



Program Review Resource Request, 2014-2015

Program **Physics**
Academic Affairs

Code **RR-139**
Validated

Basic Information About the Resource Request

Resource Request Description Laboratory Equipment Revitalization

What priority does the program assign to this resource request? High Priority

Mark Type of Request:

- Facilities/Maintenance
- Classroom Upgrade
- Instructional Equipment
- Non-Instructional Equipment
- Supplies
- Computer Hardware for Student Use
- Computer Hardware for Faculty/Staff Use
- Software/Licenses/Maintenance Agreements
- Conference/Travel
- Other

4.1. Clearly describe the resource request.

Much of the laboratory equipment used in Physics 101, 102, and 103 is seeing heavy wear and gradually becoming obsolete. The deteriorating condition of our equipment has meant that many experiments can no longer be performed with satisfactory results. Furthermore, enrollment in our classes has increased, without the purchase of additional equipment. Consequently, students have had to share equipment in larger and larger groups. This ultimately degrades the quality of education as students receive less hands-on experience with the equipment. It has become imperative that we purchase equipment that is new, modern, and in sufficient numbers to accommodate larger classes. Equipment that is in need of replacement includes the following:

- Spectrometer (SP-9268A) \$1,250.00
- Oscilloscopes \$1,000.00
- Van de graph generator \$813.00
- Ballistic pendulum \$700.00
- signal generator \$595.00
- Modulated lasers \$575.00
- Na Lamps (OS-9287B) \$559.00
- Force tables (metal) \$550.00
- AC/DC power supplies \$500.00
- Current balance \$420.00
- Spark generator \$400.00
- Pasco Geiger counter (PS-2166) \$348.00
- Pasco radioactive samples (SN-7972A) \$264.00
- multimeters \$260.00
- Standing wave generator (WA-9867) \$259.00

Amount requested: \$ 8722.00

- Breakdown of cost, if applicable:
- Spectrometer (SP-9268A) \$1,250.00
 - Oscilloscopes \$1,000.00
 - Van de graph generator \$813.00
 - Ballistic pendulum \$700.00
 - signal generator \$595.00
 - Modulated lasers \$575.00
 - Na Lamps (OS-9287B) \$559.00
 - Force tables (metal) \$550.00
 - AC/DC power supplies \$500.00
 - Current balance \$420.00
 - Spark generator \$400.00
 - Pasco Geiger counter (PS-2166) \$348.00

Pasco radioactive samples (SN-7972A)	\$264.00
multimeters	\$260.00
Standing wave generator (WA-9867)	\$259.00
Tesla coils	\$229.00

T O T A L :	\$8,722.00

4.2. Funding

Requires One-Time Funding Requires Ongoing Funding

This is a New Request

This is a Repeat Request from a Previous Year

Year(s) Requested:

Special Criteria

4.3. Please check if any of the following special criteria apply to this request:

- Health & Safety Issue (explain fully)
- Accreditation Requirement (see note in red)
- Contractual Requirement (explain fully)
- Legal Mandate (explain fully)

Accreditation only applies to the ACCJC or other specific accrediting agency to which your program is required to report (be specific in the text box below).

Please explain how/why this request meets any of the above criteria.

None of the special criteria listed above apply to this resource request.

Justification and Rationale

GLENDALE COMMUNITY COLLEGE MISSION STATEMENT

Glendale Community College serves a diverse population of students by providing the opportunities and support to achieve their educational and career goals. We are committed to student learning and success through transfer preparation, certificates, associate degrees, career development, technical training, continuing education, and basic skills instruction. Dedicated to the importance of higher education in an evolving urban environment, faculty and staff engage students in rigorous and innovative learning experiences that enhance and sustain the cultural, intellectual, and economic vitality of the community.

As part of its mission, Glendale Community College is committed to student success by promoting:

- communication, critical thinking, information competency, quantitative reasoning, global awareness, personal responsibility, and application of knowledge;
- coherence among disciplines and promotion of openness to the diversity of the human experience;
- student services, learning support, and state of the art technology that enable students to reach their educational goals in an efficient and timely manner.

4.4. Justification and Rationale: What EMP Goal, plan, SLO, PLO, or ILO does this request address?

What part of the college mission statement does it address?

Please use information from your report to support your request.

Part of our mission at Glendale Community College and at the Physics Department is to provide students with "state of the art technology that enables them to reach their educational goals in an efficient and timely manner." The purpose of this resource request is exactly to fulfill this mission statement. We are asking for laboratory equipment that is essential to the educational goals of our

students. Equipment that is modern and in good working condition allows our students to perform cutting-edge experiments that will prepare them for careers in science and technology.

4.5. What measurable outcome will result from filling this resource request?

This request specifically addresses Student Learning Outcome #4 for Physics 101, 102, and 103: "Students will demonstrate the ability to use lasers, micrometers, calipers, oscilloscopes, spectrometers, interferometers, and voltmeters accurately and safely." The degree to which students satisfy this SLO can be directly measured by looking at student lab grades.

Steps in the Resource Allocation Process

This request will be submitted along with the Program Review document.

After submission, this request will go to the Program Review Committee for validation (see the validation rubric below).

If the request is validated as compliant, then it will move to the appropriate standing governance committee (Academic Affairs, Student Affairs, or Administrative Affairs) for prioritization.

The prioritized lists of requests from the standing governance committees are then sent to the Expanded Budget Committee for the final prioritization and the Budget Committee's recommendation for funding.