UNIT REPORT

Physics, Department of
Assessment Plan Summary

# Physics, Department of

# **Conduct Research**

# **Goal Description:**

Support the Notion of a Research Oriented Department RELATED ITEMS/ELEMENTS

**RELATED ITEM LEVEL 1** 

### **Produce Research Related Materials**

## **Performance Objective Description:**

Encourage research track faculty to illustrate their research through the production of related materials.

RELATED ITEM LEVEL 2

#### **Publications And Presentations**

### **KPI Description:**

100% of research track faculty members will produce publications and presentations dealing with their research. The standard is that each research faculty will produce at least one publication.

### **Results Description:**

All faculty produced at least one paper.

RELATED ITEM LEVEL 3

#### **Publications and Presentations**

#### **Action Description:**

Faculty will publish in peer-reviewed journals and magazines for the popularization of science, and attend professional meetings at which their results will be disseminated.

# **Provide Appropriate Personnel Resources For The Unit**

# **Goal Description:**

Provide Appropriate Personnel Resources for the Unit

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

# **Laboratory Technician Staff Position**

# **Performance Objective Description:**

Submit a proposal to acquire a Laboratory Technician Staff Position as part of the annual departmental budget proposal. The individual filling this position will be charged with maintaining the instructional lab equipment and laboratory preparation that cannot be conducted by faculty.

RELATED ITEM LEVEL 2

# **Submission Of Staff Request**

### **KPI Description:**

The request for a Laboratory Technician Staff Position will be submitted as part of the annual departmental budget proposal by the deadline set by the College and Arts and Sciences. The new strategic planning should make the request more likely to happen.

## **Results Description:**

Dr Walker requested the staff position.

RELATED ITEM LEVEL 3

### **Submission of Staff Request**

# **Action Description:**

The department will pursue options for making the role of laboratory coordinator a permanent position.

### **Update to Previous Cycle's Plan for Continuous Improvement**

### Previous Cycle's Plan For Continuous Improvement (Do Not Modify):

The department will bring in a new faculty member with excellent teaching and research credentials. It will implement new assessment of student's skills based upon nationally standardized GRE examinations. The department will stabilize the role of its laboratory coordinator. The department will begin a pilot program for enhancement of core lower division courses by addition of a problem solving recitation period.

# **Update of Progress to the Previous Cycle's PCI:**

The department hired Dr. James Dent who has outstanding credentials in teaching and research. We have implemented the new assessment based on the physics GRE; the quantum assessment seemed successful, the classical mechanics assessment needs further work. A pilot program was begun for a problem solving section for physics 1411, introductory classical mechanics. Based on the judgment of the instructor, Professor Hui Fang, the program yielded positive results in that more time was available for problem solving.

# **Plan for Continuous Improvement**

# **Closing Summary:**

The department will bring in a new faculty member with excellent teaching and research credentials. The assessment based on the GRE will be
continued to be implemented. Modifications will be made for the classical mechanics part of the assessment. A problem solving session will be
added to physics 1422, electricity and magnetism, allowing more problem solving which is essential to student success.