirement takes the place of the 16 units in 2.b) above.

1. Lower-division requirements (8 units)
   CS 012, CS 014

2. Upper-division requirements (16 units)
   a) Sixteen (16) units of coursework selected from
      (1) CS 141, CS 177
      (2) MATH 120, MATH 135A, MATH 135B
      (3) STAT 198-I

Quantitative Management Option

The requirements for this option are in addition to the requirements for the B.S. in Statistics, except that the option requirement takes the place of the 16 units in 2.b) above.

1. Lower-division requirements (18 units)
   a) ECON 002, ECON 003
   b) BUS 010, BUS 020

2. Upper-division requirements (16 units)
   a) Three courses from one area and four (4) additional units from one other area
      (1) Marketing: BUS 103, BUS 113, BUS 117
      (2) Finance: BUS 106/ECON 134, BUS 134, BUS 135, BUS 136, BUS 138
      (3) Accounting: BUS 108, BUS 165A, BUS 165B, BUS 168A, BUS 168B
      (4) Management Information Systems: BUS 101, BUS 171, BUS 173

Justification:
The Mathematics Department will delete MATH 8A and MATH 8B effective Fall 2017. A new course sequence, MATH 6A and 6B will cover the pre-calculus material (i.e. MATH 5) in 2 quarters rather than one quarter for those that do not place high enough on the MAE to enroll in MATH 5

Approvals
Approved by Statistics Faculty: March 11, 2016
Approved by the Executive Committee College of Natural and Agricultural Sciences: March 15, 2016
Approved by the Committee on Educational Policy: April 27, 2016
To be adopted:

Change to Business Administration Major (BSAD)

**PRESENT:**

**Business Administration Major**

1. Preparation for Business Administration major (8 courses [at least 32 units])

   Major prerequisites (non-BUS courses may be used to satisfy breadth requirements for the School of Business Administration):
   (1) BUS 010
   (2) BUS 020
   (3) ECON 002
   (4) ECON 003
   (5) CS 008
   (6) STAT 048
   (7) MATH 022
   (8) ECON 102 or ECON 103

   The major requirements for the B.S. in Business Administration are as follows:

2. Upper-division major requirements (18 courses [at least 72 units])

   Core courses (at least 10 courses [at least 40 units]):
   BUS 100W, BUS 101, BUS 102, BUS 103, BUS 104/STAT 104, BUS 105, BUS 106/ ECON 134, BUS 107, BUS 108, BUS 109

   Concentration (At least 20 units): Students in the Business Administration major (BSAD) will be required to declare a concentration at least three quarters prior to graduation, provided they be allowed to change their concentration, if justified. The Office of Undergraduate Business Programs will manage the process. Students can declare one concentration.

   Choose five courses from one of the concentrations listed below. Courses completed

**PROPOSED:**

[No change.]
to meet upper division core requirements may not be used to meet concentration requirements.

**Accounting and Auditing:** BUS 154, BUS 160/ECON 160, BUS 161, BUS 162/ECON 162, BUS 165A, BUS 165B, BUS 165C, BUS 166, BUS 167, BUS 168A, BUS 168B, BUS 169A, BUS 169B

**Finance:** BUS 132 and at least four of the following: BUS 131, BUS 134, BUS 135, BUS 136, BUS 137, BUS 138, BUS 139, BUS 140E, BUS 146, BUS 147, BUS 148, BUS 153/ECON 153

**Information Systems:** BUS 125, BUS 128, BUS 171, BUS 172, BUS 173, BUS 174, BUS 175

**Management:** BUS 143, BUS 144, BUS 145, BUS 146, BUS 147, BUS 148, BUS 149, BUS 154, BUS 155, BUS 156, BUS 157, ANTH 105/BUS 158, BUS 173

**Marketing:** BUS 111, BUS 112, BUS 113, BUS 114, BUS 115, BUS 116, BUS 117, BUS 118, BUS 119, BUS 124

**Operations and Supply Chain Management:** BUS 122, BUS 124, BUS 125, BUS 126, BUS 127/STAT 127, BUS 128, BUS 129, BUS 130, BUS 173

**An additional 3 courses (at least 12 units) of Business Administration elective courses from BUS 111-BUS 199H, excluding BUS 190. Courses completed to satisfy the five-course concentration requirement may not be used to meet this requirement. Related courses outside of Business Administration may be approved to satisfy their requirement with the approval of the Associate Dean or Assistant Dean of Undergraduate Student Affairs of SoBA.**

**Justification**
Due to addition of new courses (BUS 123, 124, 150 and 170), the list of courses that can satisfy the requirements for the various concentrations is revised and expanded. The availability of more courses will make it easier for students to meet the educational objectives for the major.

**Approvals:**
Approved by the Executive Committee from the School of
THE GRADUATE DIVISION AND EXECUTIVE COMMITTEES OF THE COLLEGES REPORT TO THE DIVISION MAY 24, 2016

To be received and placed on file:

Reports of Degrees Awarded - Fall 2015

Bourns College of Engineering
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   Master of Education: ..................................................... 4
   Master of Professional Accountancy: ......................... 1
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The names of the candidates are filed in the official records of the Office of the Registrar.

S. See, Secretary-Parliamentarian
Riverside Division of the Academic Senate
To be received and placed on file:
The Committee on Committees reports the following 2015-16 appointments:

- In accordance with Bylaw 2.3, the Committee on Committees appointed Professor Piotr Gorecki to serve as Vice-Chair beginning April 1, 2016 – August 31, 2016, to fill Professor Mariam Lam’s unexpired term.

Respectfully Submitted,

Jeff Sacks, Comparative Literature & Foreign Languages, Chair
Tim Close, Botany & Plant Science
Ilya Dumer, Electrical & Computer Engineering
Derek Roff, Biology
Laosheng Wu, Environmental Sciences
Mohsen El Hafsi, School of Business Administration
Sherryl Vint, English
Amalia Cabezas, Media and Cultural Studies
Srikanth Krishnamurthy, Computer Science
Ilhem Messaoudi Powers, Biomedical Sciences
Christina Schwenkel, Anthropology
The Committee on Courses has approved the following courses.

