

# CAN Program Review (Instructional) - Chemistry (Even Year)

# Objective: To ensure student access to the application of computers in the chemistry laboratory .

We would like to request a set of 35 laptops with Office suite software and a charging cart. These laptops will be used by all students in the laboratory to (1) collect data from our large inventory of Vernier laboratory probes via interfacing, (2) manipulate experimental data, (3) create excel spreadsheets and graphs, (4) create formal laboratory reports, (5) conduct virtual laboratory experiments when appropriate, etc. Additionally, having laptops available in the laboratory room facilitates access of all students to the technology to view content, closed captioned videos, annotated power points, and interactive activities. Furthermore, having laptops consistently in the laboratory for student use may reduce barriers for them to submit their online assignments if they can finish them in class.

Objective Status: 1 - New (PR)

Objective Year: 2020-2021

Estimated Start Date: 08/14/2020

**Please select the college goals with which this objective aligns.:** Student Completion/Success - Provide educational and student services programs that highlight inclusivity, diversity, and equity in their mission to help students meet their unique educational goals and minimize logistical and financial barriers to success.

**Please select the district goals with which this objective aligns.:** District Goal #3 - Increase Program Delivery Options, Including the Expanded Use of Instructional Technology, to Support Student Learning and Success

### Action Plans

**2020-2021** - Routinely utilize computers to interface to chemical analytical instrumentation across the chemistry laboratory curriculum.

Assist students in learning how to manipulate technology.

Assist students in accessing course content and using technology.

Facilitate completing assignments such as online quizzes.

(Active)

Who's Responsible for Completing this Action Plan?: All Chemistry Instructors Estimated Completion Date: Open ended

### Resource Requests

We would like to request a set of 35 laptops with Office suite software and a charging cart. - Increased accessibility to technology that will be found in future places of employment will make our graduates more marketable.

Status: New Request - Active Type of Resource: Information Technology Cost: 85000 One-Time or Recurring Cost?: One-Time Cost Division/Department Priority: High Priority

# **Objective: Update the laboratory curriculum across the Department**

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Allow students a greater opportunity to learn from individualized hands-on experiences by manipulating laboratory common equipment as opposed to share data for lack of sufficient laboratory equipment. This will have a significant impact on individual preparation for personal success when looking for employment.

Objective Status: 2 - Continuing (PR)

Objective Year: 2020-2021

Estimated Start Date: 08/14/2020

Estimated Completion Date: 05/15/2021

**Please select the college goals with which this objective aligns.:** Student Completion/Success - Provide educational and student services programs that highlight inclusivity, diversity, and equity in their mission to help students meet their unique educational goals and minimize logistical and financial barriers to success.

Please select the district goals with which this objective aligns.: District Goal #1 - Develop and Strengthen Educational Offerings, Interventions, and Support Programs that Increase Student Access & Success

## Action Plans

**2020-2021** - Introduce students to laboratory equipment and analytical instrumentation they will use at transfer schools and at places of employment.

Acquire new equipment to augment the current capability to allow students a greater opportunity for independent learning and personal growth.

Design new experiments for updated use of equipment across the chemistry curriculum, including independent research and Honors work.

#### (Active)

Who's Responsible for Completing this Action Plan?: All Chemistry Instructors Estimated Completion Date: Open ended

#### Resource Requests

**35** each (enough for one lab section) (1) **50** mL burets, (2) double vinylized buret clamp, (3) adjustable --prong clamps, (4) clamp ring set, (5) **18** mm clamp holder talon. - Each student will have the opportunity to conduct his/her own experiment. They will learn at their own pace and in their own learning style. Please note that the listed 5 items go together as a set.

Status: Continued Request - Active Type of Resource: Equipment (Items Over \$5000) Cost: 7800 One-Time or Recurring Cost?: One-Time Cost Division/Department Priority: High Priority

**35 each (enough for one laboratory section) (1) 60 mL separatory funnels and (2) 125 mL separatory funnels -** These are common equipment found in typical organic chemistry, biology, biotechnology and pharmaceutical research laboratories. Students will be equipped with marketable laboratory skills that can be translated to employment.

Status: Continued Request - Active Type of Resource: Equipment (Items Over \$5000) Cost: 7000 One-Time or Recurring Cost?: One-Time Cost Division/Department Priority: High Priority

Sartorius SSECURA 21021S Topload Weighing Balance - Students get evaluated and assigned grades based on their determination of quantitative measures of unknowns. For example, determining the percent composition of a mixture of three components. This balance is reliable and sensitive. It will ensure an accurate sample preparation for a fair and equitable evaluation of all students.

Status: Continued Request - Active Type of Resource: Supplies (Items less than \$5000) Cost: 3000 One-Time or Recurring Cost?: One-Time Cost Division/Department Priority: High Priority

# Objective: Request for a part-time Physical Sciences Special Projects Assistant

We are planning to submit a request for a part-time Physical Sciences Special Projects Assistant who can maintain the analytical chemical instrumentation, assist in developing laboratory curriculum, coordinate the implementation of the laboratory curriculum and assist in the administration of the independent laboratory research component of CHEM 695 and Honors contracts.

**Objective Status:** 2 - Continuing (PR)

Objective Year: 2020-2021

Estimated Start Date: 08/20/2020

**Please select the college goals with which this objective aligns.:** Student Completion/Success - Provide educational and student services programs that highlight inclusivity, diversity, and equity in their mission to help students meet their unique educational goals and minimize logistical and financial barriers to success.

Please select the district goals with which this objective aligns.: District Goal #3 - Increase Program Delivery Options, Including the Expanded Use of Instructional Technology, to Support Student Learning and Success

### Action Plans

2020-2021 - Submit a new position request for a part-time Physical Sciences Special Projects Assistant in Spring 2020 (Active)

Who's Responsible for Completing this Action Plan?: The Chemistry Department Estimated Completion Date: May 2021

#### Resource Requests

Part-time Physical Sciences Special Projects Assistant

Status: Continued Request - Active Type of Resource: Instructional Personnel Cost: 40000 One-Time or Recurring Cost?: Recurring Cost Division/Department Priority: High Priority

# Objective: Request for a Physical Sciences laboratory/ Teaching Assistant

To increase retention and success by offering an ongoing qualified and reliable technical support and intervention program to students.

Objective Status: 1 - New (PR) Objective Year: 2020-2021 Estimated Start Date: 08/14/2020 Estimated Completion Date: 05/14/2021

**Please select the college goals with which this objective aligns.:** Student Completion/Success - Provide educational and student services programs that highlight inclusivity, diversity, and equity in their mission to help students meet their unique educational goals and minimize logistical and financial barriers to success.

**Please select the district goals with which this objective aligns.:** District Goal #1 - Develop and Strengthen Educational Offerings, Interventions, and Support Programs that Increase Student Access & Success, District Goal #3 - Increase Program Delivery Options, Including the Expanded Use of Instructional Technology, to Support Student Learning and Success

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## Action Plans

2020-2021 - Submit a Physical Sciences laboratory/ Teaching Assistant new position request. (Active)

Who's Responsible for Completing this Action Plan?: The chemistry department

Estimated Completion Date: May 2020

## **Resource Requests**

Physical Sciences laboratory/ Teaching Assistant

Status: New Request - Active Type of Resource: Instructional Personnel Cost: 50000 One-Time or Recurring Cost?: Recurring Cost Division/Department Priority: High Priority