## LIBERAL ARTS (LA)

## About the program

The Associate in Liberal Arts is designed for students who want a broad knowledge of the liberal arts and sciences. This degree requires the successful completion of the general education pattern and an area of emphasis that meets the student's educational goals. The general education pattern provides a broad knowledge of the liberal arts and sciences and the emphasis area requires a student to focus on a specific academic area.

## Degrees/Certificates within this Program:

- Associate of Arts Degree, Liberal Arts: Agriculture
- Associate of Arts Degree, Liberal Arts: Behavioral \& Social Science
- Associate of Arts Degree, Liberal Arts: Business
- Associate of Arts Degree, Liberal Arts: Fine Arts
- Associate of Arts Degree, Liberal Arts: Humanities, Language \& Communication
- Associate of Arts Degree, Liberal Arts: Mathematics
- Associate of Arts Degree, Liberal Arts: Science
- Associate of Arts Degree, Liberal Arts: Science Exploration


## Similar Degrees/Certificates offered at CR:

- Associate in Arts in History for Transfer
- Associate in Arts in Psychology for Transfer
- Associate in Arts in Studio Arts for Transfer
- Associate in Science in Early Childhood Education for Transfer
- Associate in Science in Mathematics for Transfer
- Associate in Arts in Political Science for Transfer
- Associate in Science in Physics for Transfer


## For more information

- Counseling \& Advising, 707-476-4150


## Associate of Arts Degree, Liberal Arts: Science

|  | Units |
| :---: | :---: |
| General Education Requirements <br> Choose one of three options. See an advisor for more information |  |
| Option A CR General Ed. Requirements | 18.0 |
| Option B CSU General Ed. Requirements | 39.0 |
| Option C IGETC (UC General Ed.) Requirements | 37.0 |
| Program Requirements |  |
| Required Core: <br> (at least one class from two of the three core areas) | $\begin{aligned} & 8.0- \\ & 9.0 \end{aligned}$ |
| Core Area 1: |  |
| CHEM 1A General Chemistry [ $A, B, C]$ | 5.0 |
| CHEM 2 Introduction to Chemistry [ $A, B, C]$ | 5.0 |
| Core Area 2: |  |
| MATH 15 Introduction to Statistics [ $A, B, C]$ | 4.0 |
| MATH 25 College Trigonometry [ $A, B]$ | 4.0 |
| MATH 30 College Algebra [ $A, B, C]$ | 4.0 |
| MATH 50A Differential Calculus [ $A, B, C]$ | 4.0 |
| Core Area 3: |  |
| PHYS 2A General Physics I $A, B, C]$ | 4.0 |
| PHYS 4A Calculus-based Physics: Mechanics [ $A, B, C]$ | 4.0 |
| Additional Courses: <br> (complete 9-10 units from the list below) | $\begin{aligned} & 9.0- \\ & 10.0 \end{aligned}$ |
| AG 17 Intro to Soil Science [ $A, B]$ | 3.0 |
| BIOL 1 General Biology [ $A, B, C]$ | 4.0 |
| BIOL 3 Fundamental Cell Biology [ $A, B, C]$ | 4.0 |
| BIOL 4 General Zoology | 4.0 |
| BIOL 5 Intro to Botany [A, B, C] | 4.0 |
| BIOL 6 Human Anatomy | 4.0 |
| BIOL 7 Human Physiology | 4.0 |
| BIOL 15 Marine Biology [ $A, B, C]$ | 4.0 |
| CHEM 1A General Chemistry [ $A, B, C]$ | 5.0 |
| CHEM 1B General Chemistry | 5.0 |
| CHEM 2 Intro to Chemistry [ $A, B, C]$ | 4.0 |
| CHEM 3 Intro to Organic Chemistry | 4.0 |
| CHEM 8 Brief Organic Chemistry | 5.0 |
| FNR 1 Intro to Forestry and Natural Resources [A] | 3.0 |
| FNR 51 Dendrology:The Identification and Study of Woody Plants | 3.0 |
| GEOL 1 Physical Geology with Lab [ $A, B, C]$ | 4.0 |
| GEOL 2 Historical Geology [ $A, B, C]$ | 4.0 |
| MATH 15 Introduction to Statistics [ $A, B, C]$ | 4.0 |
| MATH 25 College Trigonometry [ $A, B]$ | 4.0 |
| MATH 30 College Algebra [ $A, B, C]$ | 4.0 |
| MATH 50A Differential Calculus [ $A, B, C]$ | 4.0 |
| MATH 50B Integral Calculus | 4.0 |
| OCEAN 10 Intro to Oceanography [ $A, B, C]$ | 3.0 |
| OCEAN 11 Lab in Oceanography [ $A, B, C]$ | 1.0 |
| PHYS 2A General Physics I [ $A, B, C]$ | 4.0 |
| PHYS 2B General Physics II | 4.0 |


| PHYS 4A Calculus-Based Physics: Mechanics [A, B, C] | 4.0 |
| :--- | :--- |
| PHYS 4B Calculus-Based Physics: Electricity and Magnetism | 4.0 |
| PHYS 4C Calculus-Based Physics: Heat, Optics, Waves, and Modern <br> Physics | 4.0 |
| Unrestricted Electives - as needed to complete 60 units total |  |
| Total Units | 60.0 |
| [A] - Course may be double-counted toward CR GE requirements <br> [B] - Course my be double-counted toward CSU-GE requirements <br> [C] - Course may be double counted toward IGETC (UC GE) requirements |  |

## About this Degree

The Liberal Arts degree with an emphasis in the sciences is designed for students wishing to pursue careers in a scientific field. Completion of curricula prepares students to major in their field of study when they transfer to a university. Science transfer students should also consider one of the Associate for Transfer degrees in a specific scientific area if it matches their area of interest. In all cases, students should seek advising before selecting specific courses in order to meet specific university requirements for their university major.

## Suggested Program Sequence

Most of these courses are taught every semester and many do not have prerequisites; therefore the sequence will vary with the needs of individual students. Please see an Academic Advisor to determine the appropriate course sequence for your academic goals.

## Program Learning Outcomes

- Appropriately apply methods of scientific inquiry to answer questions, and explain the limitations of this approach.
- Apply concepts of physics and chemistry to quantitatively explain observable phenomena.
- Collect and analyze data, evaluate sources of error, and synthesize this information into clear and organized reports.
- Use numerical, graphical, symbolic and verbal representation to solve problems and communicate with others.
- Follow instructions to perform laboratory techniques and procedures, and report associated outcomes.
- Provide specific examples of the classification of the natural world, drawn from both life and physical sciences.