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<th>Action</th>
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<th>Course 2</th>
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<td>Anthropology and International Development (4)</td>
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<td>Foundations of Political Economy (4)</td>
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<td>Comparative Analysis of Economic Systems (4)</td>
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Committee on Courses  
Report to the Riverside Division  
May 24, 2016

To be received and placed on file:
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Graduate Courses:

| NEW | CS 229 V | Machine Learning (4) | |
| NEW | CS 235 V | Data Mining Techniques (4) | |
| NEW | CS 242 V | Information Retrieval and Web Search (4) | |
| NEW | GEO 271 | Global Seismology (4) | |
| NEW | GEO 272 | Array Seismology (4) | |
| NEW | HIST 298 G | Public History Group Internship (1-12) | |
| NEW | STAT 202 A | Regression, ANOVA, and Design (4) | |
| NEW | STAT 202 B | Regression, ANOVA, and Design (4) | |
| NEW | STAT 202 C | Regression, ANOVA, and Design (4) | |
| NEW | STAT 206 | Statistical Computing (4) | |
| NEW | STAT 206 V | Statistical Computing (4) | |
| DELETE | PLPA 215 | Genetics of Fungi (3) | |
| DELETE | PLPA 220 | Advanced Mycology (4) | |
| DELETE | STAT 209 B | Statistical Data Mining (4) | |
| CHANGE | BCH 230 (E-Z) | Advanced Topics in Biochemistry (2) | |
| CHANGE | BCH 297 | Directed Research (1-6) | |
| CHANGE | BCH 299 | Research for Thesis or Dissertation (1-12) | |
| CHANGE | BIEN 233 | Computational Modeling of Biomolecules (4) | |
| CHANGE | CEE 233 | Advanced Air Pollution Control and Engineering (4) | |
| CHANGE | CHEM 242 | Combinatorial Chemistry and Chemical Genomics (3) | |
| CHANGE | CHEM 246 | Fate and Transport of Chemicals in the Environment (4) | |
| CHANGE | CS 229 | Machine Learning (4) | |
| CHANGE | CS 235 | Data Mining Techniques (4) | |
| CHANGE | CS 242 | Information Retrieval and Web Search (4) | |
| CHANGE | CWPA 297 | Directed Research (1-6) | |
| CHANGE | DNCE 264 | Oral History and Ethnographic Methods (4) | |
| CHANGE | EEOB 216 | The Theory of Evolution (4) | |
| CHANGE | EEOB 283 | Seminar in Organismal Biology (1-4) | |
| CHANGE | ENSC 200 | Fate and Transport of Chemicals in the Environment (4) | |
| CHANGE | ENSC 208 | Ecotoxicology (4) | |
| CHANGE | ENTX 200 | Fate and Transport of Chemicals in the Environment (4) | |
| CHANGE | ENTX 205 | Biotransformation of Organic Chemicals (4) | |
| CHANGE | ENTX 208 | Ecotoxicology (4) | |
| CHANGE | MCBL 290 | Directed Studies (1-6) | |
| CHANGE | STAT 204 A | Advanced Design and Analysis of Experiments (4) | STAT 200A |
| CHANGE | STAT 204 B | Advanced Design and Analysis of Experiments (4) | STAT 200B |
| CHANGE | STAT 207 | Advanced Statistical Computing (4) | |
| CHANGE | STAT 208 | Statistical Data Mining Methods (4) | STAT 209A |
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**Extension Courses:**

- **INSTRUCTOR EDUCC X80**
  - Introduction to Early Childhood Studies: Child Growth & Development, Birgit Monks, Ph.D.
  - Introduction to Early Childhood Studies: Child Growth & Development, Ansina Green, M.A.

- **INSTRUCTOR EDUCC X83.01**
  - Observation and Assessment of Children's Behavior, Maria Avalos, M.A.

- **INSTRUCTOR EDUCC X87.01**
  - Health, Nutrition and Safety in Early Childhood, Ansina Green, M.A.

- **INSTRUCTOR EDUCC X87.45**
  - Infant and Toddler Development, Susan Johnson, M.Ed.

- **INSTRUCTOR EDUCC X88.63**
  - Education and Care of the Infant, Susan Johnson, M.Ed.
  - Education and Care of the Infant, Birgit Monks, Ph.D.

- **INSTRUCTOR EDUCC X88.65**
  - Supervised Field Experience in Early Childhood Studies, Maria Avalos, M.A.

- **INSTRUCTOR MGT X105.11**
  - Supervised Training and Grand Teton Lodge Company, Buket Ertenu, B.A.
To be received and placed on file:

The Committee on Courses has approved requests to allow the following instructors to teach upper division courses as indicated:

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To be received and placed on file:

The Committee on Courses has approved the following course proposals for deletion, which have been listed in the General Catalog, but for at least four years, have not been offered, been offered with zero enrollment, or have been offered but canceled for deletion with the concurrence of the departments involved.

This following lists courses that were deleted and identified in the 2014-2015 Academic Year as part of the courses not offered for four or more year’s process.

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This following lists courses that were deleted and identified in the 2015-2016 Academic Year as part of the courses not offered for four or more year’s process.

ECON 004

Courses previously approved for deletion:

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ANTH 171  ECON 175
ANTH 174  ECON 180
ANTH 250A  ECON 202B
ANTH 250B  ECON 262
ANTH 250C  ECON 266
          ECON 268
          ECON 271
          ECON 272C
          ECON 279

Courses scheduled to be approved for deletion:

ANTH 102  ECON 060  EE 140
ANTH 128
ANTH 167
January 25, 2016

To: Paul D’Anieri  
   Provost and Executive Vice Chancellor

From: Jose Wudka, Chair  
      Riverside Division

Re: Review of Endowed Founder’s Chairs in Chemistry

At its January 25, 2016 meeting, Executive Council reviewed and supports the proposal to establish four Endowed Founder’s Chairs in Chemistry to honor George K. Helmkamp, Harry W. Johnson, Jr., Donald T. Sawyer, and Hartland H. Schmidt.
CONFIDENTIAL

November 19, 2015

President Janet Napolitano
University of California
Office of the President
1111 Franklin Street, 12th Floor
Oakland, CA 94607-5200

Dear Janet,

In accordance with University policy, I am writing to request your authorization to accept a pledge to the UC Riverside Foundation, totaling $6,000,000, to establish four endowed chairs in the College of Natural and Agricultural Sciences. The establishment and naming of the four chairs will be addressed separately at a later date. The pledge is from a donor with a long history of support for UC Riverside who wishes to remain anonymous.

