Planning Unit: Chemistry

Unit Manager: Lead Faculty, Chemistry

Objective: 725 - Equipment, technology and facilities requests for chemistry

**Objective Description:** 

To provide the technology to support instruction for all types of learners.

Start Date: Task Type: Priority Level: Task Order:

10/20/2017 Resource Request High 1

Due Date:Completion Date:Task Status:Budget:1/20/2019New\$1,900

To purchase 20 Vernier pH electrodes from VWR Catalog # 470039-294. These would replace our aging and malfunctioning pH probes. There is very little that is more frustrating to a student or an instructor than getting to the end of a 3 hour experiment and have the data corrupted due to a malfunctioning piece of equipment.

# **Budget Remarks:**

Date:	Name:	Remarks:	
No Data to	Display		

# **Budget Details:**

GL Code	Account	Description	Requested	Approved
Supply	Chemistry	pH electrodes for Vernier	\$1900.00	\$1900.00

# **Assignment Details:**

Name:	Email:
No Data to Display	

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Start Date: Task Type: Priority Level: Task Order:

2/5/2018 Resource Request High

Due Date: Completion Date: Task Status: Budget:

New \$4,200

Purchase 6 water baths for use in both allied health sciences courses and general chemistry courses for majors. More water baths would allow us to perform kinetics labs safely and with more accurate temperature control. In Chemistry 410 water baths are used in the digestion of proteins, enzymatic breakdown of lactose, osmosis and rates of reaction. We currently are constantly moving water bath from room to room and rescheduling labs to make sure the 2 water baths we currently have are available.

### **Budget Remarks:**

Date:	Name:	Remarks:	
No Data to	Display		

# **Budget Details:**

GL Code	Account	Description	Requested	Approved
Supply	Chemistry	Water baths	\$4200.00	\$4200.00

### **Assignment Details:**

Name:	Email:	
No Data to Display		

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Start Date: Task Type: Priority Level: Task Order:

2/7/2018 Resource Request High

Due Date: Completion Date: Task Status: Budget:

New \$19,000

To replace the air pump and upgrade the communication interface between the NMR and its computer. The NMR we have available for our students to use is a state of the art chemical analytical instrument purchased with NSF funding. But, it is in urgent need of an upgrade. With the interface we would be replacing two large ribbon cables with one USB cable which would then allow us to upgrade the instrument's computer if needed in the future. Also included is a new air pump which is much more energy efficient and minimizes noise pollution. All of this upgrading is chemistry specific and requires specialized chemistry analytical expertise.

### **Budget Remarks:**

Date:	Name:	Remarks:	
No Data to D	Display		

### **Budget Details:**

GL Code	Account	Description	Requested	Approved
Equipm	Chemistry	nuclear magnetic resonance (NMR) spectrometer air pump and communication upgrade	\$19000.00	\$19000.00

### **Assignment Details:**

Name:	Email:
No Data to Display	

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Start Date: Task Type: Priority Level: Task Order:

2/7/2018 Resource Request Medium

Due Date: Completion Date: Task Status: Budget:

New \$4,800

To purchase 3 analytical balances to support the chemistry department effort to make experiments greener and safer as well as cost effective and reducing waste disposal budget. All chemistry labs are cutting down on the amount of reagents used. Smaller amounts of reagents require the use of milligram balances. Increasing the number of analytical balances we currently have available will cut down on bottle necking of students creating a better learning environment for our students.

#### **Budget Remarks:**

Date:	Name:	Remarks:	
No Data to	Display		

# **Budget Details:**

GL Code	Account	Description	Requested	Approved
Supply	Chemistry	Analytical Balances	\$4800.00	\$4800.00

# **Assignment Details:**

Name:	Email:
No Data to Display	

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Start Date: Task Type: Priority Level: Task Order:

2/7/2018 Resource Request Medium

Due Date: Completion Date: Task Status: Budget:

New \$2,600

To purchase 4 Polarimeters with extra sample cells to use with Vernier open source Organic Chemistry Labs. Polarimeters are used in organic chemistry to differentiate between optical isomers. Optical Isomerism which is determined by the rotation of plane polarized light is a basic concept in organic chemistry. Purchase of these polarimeters would allow students to see first hand what this concept actually entails. It is also part of the project undertaken by the Chemistry department to use open source lab manuals or create our own to cut down on cost and decrease barriers to science education.

# **Budget Remarks:**

Date:	Name:	Remarks:	
No Data to D	Display		

### **Budget Details:**

GL Code	Account	Description	Requested	Approved
Supply	Chemistry	Chemical Polarimeter plus extra cells	\$2600.00	\$2600.00

### **Assignment Details:**

Name:	Email:
No Data to Display	

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Start Date: Task Type: Priority Level: Task Order:

2/7/2018 Resource Request Medium

Due Date: Completion Date: Task Status: Budget:

New \$7,000

To purchase more 1-10 mL pipetman which are used for dispensing liquids quickly with great accuracy and repeatability. These would be added to the ones we purchased last year. The pipetman is an industry standard in both chemistry and biology and used in all sorts of applications. The use of pipetman has lowered waste and increased student success at the same time. Purchasing theses would mean groups would not have to share increasing the time all students spend using these tools. This in turn translates in student satisfaction and success.

#### **Budget Remarks:**

Date:	Name:	Remarks:	
No Data to D	Display		

#### **Budget Details:**

GL Code	Account	Description	Requested	Approved
Equipm	Chemistry	Pipette 1-10 mL 1 channel	\$7000.00	\$7000.00

#### **Assignment Details:**

Name:	Email:
No Data to Display	

Start Date: Task Type: Priority Level: Task Order:

2/7/2018 Resource Request Low 7

Due Date: Completion Date: Task Status: Budget:

New \$25,500

To purchase 3 UV Vis Lambda Bio spectrometers that would take spectra in both the visible and ultra violet electromagnetic regions. These cutting edge instruments rapidly find results in the visible and UV spectrum. This allows students in chemistry 201 and 220 to see physical proof of a nonvisible reaction occurring. They also allow for quick reading across a large range of wave length supporting the success for our kinesthetic learners.

### **Budget Remarks:**

Date:	Name:	Remarks:	
No Data t	o Display		

### **Budget Details:**

GL Code	Account	Description	Requested	Approved
Equipm	Chemistry	Lambda Bio UV/Vis with printer	\$25500.00	\$25500.00

### **Assignment Details:**

Name:	Email:
No Data to Display	

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