Southwestern College (SWC) requests $19,980 to update the content of the course sequence for biology majors and to develop new laboratory exercises to complement the revised curriculum. The biology faculty members participating in the project conducted a thorough review of the biology majors program and concluded that the program needs to provide better preparation for transfer to senior institutions, offer laboratory assignments that allow investigation and data manipulation and that require critical thinking, provide students with the biotechnology experience in the laboratory that will prepare them for transfer, and/or employment in San Diego's growing biotechnology industry, and provide the computer experience in the laboratory needed for upper division coursework. The objectives of the project were designed to meet these needs, and include: (1) to redesign the biology majors curriculum to create an active-learning environment that requires critical thinking, and allows investigation using the scientific method; (2) to design laboratory exercises for the biology majors curriculum (including zoology, cellular processes, botany and chemistry courses) that accommodate the learning needs of underrepresented and educationally disadvantaged students; (3) to identify and acquire the specific instructional materials needed to implement the curriculum and lab exercises designed; (4) to write a curriculum guide that outlines the redesigned biology majors curriculum; (5) to develop Instructor, Student and Lab Tech guides that cover all components of each of the lab exercises developed; (6) to pilot test the revised curriculum and the draft lab exercises; and (7) to disseminate the curriculum outline and lab exercise guides to community colleges throughout California.