I look forward to your approving this request at your earliest convenience.

Sincerely,

Kim A. Wilcox
Chancellor
December 3, 2015

CHANCELLOR WILCOX

Dear Kim:

I am delighted to approve the acceptance of a pledge to the UC Riverside Foundation of $6,000,000 from an anonymous donor to establish four endowed chairs in the College of Natural and Agricultural Sciences. This is a wonderful gift and I look forward to formally establishing the four chairs honoring a number of the founding faculty members of the Chemistry Department in the near future.

Yours very truly,

[Signature]

Janet Napolitano
President

cc: Provost Dorr
    Executive Vice President Brostrom
    Senior Vice President Henderson
    Assistant Vice President O'Neill
    Vice Chancellor Hayashida
    Director Wottring-Gonzales
GIFT AGREEMENT BETWEEN
The UC Riverside Foundation
And the University of California, Riverside
To Establish
Endowed Founder’s Chairs in Chemistry
To Honor
George K. Helmkamp, Harry W. Johnson, Jr., Donald T. Sawyer, and Hartland H. Schmidt
In the College of Natural and Agricultural Sciences

I. INTRODUCTION
pledge irrevocably to give the UC Riverside Foundation a California non-profit corporation, with the conditions and purposes contained in this document, cash or marketable securities having a fair market value on the dates of the gifts in the aggregate amount of $6,000,000 to establish four true endowments each in the amount of $1,500,000 in support of four Endowed Founder’s Chairs in Chemistry to honor the above named founding faculty members (“Chair Funds”).

II. BACKGROUND
, wish to recognize individual faculty members who were among the founders of the Chemistry Department at UCR by creating endowed chairs named in their honor.

The Chemistry Founder’s Endowed Chairs will recognize four of the founding faculty of the UCR Chemistry Department. These faculty members helped to establish UCR’s Chemistry Department, instructed UCR’s entering class, and laid the foundation for UCR’s first Ph.D. program and the department’s current success. Their commitment to science and to undergraduate research and education continues to serve as an inspiration to the UCR Chemistry Department today. The endowed chairs named in their honor will be used to recruit or recognize outstanding faculty at the forefront of research in the chemical sciences.

III. ESTABLISHMENT OF FUNDS
These funds shall be established when:
A. Subject to approval through the appropriate policies and procedures of the University of California, Riverside, and the Regents of the University of California, and pending receipt of funds as described below, Chair Funds shall establish four endowed chairs
Gift Agreement Between [Redacted], the UC Riverside Foundation and the University of California, Riverside to establish Endowed Founder’s Chairs in Chemistry in the College of Natural and Agricultural Sciences

named the George K. Helmkamp Founder’s Chair in Chemistry, the Harry W. Johnson, Jr. Founder’s Chair in Chemistry, the Donald T. Sawyer Founder’s Chair in Chemistry, and the Hartland H. Schmidt Founder’s Chair in Chemistry. ("Chairs").

B. The Chairs, four true endowments to be held by the UC Riverside Foundation, shall be established when this memo has been reviewed, signed and dated by the Donors and an appropriate university official and the 2015 pledge payment has been received. The Donors agree to make payments of $3,000,000 annually for two years beginning on or before December 31, 2015, with the final payment on or before December 31, 2016. Donors understand that the University will send reminder notices in accordance with this schedule.

C. Additions to the Funds can be made at any time.

IV. PURPOSE AND USE OF ENDOWMENTS

A. General Purpose
The expendable distributions from the Chair Funds will provide support funds for four endowed chairs in Chemistry under the direction of the Dean of the College of Natural and Agricultural Sciences in accordance with established University policies and procedures.

The establishment of the Chair Funds will comply with current policies of the UC Regents and the UC Riverside Foundation. If, in the judgment of the Chancellor of UC Riverside, the designated use of endowment payout is impractical or impossible, then the Chancellor may, in consultation with the Donors when possible, use endowment payout for such other purposes at the University of California, Riverside as s/he determines to be consistent with the Donors’ interests and intentions.

V. ADMINISTRATION OF FUNDS

A. The Chair Funds will be administered in accordance with the UCR Policies and Procedures on Endowed Chairs: Establishment, Administration and Appointment of Faculty.

B. The Chair Funds’ expendable distributions will be determined periodically under the terms of the Endowment Expenditure Policy as established by the UC Riverside Foundation

C. Payout from the Chair Funds will be transferred to The Regents, to be made available to the chair holders, in support of teaching, research, and service activities under the direction of the Dean of the College of Natural and Agricultural Sciences in accordance with University policy.
Gift Agreement Between [Redacted], the UC Riverside Foundation and the University of California, Riverside to establish Endowed Founder’s Chairs in Chemistry in the College of Natural and Agricultural Sciences

D. Total return earned by the Chair Funds in excess of the amount approved for distribution will be retained in the Chair Funds’ principal to protect the Chair Funds from the effects of inflation and to allow for growth. Any unexpended distribution from the previous year may be combined with that of the current year for spending purposes or added to the Chair Funds’ principal.

E. The principal of the Chair Funds may be combined with other Funds for investment purposes. Fiduciary responsibility for governance and investment of this endowment is vested in the UC Riverside Foundation Board of Trustees.

F. As is customary with universities and other non-profit organizations across the country, a one-time gift fee is applied to each gift in order to provide essential support to UCR’s advancement program. We understand that the fee is currently 5%. In addition, administrative fees will be charged in accordance with UCR policy.

VI. STEWARDSHIP

Endowed funds are a testament to the value the Donors place on intellectual and scientific achievement. During their lifetime, Donors will receive periodic stewardship reports from the University on the Funds.

The Donors agree that these funds may be used in University communications.

