Program	Planning Year	Objective Title	Objective	Action Plan	Type of Resource	Resource Request	Resource Request Description	Cost
Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Equipment (Items Over $5000)	Incubating Mini-Shaker	We only have 2 small shaking incubators, and need more to support the 4-5 sections of Microbiology and Cell/Molecular biology, as well as increasing number of student research projects. https://us.vwr.com/store/product/4902590/vwr-incubating-mini-shaker Price quoted is before tax and excluding SH Need 2, each at $3600	$7,200.00
Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Equipment (Items Over $5000)	Incubating Orbital Shaker (VWR 3500I)	We only have 2 small shaking incubators, and need more to support the 4-5 sections of Microbiology and Cell/Molecular biology, as well as increasing number of student research projects. We need to be able to aerate and incubate larger cultures too. https://us.vwr.com/store/product/4835149/vwr-incubating-orbital-shaker-model-3500i Need 1, at $5921 Price quoted is before tax and excluding SH	$5,921.00
Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Supplies (Items less than $5000)	Glucose monitors	The glucose meters we use for BIO260 have been phased out by the manufacturer, and it is no longer possible to get test strips that work with our meters. We will need to replace our meters with current versions. For estimating purposes, we can consider the following model: https://www.amazon.com/Accu-Chek-Guide-Glucose-Monitoring-System/dp/B0716J6KMD/ref=sr_1_1_a_it?ie=UTF8&qid=1540842208&sr=8-1&keywords=Accu-Chek+Guide&dpID=51Kk%252B0TqupL&preST=_SY300_QL70_&dpSrc=srch We need to purchase 12 glucose monitors each at $30. This price is before tax and excluding SH.	$360.00
Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Supplies (Items less than $5000)	Holder for 125 ml flasks, fits shaker	Adapter flask holders for different sized flasks, for cultures of different volumes. For VWR Shaker 3500I. https://us.vwr.com/store/product/4835149/vwr-incubating-orbital-shaker-model-3500i Need 4 at $29 each Price quoted is before tax and excluding SH	$116.00

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Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Supplies (Items less than $5000)	Holder for 250 ml flasks; fits shaker	Adapter flask holders for different sized flasks, for cultures of different volumes. For VWR Shaker 3500I. https://us.vwr.com/store/product/4835149/vwr-incubating-orbital-shaker-model-3500i Need 4 at $29 each Price quoted is before tax and excluding SH	$116.00
Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Supplies (Items less than $5000)	Micropipettors P-1000 size (4 pack)	We need a few completel sets (4 each of P-1000) of micropippetters to support independent student projects outside of regular class time, especially with the new student Independent Projects lab space in Building 23. 1-4 pack https://www.pipette.com/P3940-4P-Labnet-Biopette-Plus-4-Pack-Mix-and-Match-Please-specify-sizes-at-checkout-1-Carousel-Stand-and-2-Racks-of-Tips Price quoted is before tax and excluding SH	$619.00
Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Supplies (Items less than $5000)	Micropipettors P-20 size, (4 pack)	We need a few complete sets (4 each of P-20) of micropippetters to support independent student projects outside of regular class time, especially with the new student Independent Projects lab space in Building 23. https://www.pipette.com/P3940-4P-Labnet-Biopette-Plus-4-Pack-Mix-and-Match-Please-specify-sizes-at-checkout-1-Carousel-Stand-and-2-Racks-of-Tips 1-4 pack Price quoted is before tax and excluding SH	$619.00
Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Supplies (Items less than $5000)	Micropipettors P-200 size (4 pack)	We need a few completel sets (4 each of P-200) of micropippetters to support independent student projects outside of regular class time, especially with the new student Independent Projects lab space in Building 23. https://www.pipette.com/P3940-4P-Labnet-Biopette-Plus-4-Pack-Mix-and-Match-Please-specify-sizes-at-checkout-1-Carousel-Stand-and-2-Racks-of-Tips 1-4 pack Price quoted with before tax and excluding SH	$619.00

