UC Riverside 2022-2023 Majors and Curriculum Updates

<u>New Major</u>

School of Business

B.S. Actuarial Science

Application for junior transfer admissions to the Actuarial Science major will open in 2024-25 for admissions in fall 2025. The major requirements are provided in the Actuarial Science 2022/23 agreement.

The Marlan and Rosemary Bourns College of Engineering

<u>B.S. Robotics</u>

Application for junior transfer admissions to the Robotics major will open in 2023-24 for admissions in fall 2024. The major requirements are provided in the Robotics 2022/23 agreement.

Major Updates:

No change.

New Concentrations

No change.

Change to College/School

No change.

<u>Curriculum</u>

New Courses Added to Assist Database (FALL 2022)
AHS 025 – Art of Mesoamerica (4)
CHEM 02A –General Chemistry for Chemistry Majors (4)
CHEM 02LA – General Chemistry Lab for Chemistry Majors (1)
CHEM 02B – General Chemistry for Chemistry Majors (4)
CHEM 02LB – General Chemistry Lab for Chemistry Majors (1)
CHEM 02C – General Chemistry for Chemistry Majors (4)
CHEM 02LC – General Chemistry Lab for Chemistry Majors (1)
MATH 005A – The Principles of Calculus I (5) <i>Previously MATH 005</i>
MUS 044 – Intro to Songwriting (4)

New Courses Added to Assist Database (Winter 2023)

MATH 05B – The Principles of Calculus II (5)

New Courses Added to Assist Database (Spring 2023)

MATH 05C - The Principles of Calculus III (5)

<u>Removed</u> from Assist Database (Spring 2022)

TFDP 052 – Advance Public Speaking (4)

CS 009P – Intro to Programing (4) Replaced by CS 009A

Removed from Assist Database (FALL 2022)

MATH 08A – Intro to College Math for Sciences (5)

MATH 08B – Intro to College Math for Sciences (5)

New Courses Added (FALL 2022)

MATH 005A - The Principles of Calculus I (5)

5 Units, Lecture, 3 hours; additional lecture, 2 hours. Prerequisite(s): a score of 2 on the AP Calculus AB Exam or a sufficiently high score on the Mathematics Advisory Examination, as determined by the Mathematics Department. A study of inequalities, absolute value, functions, graphing, logarithms, trigonometry, roots of polynomials, counting, vectors, and other elementary concepts of mathematics. Some sections may be offered online. Credit is awarded for one of the following MATH 005A, MATH 004, MATH 006A, or MATH 006B. *Previously MATH 005*

MUS 044 - Intro to Songwriting (4)

4 Units, Lecture, 3 hours; activity, 3 hours. Prerequisite(s): none. Explores fundamentals of songwriting from writing lyrics to finding a structure. Focuses on analyzing several songs and techniques from various time periods and creating model exercises.

AHS 025 - Art of Mesoamerica (4)

4 Units, Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): None. Surveys the art and architecture of Mesoamerica from the Olmec to the fall of the Aztec capital in 1521. Focuses on empire and trade, religion and astronomy, writing systems and the history the book, and cross-cultural interaction through emphasizing the close analysis of artworks and historical texts.

CHEM 02A – Major General Chemistry (4)

4 Units, Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): concurrent enrollment in CHEM 02LA; MATH 006B with a grade of C- or better or MATH 009A with a grade of C- or better or MATH 009B with a grade of C- or better or MATH 009C with a grade of C- or better; or a score of 3, 4, or 5 on the College Board Advanced Placement Chemistry Examination or Advanced Placement Calculus Examination or a passing score on the California Chemistry Diagnostic Test or a score on the Mathematics Advisory Exam sufficient for placement in MATH 009A.; restricted to major(s) Chemistry. An introduction to the basic principles of chemistry including atomic structure, quantum mechanics, molecular bonding, and stoichiometry. Designed for Chemistry majors. Credit is awarded for one of the following CHEM 002A, CHEM 001A, or CHEM 01HA.