No public identification or acknowledgment shall be made of the Donors’ gift, which uses Donors' actual names, whether identification is in print or electronically. Donors' actual names shall be confidential and disclosed only to: the UCR Chancellor; the Vice Chancellor, University Advancement, the Associate Vice Chancellor of Development, and their successors, upon their assumption of office. Disclosure may be made to other UCR employees only to the extent needed for the proper administration of the Fund and then only under advice of the confidentiality of the Donors' actual names.

ACCEPTANCES:

[Redacted] Date

[Redacted] Date
Gift Agreement Between [redacted] the UC Riverside Foundation and the University of California, Riverside to establish Endowed Founder’s Chairs in Chemistry in the College of Natural and Agricultural Sciences

Cynthia K. Larive, Interim Dean of the College of Natural and Agricultural Sciences

Peter A. Hayashida
Vice Chancellor, University Advancement

Kim A. Wilcox
Chancellor

Date 11/3/2015

Date 11/12/15
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* Denotes first time approval for Instructor
** Denotes Instructor has previously been approved but has not yet taught; therefore, there are no evaluations
April 19, 2016

To: Jose Wudka, Chair of the Riverside Division of the Academic Senate

From: Jodi Kim, UCR Divisional Representative to the Assembly of the UC Academic Senate


Chair’s Announcements:
The meeting was convened by Dan Hare, Chair of the Academic Senate, who announced that the main agenda item would be to update the Assembly members on the report and recommendations of the President’s Retirement Options Task Force (ROTF), the results of the systemwide Senate review of the report, and the contents of an Academic Council letter that summarizes the views of Senate divisions and systemwide committees. This letter is in the process of being finalized. The following updates were provided:

1. As part of the budget agreement with the state, UC agreed to implement a new pension tier for UC employees hired on or after July 1, 2016 that includes a cap on pensionable salary aligned with the state’s Public Employee Pension Reform Act (PEPRA), in exchange for $436 million in Proposition 2 funds paid to UCRP over three years. The agreement also allows UC to offer a supplement to the PEPRA cap to select groups of employees. President Napolitano assembled a Task Force to advise her about the design and implementation of a new tier that will meet these requirements and also preserve the competitiveness of UC retirement benefits and the financial sustainability of UCRP. Four Senate representatives served on the Task Force. The recommendations for the 2016 tier were released for Senate review on January 15, and comments are due February 15. The Senate chair and vice chair also collaborated on a Guide to Reviewing the Report that focuses on key points.

2. The Council letter notes that Senate divisions were unanimous that the agreement to adopt the PEPRA cap and any retirement plan in response to the cap will significantly reduce the value of UC’s retirement benefit for future employees and undermine the ability of UC campuses to make the competitive offers necessary to recruit and retain outstanding faculty members. Reviewers were also concerned about the impact of the 2016 tier on the future of UC, noting that the quality of a UC education is a direct reflection of the quality of the faculty who provide that education. Reviewers expressed concern that the decision to adopt the cap was made in haste and without the expected and necessary Senate consultation. Moreover, Divisions noted that the ROTF was given an impossible task – to preserve total remuneration, protect the viability of UCRP, and generate significant
saving. Only the second is likely to be achieved through the current recommendations, largely as a result of past actions such as the adoption of the 2013 tier and subsequent UC funding and borrowing decisions. They noted that the only way to achieve savings is to reduce benefits.

3. The Council letter also summarizes the divisions’ analysis of the recommendation to offer new employees a choice of two plans. Under Plan A, employees would be covered by a Defined Benefit (DB) plan up to the PEPRA limit, plus a supplemental Defined Contribution (DC) benefit that includes an additional employer/employee contribution equivalent to 10%/7% of pay on income over the PEPRA limit. Most divisions recognized that for employees whose salary crosses the cap in mid-career, the DC supplement under Plan A would be too little-too-late to fully compensate for the effects of the cap compared to the 2013 tier. Divisions also understood that the projected income replacement under Plan B would be insufficient to preserve competitive total remuneration, and would reduce the incentive for employees to decline outside offers in early- or mid-career and retire at a targeted age. Most divisions agreed with the ROTF recommendation to make Plan A the default option. UC will be requesting a Private Letter Ruling from the IRS about the possibility of offering a second choice at different times for different segments of employees.

4. An updated total remuneration analysis released last week confirmed that both Plans A and B would compound the competitive shortfall outlined in the 2014 Total Remuneration study. Senate reviewers noted that UC would need to increase cash compensation to preserve competitive total remuneration under the reduced benefits of the 2016 tier. Reviewers were also concerned that creating a two-tier pension system with significantly different benefits will harm equity and morale, could exacerbate existing financial disparities by race and gender, and could further impair UC’s ability to recruit and retain diverse faculty. The Council letter notes that any plan adopted should apply equally across the board to all employee groups for the sake of simplicity and fairness.

5. Several divisions asked to review alternative plans. There was no time to develop formal alternatives; however, initial modeling suggests there is a viable alternative to Plan A involving additional employer and employee contributions to a supplementary DC plan beginning on the first day of hire and on the first dollar earned, irrespective of one’s salary below the cap, to take advantage of the significant power of compound interest.

6. The 2016 tier will not have a significant impact on UCRP’s funded status or generate significant savings; instead it will cost UC more from higher salaries and increased retention costs, and has the potential to change the relationship between UC and its world class faculty.
Discussion:

1. It was noted that the PEPRA cap will apply to all employees, including members of the Senior Management Group.
2. Assembly members encouraged Senate leaders to request additional modeling of alternatives to Options A and B and their benefits and costs.
3. Several Assembly members urged the Senate to reject the plan and express its dissatisfaction through a formal Memorial.
4. It was noted that the 2016 tier will not produce savings, but will increase overall costs for the University, push the additional costs associated with making up the PEPRA cap to the campuses, shift total remuneration from benefits to salary, and increase the funding disparity between campuses.
5. It was noted that the Regents’ new UCRP funding policy is already addressing the problems created by the earlier contribution holiday, and UC should encourage the state to live up to its full obligation to UCRP.
6. It was also noted that the Senate should consider the potential consequences of a full rejection of the mandate, as the Legislature expects UC to adopt the PEPRA cap as a measure of fairness to other state employees subject to the PEPRA legislation.

