



**INSTRUCTIONAL EQUIPMENT REQUEST**

**Due in Dean/Unit Head's Office on September 19, 2011 (FALL) and March 1, 2012 (SPRING)**

The Definition of Instructional Equipment can be found in the California Community College's Budget and Accounting Manual. A copy of these definitions is on the PBC webpage:  
<http://grapevine/pbc/InstructionalEquipment.php>

Name of Requestor: William Eddy

Division/Unit : Physical Education Athletics

Brief title of request (equipment or materials being requested must be similar, related or part of a system. Jacobs Ladder

**Request amount** (unit cost and total cost including tax and shipping.  
 Please include all costs including installation, modification to existing facilities to accomodate new equipment, etc.):  
 This should come from the vendor quote

Item (s) cost	\$ <u>6790.00</u>
Tax (.0875)	\$ _____
Shipping	\$ <u>705.00</u>
Installation	\$ _____
Facilities Modification	\$ _____
Other	\$ _____
Total Cost	\$ <u>7575.00</u>

**Attach copy of quote(s), estimate(s) and requisition(s):**  
 (Must attach quote & requisition; absence of either will delay processing)

**Brief description of specific equipment or materials requested and what they will be used for: (include the # pieces being requested; i.e.: 10 crayola crayons, sky blue, etc. in 250 words or less)**

Two Jacobs Ladder cardio machines used for cardio workouts aerobic and anaerobic and rehabilitation.

Is this in your Program Review? Yes  No

The need for updated equipment was discussed in program review to provide support to all physical education, athletics and intercollegiate programs. Based on the program review, the jacobs ladders meet the needs of the general population along with students with special needs. The ladders can be used in many classes to work on core strength, rehabilitation, stability and flexibility.

Is it a replacement? Yes

Upgrade? Yes

New technology? Yes

Please explain?

Jacobs Ladder simulates a form of climbing and offers a comparably aggressive workout. It is low impact on joints. Exercises offer the training athlete and student an unlimited higher end speed. Coordinates upper and lower extremities to work together. Jacobs Ladder puts the subject at a 40 degree angle thereby taking stress off of the lower back and knees. Jacobs Ladder gives the user a constant 12 inch step, giving a complete range of motion. Jacobs Ladder has been viewed as a less boring workout because of the natural ladder climbing motion instead of reciprocating movement. Jacobs Ladder has no upper end speed thereby giving the student the option of training either aerobically or anaerobically.

Following is the evaluation criteria; please see corresponding Instructional Equipment Rubric.

***Instructional and Service Impact***

How will this item have a positive impact on instruction and/or teaching and learning in the classroom? Is this for use by the Instructor or students, or both?

The positive impacts on instruction and teaching stems from Jacobs Ladder providing the ultimate fitness experience. The unique design on the machine allows for both aerobic and anaerobic workouts. Aerobically, Jacobs Ladder not only increases heart rate quicker than other machines, but correspondingly results in increased VO2MAX levels. Jacobs Ladder also offers the user the option of HIIT (high intensity interval training). Because speed of the rungs is determined by the user, HIIT interval training can be achieved by utilizing 1-3 minute intervals at 85-90% maximum heart rate. Jacob's Ladder emulates sprinting or stair climbing without incurring the high impact on joints. The users will be both instructors and students.

***Impact on Enrollment***

**Will the equipment impact enrollment, attract or increase the number of students participating in a course or program?**

Study after study confirms that exercise using both the arms and legs requires more energy expenditure, and therefore burns more calories than exercises using just the arms or the legs. Currently other than the elliptical machine we have no other machines that achieve this type of exercise. Jacobs Ladder is better than the elliptical in that again it gives both and aerobic and anaerobic workout. The Jacobs ladder takes the stress off the knees by utilizing the 40 degree angle. Any time new equipment is added to the fitness center it always attracts students to use it.

