



# OFFICE OF INSTRUCTION

## Curriculum/Tenure Review/Faculty Evaluation & Catalog

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### Catalog Update for 2009-10 College Catalog

Last Updated: July 28, 2009

The following programs were identified as "pending state approval" in the print catalog. It has since been approved. The program details are outlined below and should be considered added to the 2009-10 College Catalog. This document will continue to be updated as additional programs that were "pending state approval" are approved.

#### Biological Sciences Major

CCSF's Biological Sciences major offers basic courses in chemistry and biology to serve students with diverse goals, including transfer to biology programs at U.C., C.S.U. or other four-year institutions. Biological Sciences majors will be able to take most or all of their lower division courses at CCSF before they transfer, but should see a counselor to confirm their program of study. Additional courses might be required to transfer to particular institutions. The Biological Sciences major is suitable for students planning to transfer into programs in the biological sciences, including general biology, cell or molecular biology, organism biology, marine biology, botany, zoology, ecology, evolution, genetics, anatomy, physiology, microbiology, and agricultural sciences. The major is also designed for students planning to transfer into a pre-medical, pre-veterinary, pre-dental, pharmacy, or chiropractic degree program.

Through the core forty-four units of the Biological Sciences major, students will gain the scientific knowledge necessary to investigate problems and ideas presented in upper division biology courses, as well as to critically evaluate scientific information. The laboratory work will train students to use current laboratory technologies, equipment and techniques to engage in the research process using scientific methods and to investigate research questions safely.

#### Required Coursework

<b>Courses .....</b>	<b>Units</b>
BIO 101A General Biology.....	5
BIO 101B General Biology.....	5
CHEM 101A General College Chemistry.....	5
CHEM 101B Introductory College Chemistry.....	5
CHEM 208A Organic Chemistry .....	4
CHEM 208B Organic Chemistry .....	4
MATH 110A Calculus I.....	4
MATH 110B Calculus II.....	4
PHYC 2A Introductory Physics .....	3
PHYC 2AL Introductory Physics Lab.....	1
PHYC 2B Introductory Physics .....	3
PHYC 2BL Introductory Physics Lab.....	1
<b>Total.....</b>	<b>44</b>

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### *Additional Course Requirements for Transfer Students*

The approval of a Biological Sciences major will effectively integrate the biology program and optimize articulation to 4-year institutions. Particular upper division institutions and programs might require additional lower-division course work. Therefore, it is strongly recommended that students contact the transfer counselor at CCSF and the appropriate department at the upper division institution in order to obtain the most accurate transfer information.

## **Biological Sciences Certificate of Achievement**

### **Required Coursework**

<b>Courses .....</b>	<b>Units</b>
BIO 101A General Biology.....	5
BIO 101B General Biology .....	5
CHEM 101A General College Chemistry.....	5
CHEM 101B Introductory College Chemistry.....	5
CHEM 208A Organic Chemistry .....	4
CHEM 208B Organic Chemistry .....	4
MATH 110A Calculus I.....	4
MATH 110B Calculus II.....	4
PHYC 2A Introductory Physics .....	3
PHYC 2AL Introductory Physics Lab.....	1
PHYC 2B Introductory Physics .....	3
PHYC 2BL Introductory Physics Lab.....	1
<b>Total.....</b>	<b>44</b>