HIGHLANDER ORIENTATION
FRESHMAN GUIDE

2016

1223 Pierce Hall
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www.cnasstudent.ucr.edu
RECOMMENDED COURSE SELECTION GUIDE
July 2016 Version

You will be registering for Fall classes in 2 stages this summer: the first opportunity allows you to enroll in up to 17 units, and a second opportunity in September will allow you to increase to 20 units. To create your initial list of up to 17 units of courses for the Fall 2016 Quarter, follow these steps:

1) Determine your placement level in Mathematics and English (see notes on page 3). You should enroll in the appropriate courses as discussed below—one course in Mathematics, one course in English, and one Freshman Advising Seminar, if applicable. List them on your UCR Enrollment Worksheet that will be given to you separately. (Students planning to participate in a CNAS Freshman Scholars Learning Community will proceed as indicated on page 4);

2) Find the recommended courses for your major listed in the Freshman Course Planning Guide flowchart;

3) Add to your UCR Enrollment Worksheet one remaining course recommended for your major, to obtain a final list of three regular academic courses. Do not enroll in more than 17 units total for now (you can add additional courses in September);

4) Write down the name and number for each course section as well as the Call Number for your preferred lecture/discussion/lab section for each course. To find this information please use the online Schedule of Classes, which can be found at www.classes.ucr.edu .

5) Proceed with Growl registration as directed in the Schedule of Classes.

The average course load per quarter for UCR students who graduate in four years is 15 units. Many students enroll in 4 regular academic courses, most of which are 4 units each. Students who plan to graduate in four years should complete, on average, a minimum of 45 quarter units per academic year (three regular quarters plus summer session, if applicable) in order to meet the 180-unit minimum required for graduation. Students must be enrolled in a minimum of 12 units per quarter to be considered full-time students for financial aid purposes.

**CNAS College Majors should enroll in the following Fall courses:**

1. **One Course in Mathematics (As indicated by your MAE score, IB/AP Score, or transfer credit):**
   - Calculus: Math9A (First Quarter Calculus)
   - Precalculus: Math5 (Precalculus) or Math 6A (Intro to College Math for the Sciences).
   Students with AP/IB, or transfer credit for calculus may enroll in more advanced courses such as Math 9B, etc. Students who placed into the Intermediate Algebra Workshop (IAW) should take and complete ARC 035 at UCR this summer or no later than this Fall. You must pass an IAW course by the end of Fall quarter to remain in the College of Natural and Agricultural Sciences. Please note, you only have one chance to pass this class. Please meet with your academic advisor for more details. (Follow the placement based on your Mathematics Advisory Exam score. Your advisor will assist you in interpreting the score. You may select a higher level of calculus only if you have Advanced Placement (AP), International Baccalaureate (IB) or transferrable college credit for calculus. See notes on page 3).

2. **One Course in English Composition:**
   - English 1A, 1PA or an English Writing Course (ENGL 4) or a Basic Writing Course (BSWT 3) or as placed by AP/IB, or transferrable college credit. Students who have not met the University of California Entry Level Writing Requirement should take an English Writing or a Basic Writing course determined by placement from the University of California Analytical Writing Placement Exam. Students with AP or IB credit for English 1A and 1B will not enroll in English now. Students with credit for English 1A and 1B will enroll in English 1C during their Junior or Senior year.

3. **One Freshman Advising Seminar,** if applicable: For students who join the CNAS Freshman Scholars Learning Community, we will enroll you in the proper Freshman Advising Seminar, NASC 93 or BCH 95. Students majoring in Physics will also need a seminar in their major field—PHYS 39. All students who are
majoring in Biochemistry will enroll in BCH 95. Students who are not in a CNAS Freshman Scholars Learning Community and who are not Physics or Biochemistry majors may not be able to enroll in these courses.

Notes:
1. **Major Advice:** Before registration, you will receive specific advising on course enrollment from your major academic advisor or from undeclared academic advisors. You should follow your advisor’s specific advice. The information in this guide will provide general information about recommended Fall 2016 courses.