MOTION: The Berkeley Division introduced a motion for an Assembly resolution regarding the imposition of the PEPRA cap on the University and the discontinuation of the current pension plan. There was a vigorous discussion about the wording of the resolution. Several friendly amendments were made and accepted. The motion was seconded.

ACTION: A roll call vote was taken, and the resolution passed unanimously, with one abstention, as follows.

Resolution of the Assembly of the Academic Senate of the University of California

WHEREAS:
Through its path-breaking research and providing the state with a high-skilled workforce, the excellence of the University of California system plays a well-documented and vital role in keeping the California economy thriving; and
That excellence is also critical to providing access for all segments of California’s society to a cutting-edge education that makes them competitive for the best jobs and the best graduate and professional schools, thereby aiding social mobility and the goal of a more just society; and
That excellence remains dependent on the ability of the University of California to attract and retain the best faculty; and
That ability is dependent on offering faculty total remuneration that is competitive with other institutions; and
As documented in the Retirement Options Task Force (ROTF) report, the analysis of Professors Chalfant & Hare, UCFW’s report, UCPB’s report, and the Divisions’ reports, the proposal to accept the Public Employees Pension Reform Act
(PEPRA) cap and to adopt either pension plan put forth in the ROTF report means offering an inferior pension plan to new employees \textit{v}_i_s-_\textit{a}_t_-v_i_s_- the current pension plan (the 2013 Tier), thereby reducing the value of that component of their remuneration,

\textbf{BE IT RESOLVED THAT:}

The Assembly rejects the imposition of the PEPRA cap on the University of California and the discontinuation of the current pension plan in the absence of any plan or program to fund or to provide compensating increases in total remuneration, so as to prevent harming the mission of the University of California by eroding its ability to recruit and retain the best faculty.

\textbf{IT IS FURTHER THE ASSEMBLY’S SENSE THAT:}

As documented in the reports of the Divisions, the cost of providing such compensating increases, as well as other resulting costs, could well exceed any savings resulting from adopting either pension option offered in the ROTF report (including factoring in the $436 million that has been offered by the State), which argues that, at the very least, further analysis and planning are warranted prior to their possible adoption to ensure that the University does not pursue an action that is costly and damaging.
April 19, 2016

To: Jose Wudka, Chair of the Riverside Division of the Academic Senate

From: Mary Gauvain and Jodi Kim, UCR Assembly Representatives to the UC Academic Senate

RE: Report of the Teleconference Meeting of the UC Academic Senate Assembly, April 13, 2016

Announcements by Chair Hare:

1. At the March Regents meeting the President approved the new retirement plan approved as submitted (no changes). The Principles against Intolerance statement was approved as amended. The amendment changes the language from “anti-Zionism” to “anti-Semitic forms of anti-Zionism.”
2. The work on the Transfer Pathways is complete, the webpage is up, and issues of gaps with certain campus majors are addressed. Some smaller majors are still in process, however, and these are not listed on the webpage. Departments that would like to have their majors listed should contact OP.
3. The review of the College Level Examination Program (CLEP) exams will start soon. The Senate is still waiting to receive copies of the exam to review.
4. Election of Academic Council to be held at May meeting
5. The joint commission on faculty discipline, the Sexual Harassment Task Force, is ongoing. Although Senate procedures have been subject to criticism, the data show that the formal Privilege and Tenure process is hardly ever used on the campuses and there is wide variation in the implementation of Title IX across the campuses. When the report from the Task Force is completed, it will be sent to the campuses for review.
6. The California State audit of UC was released on March 29 and received substantial attention from the press. Many statements in the report mischaracterize how UC funding works and representatives from OP were diligent in clarifying these issues at the audit hearing. The main issues of concern are whether non-residents are displacing California resident undergraduates and if non-residents have lower admission requirements.

Discussion:
Question: Was the Master Plan considered in the audit?
Answer: Although the undergraduate admissions process entails a holistic/comprehensive review of 14 criteria, the auditors could only analyze student SAT scores and GPA. There was frustration that the auditors used selective data and that they did not use the contemporary definition of the Master Plan in their process. The Legislature believes we are not following the Master Plan, which stipulates that non-residents have to compare favorably to residents at each campus and not just system-wide. But this can be interpreted in different ways. Since 2011, non-residents have compared favorably to the “average” resident.
In terms of faculty misconduct processes, how do we deal with the fact that there are specificities and variations across campuses, for example some campuses don’t have a Charges Committee?

Answer: Yes, there is campus variation on the Title IX process. It is unclear to whom Title IX reports, etc. But the question of whether there is a Charges Committee is a red herring because there are still set processes for each campus, and variations in these processes do not constitute a difference of real substance.

Announcements by Provost Dorr:
1. Comments on the State audit:
   a. The UC is adding at least 5,000 new California residents in 2016-17.
   b. It was anticipated that the audit results would be negative both in evaluation and tone. The audit was largely politically motivated, and there were places where facts and interpretations of them were incorrect.
   c. The reaction in the press occurred with little chance for UC to respond right away because UC was not given the opportunity to read and discuss the audit before it was released.
   d. A report from OP entitled “Straight Talk on Hot-button Issues: UC Admissions, Finances, and Transparency” responds to what is in the audit but does not argue with the audit directly. This report has been distributed widely and is available online at the UCOP website.
   e. There was tremendous preparation at OP for the audit hearing. The main points made by UC at that hearing were:
      1) UC has increased Pell Grant, 1st generation, and minority enrollment in a way that far outshines competitors;
      2) total growth in staff is largely in the Health Sciences and this staff is paid mainly through non-UC funds;
      3) eligible California residents are guaranteed admission while non-residents are not;
      4) among residents there is a greater percentage admitted to their campus of choice than there is among non-residents;
      5) there has been a 45% growth in residents at the 3 campuses that have had the greatest number of non-residents (Berkeley, LA, and San Diego);
      6) every campus is expected to enroll non-residents on top of the continued enrollment of CA residents;
      7) non-residents are not taking the place of residents and more residents are admitted if there is additional funding;
      8) residency is not a factor in access to competitive majors.
   f. UCOP thinks that the hearing went well given the circumstances.

