



Cañada College ♦ College of San Mateo ♦ Skyline College

## GENERIC POSITION DESCRIPTION

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### PHYSICS INSTRUCTOR

A Faculty Position  
Salary Schedule 80

Placement on the regular faculty salary schedule is based upon education and credited experience. Initial placement with a Master's degree can range from \$62,292 up to \$78,168 per year; and a Ph.D. can range from \$71,376 to \$83,436 per year. Additionally, academic employees can be offered opportunities for other paid assignments and paid professional growth incentives. Benefits include a choice of medical plans, dental coverage, vision care, sick leave, salary continuance insurance, and an optional tax-deferred flexible benefit plan. Coverage is offered for employees and all eligible dependents. Academic employees participate in the State Teachers' Retirement System, a defined-benefit retirement plan through the State of California. Employees may also be eligible for various first-time homebuyer programs.

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#### A. General Statement

The San Mateo County Community College District seeks employees who value working in a collegial, collaborative environment, guided by a commitment to helping all students achieve success. All departments strongly encourage collaboration across disciplines to create integrated, interdisciplinary learning experiences. SMCCCD faculty members are expected to be knowledgeable about and willing to use, different learning and teaching methods as appropriate to the discipline.

#### B. Duties & Responsibilities

The duties below are representative of the duties of the classification and are not intended to cover all of the duties performed by the incumbent(s) of any particular position. The omission of specific statements of duties does not exclude them from the position if the scope of work is similar, related, or a logical assignment to this classification.

1. Teach all levels of courses in Physics from conceptual to calculus based, including a combination of lecture and laboratory sections
2. Assist in curriculum assessment and revisions and new course development, including student learning outcomes and assessment processes
3. Collaborate with other instructors to enhance instruction, curriculum, and student success.
4. Participate in the development and/or selection of course materials, equipment and technology that will enhance offerings of the departments.
5. Maintain expertise in current teaching methodologies, technologies, and curricula and develop new instructional materials and techniques to meet the changing needs of students
6. Consult with students during regularly scheduled office hours.
7. Serve as a member of division and college committees.

8. Perform other duties as required by contract, collective bargaining agreement, and general institutional needs in a timely manner.

The college offers day and evening classes, and faculty may be required to teach a class in the evening.

### C. Requirements

Possession of a Master's degree in Physics, Astronomy or Astrophysics OR a Bachelor's degree in Physics or Astronomy AND a Master's degree in Engineering, Mathematics, Meteorology, or Geophysics OR the equivalent (see information below).

Demonstrated cultural competence, sensitivity to and understanding of the diverse academic, socioeconomic and ethnic backgrounds of community college students, faculty, and staff.

For persons applying for this position based on Equivalence, please answer the supplemental question on the online application choosing one or more of the following:

#### Degree Equivalence

The applicant possesses a degree(s) with similar content to those listed for the relevant discipline. The name of the degree is close to that specified on the Disciplines List but the degree either has a different title or area of expertise or the coursework is slightly different.

#### Academic Background Equivalence

Related to disciplines in which a Master's degree is not generally expected or available. The applicant must have completed at least 24 semester units of coursework in the academic field and must possess at least the equivalent level of achievement and the equivalent in breadth, depth of understanding, and rigor in each of the following:

- i. a broad cultural education usually met by the general education requirements for any Bachelor's or Associate's degree, and
- ii. a detailed study of the discipline in breadth, depth, and rigor, usually met by course work required for the degree major.

#### Professional Achievement Equivalence

The applicant must have completed the General Education requirements for that degree and show evidence of outstanding professional achievement and/or substantial training in the requested field. The applicant must submit substantial evidence, which demonstrates that his/her preparation, teaching experience, work experience, and ability are equivalent to those expected from a person who meets the minimum qualifications.

### D. Knowledge, Skills & Abilities

#### *Subject matter preparation:*

Preference will be given to candidates who:

1. Possess a professional level of competence in physics with demonstrated familiarity with the sub-disciplines of physics
2. Have demonstrated ability to teach conceptual physics, astronomy, and/or engineering physics courses
3. Have recent successful experience in teaching or preparation to teach in a community college

#### *Evidence of outstanding ability as a teacher:*

Appropriate evidence includes, but is not limited to, experience, training, or achievement that the candidate has:

4. Commitment to staying abreast with the latest developments in physics
5. The ability to reflect on and evaluate one's pedagogy and to examine its effect critically
6. The ability to organize and explain materials in ways appropriate to students' abilities and learning styles in both developmental and transfer courses
7. The ability to use teaching methods that engage students actively in their own learning, promote development of critical thinking skills, and encourage them to become lifelong learners

8. The ability to use instructional methods that emphasize cooperation and collaboration and that reflect cultural sensitivity and interdisciplinary approaches to subject matter
9. The ability to motivate students from a broad spectrum of cultural, academic, socioeconomic, and language backgrounds
10. The ability to develop student learning outcomes and to develop methods for assessing students' achievement of those outcomes
11. The enthusiasm for, understanding of, and commitment to the role and purpose of the community college
12. Familiarity with and willingness to expand the use of technology in physics education, including online instruction
13. A commitment to the teaching profession, its goals and ideals, and enthusiasm for the mission of the community college

***Evidence of effectiveness as a colleague:***

14. The ability, initiative, and commitment to work collaboratively with faculty and staff in the spirit of collegiality and innovation to enhance instruction, curriculum, and student success
15. Commitment to professional responsibilities outside of the classroom through enthusiastic contributions to department, division and college activities.

(01/2015)

Other posting details:

**Timeline:**

Position Posted: **February 3, 2015**

First Review Date: **March 10, 2015**

The Preliminary Screening is scheduled to be completed by **March 31, 2015**.

Interviews are tentatively scheduled to be held between **April 13** and **April 24, 2015** at College of San Mateo

Finalist interviews are tentatively scheduled to be held between **April 27** and **May 8, 2015** at College of San Mateo