2. **English Requirement:** Students must take the University of California Analytical Writing Placement Exam (AWPE) for English placement. Students placed in an English Writing or Basic Writing course have not met the University of California Entry Level Writing Requirement (ELWR). Students placed in a Basic Writing course (BSWT3) must pass this course with an “S” in order to proceed to an English Writing course. Students placed in an English Writing course (ENGL 1PA or 4) must pass this course with a grade of “C” or better in order to meet the University of California Entry Level Writing Requirement. See the UCR Entry Level Writing Requirement (ELWR) website [http://elwr.ucr.edu](http://elwr.ucr.edu) for more information. Once students meet the University of California Entry Level Writing Requirement, they must then complete one full-year of English Composition or equivalent. **Students who do not meet the University of California Entry Level Writing Requirement by the end of their first year after becoming eligible to enroll in ENGL 1PA or 4 are not allowed to continue as students at UCR.**

   If you did not take the University of California Analytical Writing Placement Exam in May, you must take it as soon as possible during the make-up dates listed on the following web site: [http://elwr.ucr.edu/test_dates.html](http://elwr.ucr.edu/test_dates.html). Students who have credit for English1A (AP/IB or otherwise) are exempt. Students who met the University of California Entry Level Writing Requirement as a result of their placement from the May system-wide University of California Analytical Writing Placement Exam should enroll in English1A. If you did not meet this requirement, you should have received a letter from the Director of UCR’s University Writing Program Office telling you in which course to enroll. Usually, students may take the University of California Analytical Writing Placement Exam only once before their initial quarter at UCR. However, students who complete preparatory work in English Writing during the summer may be retested before Fall classes begin. For more information, see the ELWR website given above or the section entitled, Summer Options below. If you are not sure if you need to take the exam, or if you have any questions about your placement, please call Sheena Thrush at the UCR University Writing Program at (951) 827-7236 or via email to sheena.thrush@ucr.edu.

3. **Mathematics:** Most freshmen in the College of Natural and Agricultural Sciences (CNAS) take either Math 5, 6A or 9A in their first quarter at UCR. However, to be properly placed in the correct level class, students must have an appropriate score on the Mathematics Advisory Examination. All entering freshmen who have not completed a transferable mathematics course or who do not have AP or IB credit in mathematics must take this placement exam before orientation. If you have not yet taken this exam you will not be able to enroll in a Mathematics course or a Chemistry course until you have completed this requirement. You will only be allowed to enroll in a Mathematics course for which you have met the prerequisites.

   Students placed into MATH 6A or MATH 5 precalculus course may complete it during the summer at UCR. If you complete precalculus during the summer, you will need to modify the planning for your course schedule for fall (See also Summer Bridge Program at UCR below). **Students who have not successfully completed Math 5 or Math 6A by the end of their first year at UCR are not normally allowed to continue as students in CNAS.**

4. **Freshman Advising Seminars:** Freshman planning to participate in a CNAS Freshman Scholars Learning Community will enroll in an NASC 93 Freshman Advising Seminar for the Fall quarter. (Biochemistry majors will take BCH 95 instead of NASC 93.) Physics majors must enroll in PHYS 39. These seminars have no prerequisites and carry one or two units of academic credit that do not meet specific degree requirements, but they will contribute to the 180-unit minimum requirement for a degree. These seminars will be graded on a Satisfactory/No Credit (S/NC) basis, and enrollments will be limited. Enrollment in one of these seminars is strongly recommended for CNAS students as a way to learn from a member of the faculty about your intended major, academic values, ethics in research and education, the importance of faculty mentors, research opportunities, academic and career goals, and campus resources. This will be an excellent opportunity for you to take a small seminar class with a regular UCR faculty member. Students enrolling in a CNAS Freshman Scholars Learning Community will be enrolled in the applicable Freshman Advising Seminar.

5. **Chemistry:** The prerequisites for Chem 1A require that you satisfy at least one of the following requirements:
   (a) Eligible to enroll in Math 6B or 9A, or higher, (see **Mathematics** above), or
   (b) Have AP credit for Chemistry (score of 3 or better on the AP Chemistry Exam)
Students whose major requires chemistry should enroll in Chem 1A for Fall if they meet course prerequisites. If they do not meet the prerequisites they will need to wait to enroll in Chemistry until after the prerequisites are met.

6. **CNAS Freshman Scholars Learning Communities (FSLC):** A special UC Riverside program exclusively for first-year CNAS students interested in enhancing their academic performance and UCR experience. This program promotes student success by providing workshops and seminars to small groups of students (20-24) to ensure a successful freshman year in the sciences. The program is space-limited and applicants are considered in the order they apply without any bias or reservation.