Discussion:
Question: Having 5,000 additional residents is not a sustainable strategy because only 50% would be funded, and the difference would need to be made up. There are also infrastructure concerns, including classroom space. Also, how can we best understand where we’re going to get these students, such as their distribution
across campuses, how many 1st years versus transfers, accounting for attrition after 1st year, etc.?

Answer:

a. Material will be presented to the Department of Finance by May 1 on how the additional 5,000 students will be funded. This will include increasing summer enrollment this coming summer. If the first SIRs are not sufficient to meet each campus target, then campuses will have Spring Semester/Winter Quarter admissions.

b. On housing issues: There is active work on housing not just for undergraduates but also for graduates, post docs, and faculty; in the short term, some campuses are changing double rooms to triple rooms, though some are already triple, reducing guaranteed housing to 1-2 years, looking for places close to campus that can be commandeered for students. Overall, a longer term plan needs to be put in place.

c. Instructional space: Some campuses are using trailers, more courses are being scheduled in the evenings and on weekends, especially labs; on many campuses there are walkthroughs of space to determine what rooms can be used for instruction. There are increases in online courses, flipped classrooms.

d. 15% more CA resident freshmen have been admitted for next year; the rate of admission of residents is higher than that of non-residents or international students.

Discussion:

Question: There is a growing lack of sufficient instructional space, especially large classrooms. What effect does this have on graduation rates?

Answer: This is a concern and reality on many campuses. There is also concern that a high proportion of the additional 5,000 will be less well prepared.

Question: Consideration for faculty growth keeps getting left out of the picture when discussing enrollment growth.

Answer: Campuses are attempting to hire more faculty. For example, Riverside is doing cluster hiring. There are some set asides and other resources for recruitment packages. Hiring of ladder faculty is going up and it is recognized as a need.

Question: Some campuses are running out of options in addressing the lack of adequate instructional space, and it is stressing faculty and students. There is a concern that the curriculum is adversely impacted.

Answer: Yes, if delivery of course content is impacted, then it is a problem. In the meantime, there is work on Transfer Pathways, major requirements, summer pilots, activity based costing pilot at Riverside that Merced and Davis are also considering, and adaptive learning. The Senate should examine the educational impact of any changes in the delivery of instruction as a result of increased enrollment.
**Reports of Standing Committees:**

**Academic Council:**

1. Nomination and Election of Vice Chair of Assembly for 2016-17, Academic Council nominated Shane White (Professor, UCLA School of Dentistry)
   
   **ACTION:** Unanimous YES vote for Shane White

2. Ratification of 2016 Oliver Johnson Award for Distinguished Leadership in the Academic Senate recipients:
   
   **ACTION:** Nominees Robert M. Anderson (Emeritus Professor of Economics and Mathematics and Coleman Fung Professor Emeritus of Risk Management at UC Berkeley) and Katya Lindenberg (Distinguished Professor of Chemistry and Biochemistry and Chancellor's Associate Chair at UC San Diego) were both ratified. They will receive the award at the end of July.

**New Business:**

**MOTION:** A request for an electronic voting option for the Academic Assembly.

**Discussion:** The software Zoom that the Assembly currently uses allows up to 60 participants, however, it does not have an electronic voting option. This option is a good thing to have when there is no consensus, even if that is rare. The system would be one that requires authentication as eligible voters.

**ACTION:**

The motion passed unanimously.
COMMITTEE ON DISTINGUISHED CAMPUS SERVICE

NOMINATION FOR THE 2015-2016 DISTINGUISHED CAMPUS SERVICE AWARD

PROFESSOR AKULA VENKATRAM

The Committee is pleased to nominate Professor Akula Venkatram from the Department of Mechanical Engineering as a recipient of the Distinguished Campus Service Award for the academic year 2015-2016. Professor Venkatram is one of the founding members of the Bourns College of Engineering and was the founding chair of the Department of Mechanical Engineering when it was still being developed. At a University level he has served on the Mechanical Engineering Undergraduate Committee during 2007-2008, 2008-2009, 2010-2011, 2012-2013, and 2013-2015 as the Undergraduate Advisor/Chair. At the college level he has served as the Chair of the College Executive Committee since 2013. Professor Venkatram’s campus service includes being a member of the Senate Committee on Research (2008-2009); member of Committee on Planning and Budget (2009-2011); a member of the UCR Budget Advisory Committee in 2009; a member of the Senate Committee on Preparatory Education (2013-2015) and a member of Executive Council (2013-2016). He was also on the search committee for the Vice Chancellor for Planning and Budget. Professor Venkatram also played a key role in the elaboration of the ABET self-study document that led to the six-year accreditation of the Mechanical Engineering undergraduate program in 2012 with outstanding reviews from the external review committee. Additionally, Professor Venkatram has taught the widest range of courses in his curricula and with outstanding effectiveness.

COMMITTEE ON DISTINGUISHED CAMPUS SERVICE

NOMINATION FOR THE 2015-2016 DISTINGUISHED CAMPUS SERVICE AWARD

PROFESSOR LINDA WALLING

The Committee is pleased to nominate Professor Linda Walling from the Department of Botany and Plant Sciences as a recipient of the Distinguished Campus Service Award for the Academic year 2015-2016. Professor Walling has served on several Academic Senate committees, but most notably she served on the Committee on Academic Personnel (CAP) as a member (2012-13), Vice Chair (2013-14), and Chair (2014-15). At the University level she served as a member of Advisory Committees on Institutes and Centers (2004-2010), and Intellectual Property and Development (2004-10). At the college level, Professor Walling has served on 9 college committees prior to her appointment to the leadership team in CNAS. Serving under 3 different CNAS deans, she was Associate Dean for Biological Sciences (2003-04), Associate Dean (2004-07) and Divisional Dean for Life Sciences (2007-09). During this time, she spent exceptional effort leading numerous initiatives for changes in biological sciences teaching, college reorganization, assessment of college’s space and current and future research and teaching needs, several CNAS building projects, and the internal and external review of the life sciences undergrad majors (2003-09). At the departmental level, she served as a member of numerous strategic committees, including planning committees, the A&PS Review Committee and Faculty Search Committees. Furthermore, she was on numerous committees on graduate and undergraduate education including serving as Graduate Advisor for the Plant Biology Graduate Program (2010-15) and Chair of the Educational Advisory Committee (2010-15).
COMMITTEE ON DISTINGUISHED TEACHING

NOMINATIONS FOR THE 2015-2016 DISTINGUISHED TEACHING AWARD

The Committee on Distinguished Teaching is pleased to nominate two outstanding, award-winning educators as co-recipients of the 2015-16 Distinguished Teaching Award. Both are graduates of the UC System, recruited to UCR from faculty positions at Colleges of Medicine. Both are tireless in bringing research experiences to larger undergraduate classes than is traditionally imagined possible.

