



## Job Description

**JOB TITLE:** Biology Instructor (Specialization: General Biology)

**LAST REVISED:** JANUARY 2011

### DEFINITION

Under the direction of an educational administrator, duties include lecture and laboratory instruction, evaluation of student performance, and curriculum development in General Biology. Additional teaching responsibilities may include lecture and laboratory courses in non-majors general biology and related disciplines. Additional responsibilities include participation in District governance and related professional activities. Assignment may include day, evening, and/or online teaching responsibilities within the District.

### EXAMPLES OF FUNCTIONS AND TASKS

**Lecture/ Laboratory/Field Preparation - ESSENTIAL:** Prepare lesson plans to be used in a lecture/lab and/or coordinate lectures with laboratory learning assignments; complete book order forms and provide the District printshop with master copies of syllabi for printing; place appropriate reference items on reserve in the library; review and select and/or prepare multi-media materials for enhancement of classroom/laboratory instructional delivery; attend conferences to increase knowledge of subject matter and teaching methods and techniques; review and select learning resources such as textbooks, internet sites, periodicals determined to be the most appropriate; **PERIPHERAL:** Review and evaluate new textbooks for content, readability, and cost effectiveness; select textbooks and/or laboratory manuals determined to be the most useful and appropriate; read current literature (normally several sources- books, newspapers, periodicals, and other printed or non-printed materials) to stay current in the field of Biological Sciences; prepare handouts and other materials (including preserved or live specimens) for classroom/ laboratory use; familiarize self with operation of all equipment currently available for use and which is appropriate for the subject area.

**Lecture/ Laboratory/ Field Presentation - ESSENTIAL:** Introduce and present lecture/laboratory information and concepts in a clear and logical manner; use analogies, examples, and/or other techniques to convey important concepts; provide clear instructional objectives and outlines to direct student learning; enhance presentations with visual aids and/or demonstrations and/or examples, as available; answer student questions; encourage student participation and involvement in classroom discussions; monitor student activity and take steps to prevent and/or control unacceptable behavior; design and develop new laboratory exercises to demonstrate major concepts; promote use of the scientific method in all laboratory protocols; help students to set up, operate, and troubleshoot equipment problems; provide equal opportunity for student participation; remain present in laboratory to supervise activities; demonstrate safe laboratory techniques and operation of equipment; handle fragile equipment, as necessary.

**Student Performance Evaluation - ESSENTIAL:** Collaboratively develop lecture/laboratory quizzes and exams which fairly evaluate student progress in acquiring knowledge of subject material; monitor student activity during examinations/quizzes; read and evaluate student responses on examinations/quizzes and mark and grade papers accordingly; assign, read, and evaluate homework assignments/projects/research papers to promote learning; tabulate scores and assign official grades; advise students on academic matters regarding their performance; refer students to appropriate student services (e.g., Disabled Student Services, Extended Opportunity Programs and Services, etc.) for specialized testing and/or tutoring; input student scores and make data available to students.

**Curriculum Development - ESSENTIAL:** Review and evaluate curriculum to include student learning outcomes and program outcomes to meet student and state interests and needs within the parameters of Divisional/Departmental budget constraints and availability of equipment and materials; coordinate with full-time and part-time instructors to enhance consistency of lecture/laboratory content; evaluate and/or revise course descriptions to fit curriculum designs; present proposals for curriculum changes to the Curriculum Committee and/or other appropriate shared governance bodies; research, evaluate, and incorporate current technology into



## Job Description

curriculum; design degree and certificate programs. **PERIPHERAL:** Review curriculum for concordance with changes in laws, regulations, and standards.

**Shared Governance Participation - ESSENTIAL:** Attend and participate in departmental meetings and activities; respond in writing to requests for information (e.g., employment process position questionnaires, unit planning guides, etc.); participate in articulation/curriculum development, investigation and costing of departmental equipment needs, and selection of textbooks; represent department by serving on campus-wide committees.