Program	Planning Year	Objective Title	Objective	Action Plan	Type of Resource	Resource Request	Resource Request Description	Cost
Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Supplies (Items less than $5000)	Pulse transducer	Students use these devices with our computerized data acquisition systems to measure blood flow through the finger. Two of these transducers are broken and in need of replacement. https://www.biopac.com/product/photoplethysmogram-for-pulse-waveform-bsl/ Need 4, each at $245.	$980.00
Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Supplies (Items less than $5000)	Reaction Timers	Students use these hand-held timers to test their reaction time to visual and auditory stimuli. Several of our timers are broken and need replacement. https://www.amazon.com/American-Educational-Products-6027-Reaction/dp/B00658AXCQ Need 6, each at $173	$1,038.00
Biological & Health Sciences	2019-2020	Improve instructional outcomes by investing in instructional equipment	Purchase instructional equipment for the biology program		Supplies (Items less than $5000)	Shaker Platform	Adapter platform for different sized flasks, for cultures of different volumes. For VWR Shaker 3500I. https://us.vwr.com/store/product/4835149/vwr-incubating-orbital-shaker-model-3500i Price quoted is before tax and excluding SH	$225.00
Biological & Health Sciences	2019-2020	Increase department budget	Increase the annual department budget to include ongoing annual instructional equipment needs		Supplies (Items less than $5000)	Human cadaver	BIOL 250 Human Anatomy requires the dissection of human cadavers in order for the course to articulate with four-year institutions and to satisfy prerequisites of allied health programs such as nursing, radiologic technology, surgical technology, occupational therapy and others. The Willed Body Program (WBP) at UCSF provides us these cadavers. In the past we usually purchased one cadaver on a yearly basis, but some (recent) years we opted out. WBP has changed their requirements for how long we may keep a cadaver necessitating us to adopt a regular/annual replacement rate. We are requesting that this cost be allocated to our annual department budget rather than a special allocation through the resource request process - it is an ongoing expense and not discretionary.	$2,800.00

Program	Planning Year	Objective Title	Objective	Action Plan	Type of Resource	Resource Request	Resource Request Description	Cost
Chemistry	2019-2020	To increase student retention and completion by creating accessible course content in Canvas.	We would like to purchase a set of 35 iPad Wi-Fi 32 GB including a charging cart and a 3-year AppleCare to help decrease the Department's identified Equity Gap. We believe that facilitating access to the technology to view content, such closed captioned videos, annotated power points, and interactive activities, as well as facilitating the submission of online assignments during class time, might eliminate barriers for students. Additionally, the instructors will be an immediate and constant source of	Hand out IPads to all students during laboratory sessions to access Canvas content relevant to complete the activity of the day. Assist students in learning how to manipulate technology. Assist students in accessing course content and using technology. Facilitate completing assignments such as online quizzes. Utilize the IPads to facilitate the completion of student questionnaires during the process of Faculty evaluations	Information Technology	35 IPad Wi-Fi 32 GB - Space Gray, a Bretford PowerSync + Cart 40 for IPad, a 3-Year AppleCare package for 35 units, 35 JAMF PRO 1YR IOS 1K-2499 PERP. The quote was approved by the IT Department.	If the Hispanic students Equity gap observed in the Chemistry Department is reduced, lack of readily available technology at home might be one of the causes.	$18,000.00
Chemistry	2019-2020	Update the laboratory curriculum across the Department	Allow students a greater opportunity to learn from individualized hands-on experiences by manipulating laboratory equipment as opposed to share data for lack of sufficient laboratory equipment. This will have a significant impact on personal success.	Introduce students to laboratory equipment and analytical instrumentation they will use at transfer schools and at places of employment. Introduce state of the art portable analytical Gas Chromatography/ Mass Spectrometry instrumentation with applications in water monitoring, gas emissions, fuel formulations and a variety of other field applications. 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.	Equipment (Items Over $5000)	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.	$7,800.00