   When you apply you will be enrolled according to Math placement and major, depending on available space. Participation in the year-long program requires students to enroll and participate in a Freshman Advising Seminar (NASC 93, PHYS 39, or BCH 95)\(^1\) during the Fall quarter and at least one Academic Resource Center Workshop (ARC 72/73)\(^2\) per quarter. These seminars and workshops have been statistically shown to enhance student GPA and four year graduation rates, as well as the overall UC Riverside experience.

   Students benefit from designed course tracks which are tailored to their major, and Math placement. Students also benefit from enrollment priority and guaranteed placement in these learning community courses. Upon completion of the program, students will have the opportunity to apply for a stipend-supported, research position with a UCR tenured faculty member during Summer 2017.

   Students who wish to apply for this exclusive program should listen closely to the information presented by Jennifer Coplea and Tracy Lamas immediately following the college academic advising session at this orientation. For more information, please email the coordinators at cnasscholars@ucr.edu

7. **Humanities/Social Science Breadth or General Education Requirement:** Any lower division course (numbered less than 100) in the field of Humanities or Social Science can be taken, but some courses count towards fulfilling general education or breadth requirements. Your advisor may suggest specific courses for your major. Many of our students take Anthropology 1, Comparative Literature 17A, Economics 2, or 3\(^3\), English 23A, History 10 or 20, Music 1, Philosophy 1 or 7, Political Science 10, or Sociology 1 as a start in fulfilling the required courses in breadth. See also the Breadth Requirements section later in this guide for a complete list of courses.

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\(^1\)Biochemistry majors will take BCH 95 instead of NASC 93. See page 3 for more information regarding the CNAS Freshmen Advising Seminars.

\(^2\)The CNAS Supplemental Instruction workshops that are part of the FSLC are coordinated by the ARC, led by successful, upper-division science majors, and are designed to promote a successful freshman transition by offering valuable, supplementary instruction in the respective CNAS Scholars math and science courses. The ARC typically offers workshops for the following classes: Math 5, Math 6A, Chemistry 1A, Biology 5A, etc.

\(^3\)Economics 2 and 3 are normally taken by students majoring in Pre-Business, Economics, or Business Economics.
All CNAS Students

### Life Science Majors:
- Biochemistry
- Biology
- CMDB
- Plant Biology
- Entomology
- Microbiology
- Neuroscience
- Undeclared Life Sciences

### Mathematical Sciences:
- Mathematics
- Mathematics for Teachers in Secondary Schools
- Statistics
- Undeclared Mathematical Sciences

### Physical Sciences:
- Chemistry
- Environmental Sciences
- Geology
- Geophysics
- Mathematics
- Physics
- Undeclared Physical Sciences

### All Life Science Majors:
1. Math*
2. English*
3. CNAS Advising Seminar**
4. Chemistry*
5. Humanities/Social Sciences Breadth

### Mathematics and Undeclared Mathematical Sciences:
1. Math*
2. English*
3. CNAS Advising Seminar**
4. Humanities/Social Sciences Breadth
5. Physics 40A or Chemistry 1A

### Statistics:
1. Math*
2. English*
3. CNAS Advising Seminar**
4. Humanities/Social Sciences Breadth
5. CS10/CS10V

### Chemistry and Undeclared Physical Sciences:
1. Math*
2. English*
3. CNAS Advising Seminar**
4. Chemistry*
5. Humanities/Social Sciences Breadth

### Geology, Geophysics, & Geoscience Education:
1. Math*
2. English*
3. CNAS Advising Seminar**
4. Chemistry*
5. Geosciences 1

### Environmental Sciences:
1. Math*
2. Environmental Sciences 1 or 6

### Physics:
1. Math*
2. English*
3. Physics 39
4. Physics 41A*

*According to Placement
** If Applicable
## College of Natural and Agricultural Sciences B.S. Breadth Requirements

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Grade Earned</th>
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<tbody>
<tr>
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<td>ENGL001A</td>
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<td>ENGL001C (or ENGL01SC)</td>
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### HUMANITIES (12 UNITS)

One (1) 4-unit course from the following:
- World History 10, 15, or 20

One (1) 4-unit course from the following:
- Fine Arts (Art; Art History; Creative Writing; Dance; Music; Theatre); Literature; Philosophy; Religious Studies

One (1) additional 4-unit course from the subjects listed above:

### SOCIAL SCIENCES (12 UNITS)

One (1) 4-unit course from the following:
- Economics, Political Science

One (1) 4-unit course from the following:
- Anthropology, Psychology, Sociology

One (1) additional 4-unit courses from the subjects listed above:

*Note: The Neuroscience major requires 4 additional units both in the Humanities and Social Sciences areas.

