CLASS TITLE: LABORATORY TEACHING ASSISTANT (OPTION CLASS)

BASIC FUNCTION:

Under the direction of an assigned supervisor, present materials, prepare and deliver oral presentations, and perform demonstrations to reinforce classroom instruction in a laboratory environment; provide laboratory instruction to enhance student skills and knowledge in a designated subject area.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:
Present materials, prepare and deliver oral presentations, and perform demonstrations to reinforce classroom instruction in a designated subject area; assure laboratory functions and related learning activities comply with established curriculum standards and requirements.

Provide laboratory instruction to enhance student skills and knowledge; develop, implement and oversee student drills, exercises, practices and assignments; assist students in completing assignments and projects; explain various principles, practices, procedures and techniques.

Collaborate with the instructor in the preparation of lab lesson plans; assist in the preparation and maintenance of instructional materials for use in lab activities; confer with the instructor concerning lesson plans and instructional materials to meet student needs; assist in developing lab schedules.

Distribute and collect student assignments; develop, prepare and administer tests as assigned; grade tests and assignments and assess student performance and progress as required; record grades and maintain student records and files; advise students concerning lab performance and progress.

Set up, operate and demonstrate the use of various instruments, tools and equipment related to assigned subject area; utilize projectors and a computer and assigned software as required; maintain lab and related equipment; arrange for major maintenance and repairs as needed.

Provide individualized and small group instruction and tutoring; lead laboratory discussions; assure learning activities adapt with the needs of individual students.

Train and provide work direction and guidance to student workers and hourly employees as assigned; participate in related recruitment activities as required.

Communicate with students, College personnel and outside agencies to exchange information and resolve issues or concerns.

Prepare and maintain various records, reports and files related to assigned activities; prepare and distribute correspondence and informational materials as needed.

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Monitor inventory levels of designated supplies; estimate and order appropriate amounts of food supplies; receive, store and maintain inventory of supplies; conduct regular and periodic inventories; prepare requisitions and maintain related records as assigned.

Attend and participate in various meetings and conferences as assigned; assist in coordinating, attend and participate in various special events related to assigned subject area as required.

Assure the health and safety of students by following health and safety practices and procedures; maintain learning environment in a safe, orderly and clean manner.

Collect and account for fees and monies related to assigned subject area and related services and activities as assigned by the position.

Drive a vehicle to conduct work as assigned by the position.

OTHER DUTIES:
Perform related duties as assigned.

ART OPTION:
Coordinate activities to meet laboratory and related instructional needs in subject areas such as general art, art gallery, printmaking, ceramics, glazing and sculpture; apply a variety of complex artistic principles, techniques, practices and disciplines in the development, analysis and adjustment of art laboratory demonstrations, exercises and instructional materials to meet student needs.

Prepare, set up, calibrate, maintain and repair a variety of specialized equipment related to art such as electric pottery, fork lifts, welders, cutters, saws, metal breaks, printing presses, drills, drill presses, grinders, nailers, planers, routers, welders, sanders, furnaces, mixers, mills, spray booths, scales, cameras, lathes, computerized operating mechanisms, metal foundry and gas, fire and electric kilns; install, assemble and construct art equipment and systems as needed.

Assemble, measure, mix and distribute various vapors, mists, sprays, molten metal, glazes, ceramic stains, acids, paints, oils and other assigned artistic supplies used in demonstrations, exercises and laboratory activities; apply paint to various art facilities and equipment as required; design and construct laboratory materials according to instructor specifications as requested.

Maintain art facilities such as classrooms, art history slide room, art offices, conference room, wood working shop, printmaking facility, painting room, drawing room, color and design room, metal working area, bronze foundry, stone and wood carving space, photographic slide copy room and art gallery in proper working condition; organize rooms according to faculty specifications; prepare and set up gallery for special events as directed; set up and maintain display cases.

Oversee and participate in the storage, use and disposal of hazardous materials and art supplies in compliance with established laws and regulations as directed; prepare related records and reports; develop, maintain and utilize hazardous material methods and procedures for safe handling, storage,

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labeling and disposal.