PROFESSOR Katherine Borkovich

Professor Katherine Borkovich moved to UCR’s Department of Plant Pathology, from the UT Houston Medical School in 2001, the same year that she won their Dean’s award for Teaching Excellence. At UCR, she became a driving force in establishing the undergraduate microbiology major, the first director of the reinstated microbiology graduate program, and then Chair of the department of Plant Pathology and Microbiology.

Dr. Borkovich embraces the most time-consuming aspects of excellent teaching. She incorporates scientific writing, statistical computation, and original research experiments into her undergraduate courses, following up with generous office hours. She is one of the few instructors who assign and grade papers in large undergraduate science courses. Students value this writing component because she devotes so much time to reading their papers and providing feedback in time for informed revision.

The microbiology capstone course, which Dr. Borkovich developed, has the structure of a group senior thesis in which students design and perform experiments, prepare illustrations and draft manuscripts. The course generates valuable research data and peer-reviewed publications with student authors. Colleagues who copied the course structure at Texas A&M were “surprised by the amount of time and effort it took to do this successfully.” Dr. Borkovich has trained 45 STEM undergraduate researchers and collaborated with colleagues in CNAS to secure two substantial grants to improve STEM education.

Letters from colleagues and students establish that Dr. Borkovich is a “leader in both teaching and developing new educational opportunities for undergraduate students.” We find her fully deserving of the Academic Senate’s Distinguished Teaching Award.

PROFESSOR Juliet McMullin

Professor Juliet McMullin moved to UCR’s Department of Anthropology in 2005 from the UC Irvine College of Medicine. She won the CHASS Junior Faculty Teaching Award in 2008 and was named the 2014-15 recipient of the CHASS McSweeny McCauley Chair for Teaching Excellence. She is currently the Associate Director for Community Engagement in the School of Medicine’s Global Health Initiative.
Dr. McMullin uses a wide range of communication methods to foster learning environments in which students, researchers, and local communities “not only learn from her but also from listening to and interacting with one another.” She explores the overlap of social inequality, health disparity and art. Her courses are a brilliant fusion of subject matter with research projects and community outreach. Dr. McMullin welcomes students as junior researchers who bring valuable insights from their home communities and contribute to conferences built around their findings. They recognize that “she offers guidance by asking the right questions and making us make the tough calls.”

Dr. McMullin’s concern for students begins with CHASS activities that help orient and socialize first year-undergraduates. Graduate students “vie to join her teaching teams because of the versatile and effective pedagogies she deploys and the careful mentoring she provides.” Senior faculty colleagues “look to her as a role model for classroom effectiveness,” whether in a small graduate seminar or a mixed media presentation to hundreds of undergraduates.

For her tireless and effective commitment to students and their communities, Dr. McMullin has thoroughly earned the Distinguished Teaching Award.
Each year the Graduate Council and Graduate Division present the Dissertation Advisor/Mentoring Award to one or two UCR faculty members who have made outstanding contributions to the training of advanced graduate students. It is my pleasure to announce that this year's winner is David Pion-Berlin.

Dr. David Pion-Berlin is a Professor in the Department of Political Science. He received his BA (1974) from Colgate University, and MA and PhD (1981, 1984) from the Graduate School of International Studies at the University of Denver. Dr. Pion-Berlin has been at UCR since 1991, where he started as an Associate Professor. His interests lie in both comparative politics and international relations, with emphasis on Latin American Politics, Civil Military Relations, Security and Defense, Political Repression, Human Rights, Regional Security, and International Influences on Latin America. He has mentored 21 graduate students at UCR, an impressive quantity, but he has never lost a focus on quality as well. Former students speak uniformly of his commitment to their education and subsequent careers, with many describing how their relationship with Dr. Pion-Berlin has remained influential for years beyond receipt of their degrees. His dedication is reflected in the many prestigious positions his students have obtained after graduation. For his many efforts in mentoring graduate students, he is being honored with the Doctoral Dissertation Advisor/Mentoring Award.
FACULTY RESEARCH LECTURER COMMITTEE

NOMINATION FOR THE FACULTY RESEARCH LECTURER FOR THE YEAR
2016-2017

PROFESSOR CARL CRANOR, DEPARTMENT OF PHILOSOPHY

From its inception well over half a century ago, the Faculty Research Lecturer Award has been the highest honor that the Academic Senate bestows. The Committee listed below, composed of five previous Faculty Research Lecturers, is delighted to nominate, Carl Cranor, Professor of Philosophy for this honor for the year 2016-2017.

Nine exceptional faculty members across all the three Colleges at the University were placed for the nomination. The committee is extremely impressed by the very high academic, research and professional activities across the different disciplines represented. The committee selected Professor Carl Cranor for his demonstrated brilliance in Philosophy of Law and Science. Professor Cranor has been nationally and internationally recognized for his research regarding Toxins and public health. In 2014-15, he was the Phi Beta Kappa Romanell Professor which recognizes the recipient’s distinguished achievement and substantial contribution to the public understanding of philosophy. Only three professors in the University of California system have been selected for it since its foundation in 1989.

Professor Cranor has outstanding research accomplishments in how ethics, law and science of toxicants intersect. His research has not only had an extraordinary impact on academia but an equally important impact on the legal system when he worked alongside the U.S. National Oceanic and Atmospheric Administration and the U.S. Department of Justice regarding the single largest environmental damage settlement in world history. A nominator writes that, “his work also sets a standard for how deep study of a field can be used to make policy recommendations”.

Another nominator writes that, “His publications communicate across the disciplines of toxicology, philosophy and law. He is the only scholar I know who has mastery over the concept of causality in science, tort, law, administrative law, who can discuss “evidence” in science and the courts and who has written brilliantly about the pursuit of truth in science and the legal system.”