Program	Planning Year	Objective Title	Objective	Action Plan	Type of Resource	Resource Request	Resource Request Description	Cost
Chemistry	2019-2020	Update the laboratory curriculum across the Department	Allow students a greater opportunity to learn from individualized hands-on experiences by manipulating laboratory equipment as opposed to share data for lack of sufficient laboratory equipment. This will have a significant impact on personal success.	Introduce students to laboratory equipment and analytical instrumentation they will use at transfer schools and at places of employment. Introduce state of the art portable analytical Gas Chromatography/ Mass Spectrometry instrumentation with applications in water monitoring, gas emissions, fuel formulations and a variety of other field applications. 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.	Equipment (Items Over $5000)	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.	$7,000.00
Chemistry	2019-2020	Update the laboratory curriculum across the Department	Allow students a greater opportunity to learn from individualized hands-on experiences by manipulating laboratory equipment as opposed to share data for lack of sufficient laboratory equipment. This will have a significant impact on personal success.	Introduce students to laboratory equipment and analytical instrumentation they will use at transfer schools and at places of employment. Introduce state of the art portable analytical Gas Chromatography/ Mass Spectrometry instrumentation with applications in water monitoring, gas emissions, fuel formulations and a variety of other field applications. 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.	Equipment (Items Over $5000)	KD Scientific Centrifan PE-T Small Volume Evaporator and rotor for 8 x 4 mL vials.	A rotatory evaporator is a common piece of equipment in any organic chemistry lab. Up to now, instruments of this kind had the disadvantage of needing circulating water, require large amounts of solvents that need to be dispose as hazardous waste and work under pressurized environment posing an elevated danger of exploding glass. These are several of the reasons we never requested one. Fortunately, the instrument we are requesting is a revolutionary design with a small foot print that does not require pressure, does not use recirculating water and only uses small amounts of solvent. This is an ideal instrument to have in a teaching environment, especially since it is designed for the microscale labs we have to reduce waste and environmental impact.	$8,500.00

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Chemistry	2019-2020	Update the laboratory curriculum across the Department	Allow students a greater opportunity to learn from individualized hands-on experiences by manipulating laboratory equipment as opposed to share data for lack of sufficient laboratory equipment. This will have a significant impact on personal success.	Introduce students to laboratory equipment and analytical instrumentation they will use at transfer schools and at places of employment. Introduce state of the art portable analytical Gas Chromatography/ Mass Spectrometry instrumentation with applications in water monitoring, gas emissions, fuel formulations and a variety of other field applications. 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.	Equipment (Items Over $5000)	Torion T-9 portable Gas Chromatograph/ Mass Spectrometer	Self contained instrument that will have the same capability of our large foot print instrument but will eliminate the need for storing large gas tanks in the laboratory, especially hydrogen.	$95,000.00
Chemistry	2019-2020	Update the laboratory curriculum across the Department	Allow students a greater opportunity to learn from individualized hands-on experiences by manipulating laboratory equipment as opposed to share data for lack of sufficient laboratory equipment. This will have a significant impact on personal success.	Introduce students to laboratory equipment and analytical instrumentation they will use at transfer schools and at places of employment. Introduce state of the art portable analytical Gas Chromatography/ Mass Spectrometry instrumentation with applications in water monitoring, gas emissions, fuel formulations and a variety of other field applications. 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.	Supplies (Items less than $5000)	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.	$3,000.00