### ETHNIC STUDIES (4 UNITS)

One (1) 4-unit Ethnic Studies course

*Note: The course used to fulfill the Ethnic Studies requirement can simultaneously be included in either the Humanities or Social Sciences area, but not both.

### BIOLOGICAL SCIENCES (4 UNITS)

One (1) 4-unit course (with lab) from the following:
- Biochemistry, Biology, Entomology, Nematology, Botany and Plant Sciences, or Plant Pathology and Microbiology

### MATHEMATICS (4 UNITS)

One (1) 4-unit course from the following:
- Mathematics, Statistics, or Computer Science

### PHYSICAL SCIENCE (4 UNITS)

One (1) 4-unit course from the following:
- Chemistry, Physics, or Geology

Two (2) additional 4-unit courses from Biological or Physical Sciences

*Note: The Biological Science, Mathematics, Physical Science and additional science requirements will be primarily met by major requirements.

### Typical courses used to fulfill breadth requirements:

#### HUMANITIES:

Note: No more than two (2) courses in performance may be counted toward the Humanities requirement.

#### Fine Arts:

- Art (ART) 1, 2, 3, 4 (performance) 5, 6, 8, 9, 65, 66
- Art History (AHS) 7, 8, 10, 15, 17A, 17B, 21, 23, 27, 28
- Asian Studies (AST) 22, 23, 47
- Creative Writing (CRWT) 12, 40, 41, 43, 45, 46S, 56, 57A, 57B, 57C, 66
- Dance (DNCE) 5 (performance), 7, 14, 19
- Latin American Studies (LNST) 15, 16, 17, 28,
- Media & Cultural Studies (MCS) 1, 4, 5, 6, 9, 10, 15, 20, 21, 22, 24, 36, 38, 46, 47, 66
- Music (MUS) 1, 2, 3, 5, 6, 7, 8, 9, 10, 14, 15, 16, 17, 18, 20, 30A, 30B, 30C
- Theater (TFDG) 10 (performance), 20, 21, 22, 42, 50S, 66, 67

#### Literature:

- Asian Studies (AST) 62, 63
- English (ENGL) 12A, 12B, 12C, 12D, 12 E-Z thru 22, 23
- Classics (CLA) 10A, 10B, 10C, 40, 45, 50
- Comparative Literature (CPLT) 1 or 1W, 2, 12, 15, 17A, 17B, 17C, 21, 22A, 22B, 23, 24, 25, 27, 28, 62, 63

#### Philosophy:

- Philosophy (PHIL) 1, 2, 3, 3W, 3X, 4, 5, 6, 7, 8, 9, 9H, 30E-Z

#### Religious Studies:

- Religious Studies (RLST) 2, 3, 5, 7, 7W, 10, 12, 12W (same as ETST12, 12W), 14, 15, 44

#### Additional courses that can be used for the unspecified portion of the Humanities Requirement:

- Asian Studies (AST) 30, 40, 45E-Z, 65
- Classics (CLA) 20, 30
- Ethnic Studies (ETST) 1, 3, 4, 5, 7, 8, 12, 12W (same as RLST12, 12W), 14
- Foreign Language (For B.S. at level 3 or above; For B.A. at level 4 or above)
- Gender & Sexuality Studies (GSST) 10, 20
- Global Studies (GBST) 1
- History (HIST) 1, 4, 17A, 17B, 30, 35, 36, 40W, 44, 44W, 45E-Z, 51, 52, 60, 75, 75V, 99W
- Linguistics (LING) 20, 21
- Southeast Asian Studies (SEAS) 47, 62, 65, 63
- Urban Studies (URST) 10, 14, 21