Assist students with kiln firing, glaze formulation, application techniques, hand building and wheel throwing; answer related student questions.

Maintain current knowledge of safety and hazardous materials issues and regulations.

**AUTOMOTIVE TECHNOLOGY OPTION:**

Provide a variety of learning activities in the Automotive Technology lab, reinforcing instruction concerning the inspection, troubleshooting, diagnosis, maintenance and repair of a variety of vehicles and related systems, equipment and components.

Oversee and participate in a variety of lab maintenance and repair projects; assign student projects as directed; review completed projects for accuracy and completeness.

Assist students with adjusting, overhauling, servicing and rebuilding automotive systems and equipment; assure proper installation and replacement of vehicle parts and components as needed.

Plan, organize and lay out lab tasks and projects; interpret and explain diagrams, sketches, schematics, technical manuals and specifications; estimate labor, material and equipment needed for lab projects.

**CHANNELS PRODUCTION OPTION:**

Provide a variety of learning activities in The Channels.org newsroom, reinforcing instruction and practices for student application of journalistic theory and content; oversee and lead students in the creation of online journalistic content with accompanying hypertext, interactive graphics, images, video and sound.

Serve as a technical resource to students concerning the operation of specialized computer software and peripheral equipment used in publishing content for the Internet and viewing on mobile devices; assist students in the design, development, analysis and maintenance The Channels.org news website.

Protect the First Amendment rights of collegiate journalists to control the content of their student publication, and advocate campus-wide for the protection of these rights.

Oversee and participate in securing and placing advertisements in the student news website; assure proper billing of related clients; maintain related records.

Monitor network system to assure smooth and efficient computer operations; investigate, troubleshoot, diagnose and resolve minor system malfunctions as needed; arrange for major maintenance and repairs as needed.

Serve as a liaison between students, faculty, staff, vendors and various outside agencies concerning
the publication of the student news website.

COMMUNICATIONS OPTION:

Provide a variety of learning activities in the Communications lab, reinforcing instruction in public relations, speech, television, radio, press release composition and other related subject matters.

Coordinate communications between students, staff and faculty to assure smooth and efficient Communications Department instructional activities.

Prepare a variety of materials for instructors, such as lab summaries, schedules, rosters, labels, forms, binders and logs.

COMPUTER APPLICATIONS (COMAP) OPTION:

Provide a variety of learning activities in the COMAP lab, reinforcing instruction in typing, software applications and related techniques, practices and procedures.

Participate in COMAP marketing activities including the preparation and dissemination of class flyers, newsletters and other informational materials; arrange for advertisements as directed; distribute lists of open classes to counselors and other College personnel.

Operate, adjust, maintain and assure proper functioning of lab computers and peripheral equipment; troubleshoot and perform minor maintenance and repairs on computers and peripheral equipment.

COMPUTER SCIENCE OPTION:

Provide a variety of learning activities in a computer science lab, reinforcing instruction related to the programming, design, coding, development and testing of computer programs and applications; assist students with determining solutions to computer programming projects.

Explain and enhance student understanding of various computer languages such as BASIC, Fortran, HTML, Web Server, Java, Pascal, C, Unix, C++ and Assembler.

Perform a variety of technical duties in the installation, operation, configuration, set up, modification and maintenance of computer hardware, software, peripherals, networks and systems to assure smooth and efficient operations of computer lab equipment for use by computer science students.

Investigate, troubleshoot, diagnose and repair hardware, software, peripheral and network malfunctions; replace computer components as needed; install, update and utilize a variety of specialized software; establish and maintain student accounts.

CULINARY ARTS OPTION:

Provide a variety of learning activities in a culinary lab, reinforcing instruction in areas such as pastry/baking, cooking, catering, kitchen management and gourmet; oversee and participate in

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cleaning, customer service, catering, food preparation and cashiering functions as assigned.