**Access**

**How does this item promote the principles of universal design, by providing opportunities for under-represented populations & accommodate students with diverse learning styles?**

The patented design created a commercial cardio machine that accommodated not only people with back issues but also people with knee, ankle and hip problems. Jacobs Ladder automatically adjusts to your speed. The faster you go, the faster it goes. The readouts in Rate (Ft/Min), Distance, Calories, and Elapsed Time give the student the ability to monitor progress over time. Its unique design allows for a low impact workout, while still delivering results. Jacobs Ladder is designed so that the user controls the speed and braking at all times. This ensures that the user is neither under- nor over-worked. The belt is the simplest, most reliable way to control speed and braking without compromising machine durability.

**Outcomes**

**How will this equipment enable or enhance SLOs? What are the consequences related to learning outcomes if request is not funded?**

Jacobs Ladder will enable and enhance a students ability to achieve the SLO of fitness level within our SLO groupings. Jacobs Ladder both enables and enhances improved fitness level between pre and post test. Pre and post tests will test cardiorespiratory endurance which the machine achieves for the user. Jacobs Ladder will also enable the students ability to accomplish identifying specific exercises to work specific muscles or muscle group. To get the cardio effect of this machine students may need to use two or three other machines. The results of the Jacobs Ladder in one use will accomplish the SLOs faster and with better consistency. If not funded the students will delay in accomplishing their outcomes given by the instructor.

**Total Cost of Ownership (This is an attempt to identify what the ongoing costs of purchasing this equipment will be to the institution)**

- a) **What is the lifespan of the equipment? 5 years? 10 years? 20 years?**
- b) **Is there sufficient current/planned space available for the storage and use of this equipment? If so, where will it be housed? If not, is there a proposed location and are there any costs associated with installation or modifications to the space?**
- c) **Are there operating costs and how will they be covered by the department?**
- d) **What will be required to maintain the equipment, such as regular servicing or upkeep? Who will perform maintenance, and what will the estimated costs be?**

4 years on parts and 1 year on labor. Jacobs Ladder has proven to be one of the most durable machines on the market today. Jacobs Ladder is self-powered using a battery and generator combination. There is no need for an electrical outlet. Because of the simple design, Jacobs Ladder is relatively maintenance free. A full description of how Jacobs Ladder works with maintenance procedures is included on the Maintenance DVD that comes with the purchase of any Jacobs Ladder. Comes fully assembled and will be housed in 2500 building rooms 202 and 203. Any standard routine maintenance will be provided by PE/Athletics assistants per manufacturers specifications.

*Visibility/Profile within Community*

Is this a "flagship" item that will bring recognition/notoriety to the College or raise the stature of the program? Will it attract students and/or enhance the image of the College in the community because of its rare, one-of-a-kind status?

It is an item that is one of a kind. Jacobs Ladder can be found in many different realms of fitness and exercise. Health Clubs, professional sports, universities, military, fire, police and PT, athletic training and Chiropractic have all used this machine.



**Commitment to Sustainability**

How does this equipment exceed basic sustainability goals and encourage renewable resources at the College? Is the design/operation of this item in keeping with the College's commitment to sustainable practices?

The frame is made from welded tubular steel. The rungs are solid maple. It is self powered so no electricity is being used.

**Health, Safety & Security**

Does this equipment address any health, safety & security concerns? If so, please explain below.

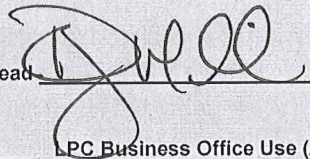
The extent of the various workouts listed in prior sections are beneficial to addressing health concerns. The equipment if used properly is safe. A product manual with all necessary information for safety is included. No security concerns addressed. One of the key functions of this machine is reducing the risk of injury by limiting the impact to joints. Rehab, cross training and injury prevention are other areas the machine addresses.

**Signatures (required)**

(If requesting computer-related equipment/software, LPC IT Department Review is **required**.)

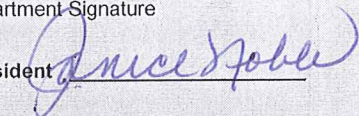
Requested by 

Dean/  
Unit Head



IT Department Signature

Vice President



LPC VP Business/President

LPC Business Office Use (Account Number)