Yet another nominator writes, “No contemporary topic is more important than the health of the human race, especially that of children, and no scholar is better positioned to do a superb job of the research that he does, Cranor is simply the best ethicist anywhere working in this area of law and risk.”

In recognition of his enormous and continued contribution to our society, the Senate Committee on Faculty Research Lecturer unanimously and enthusiastically nominates Professor Carl Cranor as the Faculty Research Lecturer for 2016-2017.

The Faculty Research Lecturer (2015-2016) Committee
John M. Fischer (Department of Philosophy)-Chair
Howard S. Friedman (Department of Psychology)
Alexander S. Raikhel (Department of Entomology)
Xuemei Chen (Department of Botany and Plant Sciences)
Harry Green (Department of Earth Sciences)
To Be Adopted:

Proposed Changes to Membership Charge of the Committee on Educational Policy
(Bylaw 8.12.1)

PRESENT:

8.12.1 This committee consists of twelve members including a Chair, a vice Chair, and a member of the Committee on Courses designated by the Committee on Committees. The membership shall include a representative from each of the Colleges. The Committee on Committees will make every attempt also to include representation from each of the Professional Schools. One member of the committee shall serve on the University Committee on Educational Policy. (Am 22 May 86)(Am 10 Jun 91)(Am 30 May 06)(Am 26 Nov 13)

PROPOSED:

8.12.1 This committee consists of fifteen members including a Chair, a vice Chair, and a member of the Committee on Courses designated by the Committee on Committees. The membership shall include a representative from each of the Colleges. The Committee on Committees will make every attempt also to include representation from each of the Professional Schools. One member of the committee shall serve on the University Committee on Educational Policy. (Am 22 May 86)(Am 10 Jun 91)(Am 30 May 06)(Am 26 Nov 13)

Justification:
The Committee proposes that three additional members be added to the Committee’s membership to accommodate the increase of workload that is necessary to complete more undergraduate program reviews each year to comply with WASC’s recommendations that each undergraduate program be reviewed every 7 to 10 years.

Approvals:
Approved by the Committee on Educational Policy: March 11, 2016
The Committee on Rules and Jurisdiction finds the wording to be consistent with the code of the Academic Senate: March 28, 2016
Received by Executive Council: April 25, 2016
To Be Adopted:

Proposed Changes to Membership Charge of the Committee on Preparatory Education
(Bylaw 8.24.1)

PRESENT:

8.24.1 This committee consists of eleven members including one member each from the English and Mathematics departments, three members from other departments, schools, or programs, the Divisional representative to the Board of Admissions and Relations with Schools, ex officio, the director of Entry Level Writing, ex officio, the associate Dean--student affairs of the College of Engineering, ex officio, the associate Dean--student affairs of the College of Humanities and Social Sciences, ex officio, the associate Dean--academic affairs of the College of Natural and Agricultural Sciences, ex officio, and the Vice Chancellor for Student Affairs, ex officio. An ex officio member may not serve as Chair. The Chair normally also serves on the University Committee on Preparatory Education. (Am 5 Nov 87)(Ed 30 Jun 91)(Am 25 May 95)(Ed 25 May 00)(Ed 22 Nov 05)(Am 19 May 15)

PROPOSED:

8.24.1 This committee consists of ten members including one member each from the English and Mathematics departments, three members from other departments, schools, or programs, the Divisional representative to the Board of Admissions and Relations with Schools, ex officio, the director of Entry Level Writing, ex officio, the associate Dean--student affairs of the College of Engineering, ex officio, the associate Dean--student affairs of the College of Humanities and Social Sciences, ex officio, and the associate Dean--academic affairs of the College of Natural and Agricultural Sciences, ex officio. An ex officio member may not serve as Chair. The Chair normally also serves on the University Committee on Preparatory Education. (Am 5 Nov 87)(Ed 30 Jun 91)(Am 25 May 95)(Ed 25 May 00)(Ed 22 Nov 05)(Am 19 May 15)

Justification:
The Committee proposes that the Vice Chancellor for Student Affairs be removed as an ex officio member of the Committee as consultation from the position is no longer needed at every meeting. If issues arise that need the Vice Chancellor for Student Affairs’ consultation, they will be invited to attend meetings as a guest.

Approvals:
Approved by the Committee on Preparatory Education: February 4, 2016
The Committee on Rules and Jurisdiction finds the wording to be consistent with the code of the Academic Senate: April 28, 2016
Received by Executive Council: May 9, 2016
To be adopted:

Proposed Changes to Bylaw HS4.1

PRESENT:

There shall be an Executive Committee consisting of the Chair of the Faculty, the Dean of the college, ex officio; the associate Dean of student affairs, ex officio; nine members of the Faculty as provided in bylaw HS 4.4.1; and student representatives as provided in bylaw HS 4.1.1.6. The Executive Committee elects the Secretary-Parliamentarian of the Faculty, who also serves as Secretary-Parliamentarian of the Executive Committee, from among its membership. (Am 4 Nov 82)(Am 26 May 88)

PROPOSED:

There shall be an Executive Committee consisting of the Chair of the Faculty [as provided in bylaw 2.1.1] and elected members of the faculty [as provided in bylaw HS 4.4.1]. The Executive Committee elects a Secretary Parliamentarian of the Faculty from among its membership on a yearly basis [as provided in AM 26 May 88]. The Dean of the college and the associate Dean of student affairs serve in non-voting ex officio roles, and may not hold leadership positions within the Committee. The committee also includes non-voting student representatives [as provided in bylaw HS 4.1.1.6].

Justification:
The bylaws have been updated to clarify that voting rights on the committee are limited to those members elected by the College’s Senate-level faculty. The revisions formalize the longstanding practice that ex officio and student members do not hold voting rights. The Committee feels that their membership is to facilitate communication and cooperation, but that voting rights derive from election by the faculty.

Approvals:

Approved by the Executive Committee of the College of Humanities, Arts, and Social Sciences: February 24, 2016
Approved by the Faculty of Humanities, Arts, and Social Sciences: February 24, 2016
Approved by the Committee on Rules & Jurisdiction: April 20, 2016
Received by Executive Council: April 11, 2016