**PERIPHERAL:** Attend and participate in divisional and/or building meetings and activities, as well as those organized by the Faculty Senate and the Staff Development Committee; serve on employee selection committees, as requested; serve as a functional member of one or more committees and/or task forces; attend Board of Trustees and/or Strategic Council meetings, as necessary; read and respond to information polls distributed by the Faculty Senate.

**Ancillary Student Services - ESSENTIAL:** Hold regular office hours; provide advice to students regarding academic performance; provide students and peers with a positive role model in terms of character and citizenship; participate in graduation and outstanding student award ceremonies. **PERIPHERAL:** Provide students with letters of recommendation, as requested; hold review sessions of classroom/laboratory material, as necessary; advise and encourage students; participate in museum program series and/or other activities and provide opportunities for participation in field trips and/or club activities.

### MINIMUM QUALIFICATIONS

#### Degrees/Experience:

**ESSENTIAL:** Master's degree in any biological science **OR** Bachelor's degree in any Biological Science **AND** Master's degree in biochemistry, biophysics, marine science **OR** the equivalent.

#### Licenses:

**ESSENTIAL:** Incumbent must possess or be able to obtain prior to employment in this position a valid California Class C or higher Driver's License in order to accomplish official travel in District and/or privately owned vehicles.

#### Knowledge of:

**ESSENTIAL:** Major concepts related to Biological Sciences; laboratory preparation procedures; operation of laboratory equipment utilized to conduct appropriate laboratory activities, use of computer technological enhancements; scientific methodology; teaching practices, methods, and techniques; laboratory equipment calibration procedures; laboratory hazards and appropriate safety protocol. **PERIPHERAL:** Procedures utilized to working in sensitive environments and familiarity with appropriate environmental regulations.

#### Ability to:

**ESSENTIAL:** Lecture in front of large groups of students; explain appropriate details and their relationships in a logical, sequential fashion; prepare laboratory equipment, materials, and charts; provide students with a "hands on" learning experience in a laboratory setting and in field studies programs; form and maintain effective working relationships with peers, staff, and students; work independently to solve problems; **PERIPHERAL:** Effectively use computer technology for classroom enhancement; recognize variation in student backgrounds, abilities, and learning styles; be patient with students; maintain integrity, honesty, reliability, and cooperation.

#### Physical Suitability Requirements:

**ESSENTIAL:** Incumbent must be able to function indoors in a classroom/laboratory environment and outdoors in a field environment engaged in work of primarily a moderately active to active nature and to do the following, with or without reasonable accommodation: Almost Constantly: Stand, sit, walk and turn to deliver lectures, other instruction, or instructional materials; utilize speech and hearing for ordinary and telephonic conversation with students and others and to respond to questions; speak in an understandable voice; utilize vision (near) to read written materials and computer screens and operate equipment; maintain cardiovascular fitness in order to



## Job Description

engage in field activities involving physical effort such as hiking, climbing, wading, digging, etc. Frequently: Reach (from overhead, level, and low) to operate equipment and prepare laboratory materials; lift (from overhead, waist, and floor levels, 50 lbs. max.), carry (50 lbs. max.), push, pull, stoop, squat, and bend to move and operate equipment and prepare laboratory materials; utilize manual and finger dexterity to operate microcomputers other office and laboratory equipment, and to prepare laboratory materials; wear appropriate personal protective equipment to work in areas subject to exposure to risk of shock from electrical equipment, exposure to dark conditions, and exposure to dust, mists, fumes, noise, chemicals, caustics, extremes of heat or cold, allergenic plants/materials, and insect stings. Occasionally: Utilize vision (far) and manual and finger dexterity to operate a motor vehicle while engaged in official travel and field activities; hike and climb to heights above ground level while engaged in field activities.

**Faculty Salary Schedule, subject to placement at hire.**

**SCFA bargaining unit status.**

**FLSA exempt.**

**Class III, Bloodborne Pathogens Exposure Control Program.**