Oversee students and participate in the preparation of food and beverages for serving in designated food service facilities according to established recipes and portion control standards; assign student duties as directed; assist with menu planning and implementation as directed.

Participate and assist students in measuring and weighing ingredients and calculating, adjusting and extending recipes; estimate needed quantities of food and supplies; participate and assist students in assembling, mixing and preparing a variety of ingredients and supplies.

Oversee and participate in maintaining assigned food service facilities, utensils and equipment in a clean and sanitary condition.

**DRAFTING/CAD OPTION:**

Provide a variety of learning activities in the Drafting and CAD labs reinforcing instruction in areas such as basic, architectural, and landscape drafting as well as computer-assisted drafting.

Explain and enhance student understanding of various computer-assisted drafting programs such as AutoCAD and Revit.

Maintain drafting and CAD labs in proper working condition; operate, adjust, maintain and assure proper functioning of drafting tables, drafting machines, computers, plotters, printers, and blue printers; troubleshoot and perform minor maintenance and repairs on equipment, computers, and peripherals.

Assist faculty in preparing a variety of materials for student learning activities, such as model making parts and plots.

**EARLY CHILDHOOD EDUCATION OPTION:**

Provide a variety of learning activities in the Early Childhood Education lab, reinforcing instruction concerning techniques, practices, procedures and strategies related to the care, supervision and instruction of children from birth to eight years old.

Visit various community early childhood education sites to observe and provide feedback and input concerning student progress; meet and confer with student teachers concerning early childhood education functions and issues.

Provide training and guidance to student teachers concerning lesson plans, instructional materials and the development and implementation of learning activities for children from birth to eight years old.

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LEARNING RESOURCE OPTION:

Provide technical training and assistance to students and faculty concerning the operation of Learning Resource Center (LRC) lab computers, software applications and peripherals; conduct LRC lab orientations.

Maintain LRC lab computers in proper working condition; investigate, troubleshoot, diagnose and resolve hardware, software, peripheral and network malfunctions; install software and hardware and observe elements of LRC computers for evidence of incorrect performance; back up system files.

Prepare and organize computer equipment for student and staff use according to established schedules and lab activities.

Update and maintain LRC website content as required.

LIFE FITNESS CENTER OPTION:

Provide a variety of learning activities in the Life Fitness Center reinforcing instruction in the development of motor skills designed for the improvement of aerobic fitness, muscular strength/endurance, and flexibility.

Serve as a technical resource to students in the use of online course management tools, and mobile fitness applications, including video analysis of movement skills used for class assignments.

Update and maintain the Life Fitness Center website content, outgoing laboratory voicemail messages, and online course management tools for courses utilizing the Life Fitness Center; maintain student attendance database to be consistent with departmental objectives, including data entry.

Perform demonstrations of physical fitness laboratory assessments to reinforce classroom instruction in health and fitness concepts.

Prepare and/or proofread programs brochures and flyers for faculty as requested.

Consistent with federal and state law, communicate with students, college personnel, and outside agencies to exchange information regarding the safe and effective application of physical activities for persons with special needs.

MATH OPTION:

Provide technical training and assistance to students and faculty concerning the operation of Mathematics lab computers, software applications and peripherals; conduct math lab orientations.

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Explain and enhance student understanding of various mathematics programs such as Maple, SPSS, MyMathLab and ALEKS. Demonstrate and assist in troubleshooting and installation of mathematics software.

Maintain math lab computers in proper working condition; investigate, troubleshoot, diagnose and resolve hardware, software, peripheral and network malfunctions; install software and hardware and observe elements of mathematics computers for evidence of incorrect performance; back-up system files.

Prepare and organize computer equipment for student and staff use according to established schedules and lab activities. Prepare, set up, operate and maintain a variety of specialized equipment related to math department activities including calculators, furniture and projectors.

Update and maintain math lab website content as required.

**MUSIC OPTION:**

Coordinate activities to meet classroom and related instructional needs in music; check electronics, instruments, tape recorders, library books, scores and other music equipment and materials in and out to students; apply and explain piano, vocal and a variety of other complex music principles, theories, techniques, practices and procedures to students; maintain record library and catalog new acquisitions.