Program	Planning Year	Objective Title	Objective	Action Plan	Type of Resource	Resource Request	Resource Request Description	Cost
Earth Science	2019-2020	Improve student success by increasing hands-on activities and student research opportunities in our classes.	Hands-on activities in our lecture classes increase student interest and success. (See sections 6A and 9B.) Further authentic research opportunities based on student interest are also likely to increase interest and success. To facilitate more hands-on activities and research opportunities we need to purchase laboratory equipment and supplies. We are primarily in need of supplies for water testing and microscopes. This fall we purchased water-testing equipment	1. Purchase equipment for 2019/2020 academic year. 2. Work with honors students, regular students, and other faculty to develop individual or group research projects in our classes. 2. Document use of new equipment.	Supplies (Items less than $5000)	Labware: 12 beakers (600 ml), 2000 ml beaker, 24 wheaton amber rounds w/caps, 10 polypropylene funnels, stir rods	supplies for water testing kit	$230.00
Earth Science	2019-2020	Improve student success by increasing hands-on activities and student research opportunities in our classes.	Hands-on activities in our lecture classes increase student interest and success. (See sections 6A and 9B.) Further authentic research opportunities based on student interest are also likely to increase interest and success. To facilitate more hands-on activities and research opportunities we need to purchase laboratory equipment and supplies. We are primarily in need of supplies for water testing and microscopes. This fall we purchased water-testing equipment	1. Purchase equipment for 2019/2020 academic year. 2. Work with honors students, regular students, and other faculty to develop individual or group research projects in our classes. 2. Document use of new equipment.	Supplies (Items less than $5000)	LaMotte Easy Read Titrators	supplies for water testing kit	$100.00

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Earth Science	2019-2020	Improve student success by increasing hands-on activities and student research opportunities in our classes.	Hands-on activities in our lecture classes increase student interest and success. (See sections 6A and 9B.) Further authentic research opportunities based on student interest are also likely to increase interest and success. To facilitate more hands-on activities and research opportunities we need to purchase laboratory equipment and supplies. We are primarily in need of supplies for water testing and microscopes. This fall we purchased water-testing equipment	1. Purchase equipment for 2019/2020 academic year. 2. Work with honors students, regular students, and other faculty to develop individual or group research projects in our classes. 2. Document use of new equipment.	Supplies (Items less than $5000)	Motic Moticam X Wi-Fi Camera	Allows wifi from microscope to any Bluetooth enabled device. Students can easily project and download their microscope images.	$405.00
Earth Science	2019-2020	Improve student success by increasing hands-on activities and student research opportunities in our classes.	Hands-on activities in our lecture classes increase student interest and success. (See sections 6A and 9B.) Further authentic research opportunities based on student interest are also likely to increase interest and success. To facilitate more hands-on activities and research opportunities we need to purchase laboratory equipment and supplies. We are primarily in need of supplies for water testing and microscopes. This fall we purchased water-testing equipment	1. Purchase equipment for 2019/2020 academic year. 2. Work with honors students, regular students, and other faculty to develop individual or group research projects in our classes. 2. Document use of new equipment.	Supplies (Items less than $5000)	Wolfe 7-45x Zoom Stereomicroscopes ($554.00 each + tax and shipping; need 6)	Our current scopes are so outdated (20-30 years old?) we don't use them. We have taken our classes to the Biology Lab to work, but that is not a sustainable solution.	$4,100.00

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Earth Science	2019-2020	Improve student success by increasing hands-on activities and student research opportunities in our classes.	Hands-on activities in our lecture classes increase student interest and success. (See sections 6A and 9B.) Further authentic research opportunities based on student interest are also likely to increase interest and success. To facilitate more hands-on activities and research opportunities we need to purchase laboratory equipment and supplies. We are primarily in need of supplies for water testing and microscopes. This fall we purchased water-testing equipment	1. Purchase equipment for 2019/2020 academic year. 2. Work with honors students, regular students, and other faculty to develop individual or group research projects in our classes. 2. Document use of new equipment.	Supplies (Items less than $5000)	Wolfe DigiVu DVM 10 Digital Stereomicroscope	For instructor to project on attached viewscreen or projector. Also useful for visually impaired students who previously have not been well-accommodated during microscope activities.	$1,400.00