#### SOCIAL SCIENCES:

- Economics (ECON) 2, 3, 6 (Same as ENSC 6)
- Political Science (POSC) 5, 5W, 7, 10, 15, 17, 20
- Anthropology (ANTH) 1, 1W, 2, 3, 5, 6, 10, 12, 20, 27
- Psychology (PSYC) 1, 2, 13, 49
- Sociology (SOC) 1, 1H, 2E-Z, 3, 3H, 4, 5, 10, 11, 15, 20, 28, 30, 31, 35, 36, 40, 41

*Additional courses that can be used for the unspecified portion of the Social Science Requirement:

- Ethnic Studies (ETST) 1, 2, 3, 5, 7, 12, 12W
- Environmental Sciences (ENSC) 6 (same as ECON6)
- Gender & Sexuality Studies (GSST) 1S, 11, 20, 21, 30
- Global Studies (GBST) 1, 2
- Public Policy (PBPL) 1
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<td>Fine Arts (Art; Art History; Creative Writing; Dance; Music; Theatre)</td>
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<td>Two (2) 4-unit courses from the following:</td>
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<tr>
<td>Literature; Philosophy; Religious Studies</td>
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<td>One (1) additional 4-unit course from the subjects listed above:</td>
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<td>SOCIAL SCIENCES (16 UNITS)</td>
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*Note: The course used to fulfill the Ethnic Studies requirement can simultaneously be included in either the Humanities or Social Sciences area, but not both.*

| FOREIGN LANGUAGE(S) PROFICIENCY | | | |
| Level 4 in one language or level 2 in two languages | | | |

| BIOLICAL SCIENCES (4 UNITS) | | | |
| One (1) 4-unit course (with lab) from the following: | | | |
| Biochemistry, Biology, Entomology, Nematology, Botany and Plant Sciences, or Plant Pathology and Microbiology | | | |
| MATHEMATICS (4 UNITS) | | | |
| One (1) 4-unit course from the following: | | | |
| Mathematics, Statistics, or Computer Science | | | |
| PHYSICAL SCIENCE (4 UNITS) | | | |
| One (1) 4-unit course from the following: | | | |
| Chemistry, Physics, or Geology | | | |
| Two (2) additional 4-unit courses from Biological or Physical Sciences: | | | |

*Note: The Biological Science, Mathematics, Physical Science and additional science requirements will be primarily met by major requirements.*

**Typical courses used to fulfill breadth requirements:**

**HUMANITIES:**

*Note: No more than two (2) courses in performance may be counted toward the Humanities requirement.*

**Fine Arts:**

- Art (ART) 1, 2, 3, 4 (performance) 5, 6, 8, 9, 65, 66
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- Asian Studies (AST) 22, 23, 47
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- Dance (DNCE) 5 (performance), 7, 14, 19
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- Media & Cultural Studies (MCS) 1, 4, 5, 6, 9, 10, 15, 20, 21, 22, 24, 36, 38, 47, 66
- Music (MUS) 1, 2, 3, 5, 6, 7, 8, 9, 10, 14, 15, 16, 17, 18, 20, 30A, 30B, 30C
- Theater (TFDG) 10 (performance), 20, 21, 22, 42, 50S, 66, 67

**Literature:**

- Asian Studies (AST) 62, 63
- English (ENGL) 12A, 12B, 12C, 12D, 12 E-Z thru 22, 23
- Classics (CLA) 10A, 10B, 10C, 40, 45, 50
- Comparative Literature (CPLT) 1 or 1W, 2, 12, 15, 17A, 17B, 17C, 21, 22A, 22B, 23, 24, 25, 27, 28, 62, 63

**Philosophy:**

- Philosophy (PHIL) 1, 2, 3, 3W, 3X, 4, 5, 6, 7, 8, 9, 9H, 30E-Z

**Religious Studies:**

- Religious Studies (RLST) 2, 3, 5, 7, 7W, 10, 12, 12W (same as ETST12, 12W), 14, 15, 44

**Additional courses that can be used for the unspecified portion of the Humanities Requirement:**

- Asian Studies (AST) 30, 40, 45E-Z, 65
- Classics (CLA) 20, 30
- Ethnic Studies (ETST) 1, 3, 4, 5, 7, 8, 12, 12W (same as RLST12, 12W), 14
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- Gender & Sexuality Studies (GSST) 10, 20,
- Global Studies (GBST) 1
- History (HIST) 1, 4, 17A, 17B, 30, 35, 36, 40W, 44, 44W, 45E-Z, 51, 52, 60, 75, 75V, 99W
- Linguistics (LING) 20, 21
- Southeast Asian Studies (SEAS) 47, 62, 65, 63
- Urban Studies (URST) 10, 14, 21