Provide a variety of specialized support services for Music department office functions and instructional activities; provide musical accompaniment for vocal and instrumental instructional activities as directed; process and coordinate response to requests from students, personnel and the public; respond to inquiries and provide detailed and technical information concerning Music department operations, events, policies and procedures.

Prepare, set up, operate, calibrate, maintain and repair a variety of specialized equipment related to music department activities including pianos, furniture, projectors, amps, VCRs, CD players and tape players; utilize meters, signal generators, soldering irons and other hand tools for equipment repairs.

Maintain classrooms, labs, practice rooms and other music facilities in proper working condition; coordinate and maintain room, instructor, concert, event and other facility schedules; prepare, set up, attend and provide assistance at student recitals, auditions and other special events; move and arrange furniture, instruments and equipment in support of music events and activities; produce, duplicate and distribute concert recordings, and tapes and CD’s for instructional activities.

Compile, maintain and report on student and faculty attendance data; prepare, post and distribute informational materials concerning music events and activities; maintain bulletin boards; maintain press lists and distribute press releases; prepare and distribute bulk mailings for the department and maintain mailing lists.

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Receive, prepare and distribute music correspondence related to assigned activities; proofread programs, brochures and flyers for faculty as requested; develop and maintain the policy and procedure manual for the Music department office.

**KNOWLEDGE AND ABILITIES:**

**KNOWLEDGE OF:**
- Terminology, techniques, equipment, materials, principles, theories, practices and procedures related to assigned subject area.
- Student guidance principles and practices.
- Instructional methods and techniques.
- General principles, practices, procedures and techniques used in lesson plan development and laboratory instruction.
- Basic practices, methods and procedures involved in the preparation of instructional materials.
- Set up, operation and demonstration of various instruments, tools and equipment related to assigned subject area.
- General curriculum standards, requirements, interpretation and application in assigned subject area.
- Diverse academic, socioeconomic, cultural and ethnic backgrounds of college students.
- Oral and written communication skills.
- Policies and objectives of assigned programs and activities.
- Interpersonal skills using tact, patience and courtesy.
- Record-keeping and report preparation techniques.
- Public speaking techniques.

**ABILITY TO:**
- Present materials, prepare and deliver oral presentations, and perform demonstrations to reinforce classroom instruction in a designated subject area.
- Provide laboratory instruction to enhance student skills and knowledge.
- Develop, implement and oversee student drills, exercises, practices and assignments.
- Interpret, apply and explain various principles, practices, procedures and techniques.
- Assist in the preparation and maintenance of instructional materials for use in lab activities.
- Grade tests and assignments and assess student performance and progress as required.
- Set up, operate and demonstrate the use of various instruments, tools and equipment related to assigned subject area.
- Oversee and assist students in completing assignments and projects.
- Develop, prepare and administer tests as assigned.
- Plan and organize work.
- Meet schedules and time lines.
- Work independently with little direction.
- Maintain records and prepare reports.
- Communicate effectively both orally and in writing.
- Establish and maintain cooperative and effective relationships with students.

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EDUCATION AND PAID EXPERIENCE:
Any combination equivalent to: bachelor’s degree in area related to assigned subject matter.

LICENSES AND OTHER REQUIREMENTS:
Some positions in this classification may require a valid California driver’s license.

WORKING CONDITIONS:

ENVIRONMENT:
Instructional laboratory environment.

PHYSICAL DEMANDS:
Dexterity of hands and fingers to operate a variety of equipment.
Sitting or standing for extended periods of time.
Bending at the waist, kneeling or crouching to assist students.
Reaching overhead, above the shoulders and horizontally.
Seeing to read a variety of materials and monitor student activities.
Hearing and speaking to exchange information.
Lifting, carrying, pushing or pulling moderately heavy objects as assigned by the position.

HAZARDS:
Some incumbents may experience exposure to fumes, potentially hazardous chemicals or body fluids.