CHEM 02LA - Major General Chemistry Lab (1)

1 Unit, Laboratory, 3 hours. Prerequisite(s): concurrent enrollment in CHEM 002A; restricted to major(s) Chemistry. An introduction to laboratory principles and techniques related to lecture

topics in CHEM 002A. Credit is awarded for one of the following CHEM 02LA, CHEM 01LA, or CHEM 1HLA.

CHEM 02B – Major General Chemistry (4)

4 Units, Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): concurrent enrollment in CHEM 02LB; CHEM 002A with a grade of C- or better, CHEM 02LA with a grade of C- or better or CHEM 001A with a grade of C- or better, CHEM 01LA with a grade of C- or better or CHEM 01HA with a grade of C- or better, CHEM 01HLA with a grade of C- or better; restricted to major(s) Chemistry. An introduction to the basic principles of chemistry focusing on the properties of liquids and gases as well as thermodynamics and kinetics of chemical reactions. Credit is awarded for one of the following CHEM 002B, CHEM 001B, or CHEM 01HB.

CHEM 02LB – Major General Chemistry Lab (1)

1 Unit, Laboratory, 3 hours. Prerequisite(s): concurrent enrollment in CHEM 002B; CHEM 002A with a grade of C- or better, CHEM 02LA with a grade of C- or better or CHEM 001A with a grade of C- or better, CHEM 01LA with a grade of C- or better or CHEM 01HA with a grade of C- or better, CHEM 01HLA with a grade of C- or better or CHEM 002B with a grade of C- or better; restricted to major(s) Chemistry. An introduction to laboratory principles and techniques related to lecture topics in CHEM 002B. Designed for Chemistry Majors. Credit is awarded for one of the following CHEM 02LB, CHEM 01LB, or CHEM 1HLB.

CHEM 02C – Major General Chemistry (4)

4 Units, Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): concurrent enrollment in CHEM 02LC; CHEM 002B with a grade of C- or better, CHEM 02LB with a grade of C- or better or CHEM 001B with a grade of C- or better, CHEM 01LB with a grade of C- or better, CHEM 01HB with a grade of C- or better, CHEM 01HLB with a grade of C- or better; restricted to major(s) Chemistry. An introduction to the basic principles of chemistry focusing on chemical equilibrium, acid-base reactions, electrochemistry, and metal complexes. Designed for Chemistry majors. Credit is awarded for one of the following CHEM 002C, CHEM 001C, or CHEM 01HC.

CHEM 02LC - Major General Chemistry Lab (1)

1 Unit, Laboratory, 3 hours. Prerequisite(s): concurrent enrollment in CHEM 002C; CHEM 002B with a grade of C- or better, CHEM 02LB with a grade of C- or better or CHEM 001C with a grade of C- or better, CHEM 01LC with a grade of C- or better or CHEM 01HC with a grade of C- or better, CHEM 01HLC with a grade of C- or better or CHEM 002C with a grade of C- or better; restricted to major(s) Chemistry. An introduction to laboratory principles and techniques related to lecture topics in CHEM 002C. Designed for chemistry majors. Credit is awarded for one of the following CHEM 02LC, CHEM 01LC, or CHEM 1HLC.

New Courses (Winter 2023)

MATH 005B - The Principles of Calculus II (5)

5 Units, Lecture, 3 hours; discussion, 2 hours. Prerequisite(s): MATH 005A with a grade of C- or better. An introduction to application of finite approximation to study functions of one variable. Topics include sequences, series, differential calculus, and antiderivatives. Credit is awarded for one of the following MATH 005B, MATH 007A, MATH 009A, or MATH 09HA.

New Courses (Spring 2023)

MATH 005C - The Principles of Calculus III (5)

5 Units, Lecture, 3 hours; discussion, 2 hours. Prerequisite(s): MATH 005B with a grade of C- or better. Further topics on infinite series including test of convergence and Taylor's series. An

introduction of integral calculus of one-variable with applications. Credit is awarded for one of the following MATH 005C, MATH 007B, MATH 009B, MATH 009C, MATH 09HB, or MATH 09HC.