**SOCIAL SCIENCES:**

- Economics (ECON) 2, 3, 6 (Same as ENSC 6)
- Political Science (POSC) 5, 5W, 7, 10, 15, 17, 20
- Anthropology (ANTH) 1, 1W, 2, 3, 5, 6, 10, 12, 20, 27
- Psychology (PSYC) 1, 2, 13, 49
- Sociology (SOC) 1, 1H, 2E-Z, 3, 3H, 4, 5, 10, 15, 20, 28, 30, 31, 35, 36, 40, 41

**Additional courses that can be used for the unspecified portion of the Social Science Requirement:**

- Ethnic Studies (ETST) 1, 2, 3, 5, 7, 12, 12W
- Environmental Sciences (ENSC) 6 (same as ECON6)
- Gender & Sexuality Studies (GSST) 1S, 11, 20, 21, 30
- Global Studies (GBST) 1, 2
- Public Policy (PBPL) 1
Art History - Art History provides the framework for the critical study of a wide range of global visual culture from different periods of human history and in all media.

Anthropology - Anthropologists study the way diverse groups of people understand and live in various settings ranging from urban environments to rural villages all over the world.

Art - Courses are offered in the following curricular areas: photography, digital art, video, two- and three-dimensional media (painting, drawing, sculpture, installation), and critical theory.

Asian Studies - Asian Studies is designed to engage students with the histories, cultures, and peoples of South, Southeast, East, and Northeast Asia.

Biochemistry - Biochemistry is the study of the chemical processes in living organisms. It deals with the structure and function of cellular components, such as proteins, carbohydrates, lipids, nucleic acids, and other biomolecules.

Bioengineering - Bioengineering is rooted in physics, mathematics, chemistry, biology, and the life sciences. It is the application of a systematic, quantitative, and integrative way of thinking about and approaching the solutions of problems important to biology, health, and clinical practice.

Biology - Biology conducts research, teaching, and service in many areas of the life sciences, including animal behavior, behavioral endocrinology, bioinformatics, cell biology, conservation biology, developmental biology, ecology, evolution, molecular biology, physiology, population biology, and systematics.

Conservation Biology - Conservation biology is an interdisciplinary subject drawing on biological, physical and social sciences, economics, and the practice of natural-resource management.

Biological Sciences

Biomedical Sciences

Botany and Plant Sciences - The department has strong programs in basic plant cell biology, responses of plant to environmental stresses, plant ecology, genetics, genomics, and evolution.

Basic Writing - Designed for students who need instruction in English as a second language.

Business Administration - Business Administration provides courses in marketing, management science, production and operations management, corporate finance and investment, cost and management accounting, and organizational behavior introduce the student to the functional areas of business.

Cell Biology and Neuroscience - Cell Biology and Neuroscience uses multidisciplinary approaches to understanding basic cellular processes in various tissues, including the nervous system, as well as more integrative levels of analysis, including behavior.

Chemical Engineering - Chemical Engineering focuses on transforming raw materials into useful everyday products. Environmental Engineering deals with design and construction of processes and equipment intended to lessen the impact of man’s activities on the environment.

Chemistry - Chemistry is the science concerned with the composition, structure, and properties of matter, as well as the changes it undergoes during chemical reactions.

CHASS First Year - CHASS F1RST provides first-year students with courses designed to help with the transition to UCR, a major research university setting, which involves high academic standards and rigorous course work. The courses offer students the resources and tools necessary to excel in the first year and beyond.

Chinese - The study of Chinese culture, literature, or language.

Classical Studies - Classical Studies combines the study of Greek and/or Latin language and literature with courses which explore the historical, philosophical, political, and cultural developments of Greece and Rome and their impact on Western civilization.

Comparative Ancient Civilizations - Comparative Ancient Civilizations, students employ the methods of humanities and social sciences in the comparison study of several major cultures of the past.

Comparative Literature - Comparative Literature encourages study of interliterary relationships among various cultural traditions.

Creative Writing - Creative Writing offers a series of workshop courses in poetry, fiction, playwriting, screenwriting, and nonfiction as well as reading courses in poetry and fiction presented from a writer’s point of view.

Computer Science - Computer Science stresses the study of core and advanced computer science topics. It prepares students for a large variety of careers in computing, including software engineering, networks, databases, graphics, algorithms, security, system analysis, and embedded systems.

Dance - Dance focuses on choreography and cultivation of cultural and historical perspectives on dance. Movement practices, dance composition, performance, pedagogies, cultural and historical studies, and digital or screen studies courses are required.

Economics - Economics studies the production and distribution of goods and services, as well as the way in which productive activity helps shape social existence.

Education - Education encompasses both the teaching and learning of knowledge, proper conduct, and technical competency.

Electrical Engineering - Electrical Engineering studies the application of electricity, electronics and electromagnetism.

English - English courses develop the skill of writing effective prose, a skill essential to undergraduate work and to communication in society generally.

Engineering - Engineering is the discipline and profession of applying technical and scientific knowledge and utilizing natural laws and physical resources in order to design and implement materials, structures, machines, devices, systems, and processes that realize a desired objective and meet specified criteria.

Environmental Sciences - Environmental Sciences seeks to expand knowledge of the physical, chemical, biological and human components of the Earth System, through cutting edge research, rigorous student training and service to the community.

Entomology - Entomology is the scientific study of insects.

Ethnic Studies - Ethnic Studies is the systematic and comparative study of the social construction of race, racism, and racial or ethnic subordination, and the history, culture, and contemporary experiences of racial or ethnic groups who have not been fully incorporated into U.S. society.

French - The study of French culture, literature, or language.

Global Studies - Global Studies is a broad-based study of processes and problems that transcend national boundaries, preparing students to become global thinkers and problem solvers for the twenty-first century.

Gender and Sexuality Studies - Women’s Studies offers a coherent interdisciplinary curriculum with a major field of study in the areas of gender and sexuality.

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Geosciences - Geology studies the structure, composition, processes, and history of the earth. In particular, Geology stresses features of the Earth’s surface and interactions between its atmosphere, hydrosphere, biosphere, rocky crust, and interior.

German - The study of German culture, literature, or language.

Greek - The study of Greek culture, literature, or language.

History of the Americas - The study of the history of the United States of America.

History of Europe - The study of the history throughout Europe.

History - History stresses an understanding of changes that take place in society over time. It also provides a meaning to the past that has many implications for the future.
Honors Program - Honors courses are special seminars, projects, and other courses designed to introduce honors students to the rewards of scholarship and research.

Italian - The study of Italian culture, literature, or language.
Japanese - The study of Japanese culture, literature, or language.
Korean - The study of Korean culture, literature, or language.
Latin - The study of Latin culture, literature, or language.
Lesbian, Gay, Bisexual, Intersexual, and Transgender Studies - Lesbian, Gay, Bisexual, Intersexual, and Transgender Studies reflects current critical, theoretical, and methodological developments across several disciplines that focus on lesbian, gay, and bisexual issues.
Linguistics - Linguistics is the science of language. It seeks to discover the psychological and motor mechanisms of human speech, the similarities and differences among languages, how languages change, and the way in which language is acquired.
Learning Center - Study skills courses designed to engage students in the learning process.
Latin American Studies - Latin American Studies explores a wide range of subjects of particular interest—from religious cults in the Caribbean to indigenous video in the Andes or the dynamics of agrarian reform in rural Mexico.
Law and Society - Law and Society provides understanding in some complex relationships between social institutions.
Mathematics - Mathematics is the body of knowledge centered on such concepts as quantity, structure, space, and change, and also the academic discipline that studies them.
Microbiology - Microbiology is the study of microorganisms, which are unicellular or cell-cluster microscopic organisms.
Media & 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.
Music - Music courses offer knowledge and awareness of music as a worldwide cultural phenomenon and develops critical acumen through a manifold approach to sound in its many cultural settings.
Natural and Agricultural Sciences - Seminar courses designed to supplement the learning process.
Neuroscience - Neuroscience emphasizes the functioning of nervous systems at the molecular, cellular, system, behavioral, and cognitive levels. Some of the topics covered include neuroanatomy, neurophysiology, and neurochemistry in humans and other animals; neural mechanisms underlying sensory system function and perception; neural organization of behavior; development of the nervous system; and neural mechanisms of learning and memory.
Public Policy - Public policy analysis is the use of decision making theory and evidence-based methods to the study of substantive public policy problems.
Philosophy - Philosophy discusses important issues and arguments surrounding such subjects as morality, knowledge, the nature of the mind and of the physical world, science, and language.
Physics - Physics is the science of matter and its motion, as well as space and time. It uses concepts such as energy, force, mass, and charge. Physics is an experimental science, creating theories that are tested against observations.
Plant Pathology - Plant pathology is the scientific study of plant diseases caused by pathogens and environmental conditions.
Political Science - Political science aims to provide an understanding of basic political processes and institutions as these operate in different national and cultural contexts.
Psychology - Psychology is an academic and applied discipline involving the scientific study of mental processes and behavior. Psychologists study such phenomena as perception, cognition, emotion, personality, behavior, and interpersonal relationships.
Religious Studies - Religious Studies provides an opportunity for students to gain a broad, cross cultural perspective by studying the diverse religious traditions of the world.
Russian Studies - The study of Russian culture, literature, or language.
Southeast Asian Studies - Southeast Asian Studies is the study of the arts and cultural life in Southeast Asia and the diasporas.
Sociology - Sociology is the scientific study of human behavior, interaction and organization.
Spanish - The study of Spanish culture, literature, or language.
Statistics - Statistics presents a comprehensive spectrum of statistical and probability theory, in so far as such theory is necessary for the understanding and analysis of observational data.
Theatre - Theatre courses focus on three broad areas of theatre — its literature, history, and criticism; performance, design, direction, and technology; and the elements of production.
Urban Studies - Urban Studies is an adaptation of a well-developed interdisciplinary focus on urban concepts, issues, and problems in order to offer the chance for increased understanding of urban processes.
Vietnamese - The study of Vietnamese culture, literature, or language.
2016-2017
Undergraduate Advising
College of Natural and Agricultural Sciences

Professional Academic Advisors

If you would like to meet with your Academic Advisor, please visit us at:

**CNAS Undergraduate Academic Advising Center**
1223 Pierce Hall

Phone: (951) 827-7294 or (951) 827-3102  
Fax: (951) 827-2243  
[www.cnasstudent.ucr.edu](http://www.cnasstudent.ucr.edu)

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### Faculty Advisors

<table>
<thead>
<tr>
<th>MAJOR</th>
<th>FACULTY ADVISOR</th>
<th>CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemistry:</td>
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<tr>
<td>Undeclared CNAS:</td>
<td>Prof. Michael McKibben</td>
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</tr>
</tbody>
</table>
Mandatory CNAS Orientation
New 2016 Fall Quarter Students

Included in each Freshman Orientation session below is time for the freshmen to meet with their major academic advisor (or an undeclared advisor) for major-specific advising for approximately 1.5 hours.

<table>
<thead>
<tr>
<th>Major</th>
<th>Day, Date, Location</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Freshman Majors in Biochemistry</td>
<td>Monday, September 19th, HUMN 400</td>
<td>8:45 a.m. to 12:00 p.m</td>
</tr>
<tr>
<td>All Freshman Majors in Biology</td>
<td><strong>Monday, September 19th, HUMN 400</strong></td>
<td>1:15 p.m. to 4:30 p.m.</td>
</tr>
<tr>
<td>Last Names A-L only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Freshman Majors in Biology</td>
<td>Tuesday, September 20th, HUMN 400</td>
<td><strong>8:45 a.m. to 12:00 p.m</strong></td>
</tr>
<tr>
<td>Last Names M-Z only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Freshman Majors in Cell Molecular &amp; Developmental Biology; Entomology; Microbiology; Neuroscience; and Plant Biology</td>
<td>Tuesday, September 20th, HUMN 400</td>
<td>1:15 p.m. to 4:30 p.m.</td>
</tr>
<tr>
<td>All Freshman majors in all Undeclared Programs</td>
<td>Wednesday, September 21th, HUMN 400</td>
<td><strong>8:45 a.m. to 12:00 p.m</strong></td>
</tr>
<tr>
<td>All Freshmen Majors in Chemistry; Environmental Sciences; Geology; Geophysics; Mathematics; Mathematics for Secondary School Teachers; Physics; and Statistics</td>
<td>Wednesday, September 21th, HUMN 400</td>
<td>1:15 p.m. to 4:30 p.m.</td>
</tr>
</tbody>
</table>