Application Form

Signature Page

Prepared By: Signature	ahlodilah	Patricia Printed Nan	M Todebush		_8/31/2015 Date
The Chair/Associa	te Dean and Dean of t Dication Form by the S				
Joh SI Ca	ean/Associate VPAA	8/31/15	Nove	(if applicable)	9-1-15
Signature		Date	Signature		Date
By signing you are	indicating that you a	gree to this fee or	a revised version	n of this fee.	
Signature Provost	of Course and Academic	9/11/1S Date			
Signature		 Date			
President					
Signature		Date			
After Approved by	President Submit Forr	n to Budget Office	with any revisio	ns made.	
Fund	Department	Program	Class		Accounts
	-			-11	

committee comments! The fee was approved walked by the committee. It clearly fits whin the lab fee cutegory so should not require BOR approval. The benefits to student clearly out weigh the costs. Committee suggested Keeling Page 1096, eye on fee for accuracy since this

Special Course and Academic Program Fee Application Form

Date of Application: 8/31/2015		
College/Department: Arts & Scie	nces/Chemistry and Physics	
Fee Name: <u>Laboratory Fee</u>		
Choose one of the following: Newly proposed fee	Existing fee that will change (increase/decrease/eliminate)Indicate which situation applies	X Reapplication of an existing fee that will not change
Choose one:		
Academic Program Fee X	Supplemental Course Material or Labo	oratory Fee
Supplemental Course Material or Lak	poratory Fees (Only complete this sec	tion if you are proposing a course fee.):
List the courses for which this fee will		
The L following the course number s All CHEM, and PHYS introductory an	vith L following the course number. Fo ignifies a laboratory course. d practicum research courses with nu ratory credit component, for example	mbers 3224 and 4222.
will provide the projected annual enro annual enrollment by the fee cost per Projected Annual Enrollment: 1724	student Fee amount per student: <u>\$35</u>	calculate annual revenue multiply the
Academic Program Fees (Only comple	ete this section if you are proposing a	program fee.):
number of semesters the fee must be	you listed above. Annual enrollment ar. To calculate the annual revenue m	ultiply the annual enrollment times the nce upon acceptance into the program
Projected Annual Enrollment:	Fee amount per student:	-
How often will a given student have to Only once (when the student is accepted into the program)	o pay the fee? Capacitan Each semester the student is enrolled in the program is summer term included?	Once per year Which semester?
Annual Revenue: Do all students enrolled in this progra	m have to pay the fee? (If no	t, explain who will pay the fee)

Application Form

Attach the following to this form:

- A narrative justification for the fee. Make certain to include the following:
 - o Description of how the fee revenue will be spent (be as specific as possible).
 - o Justify why the program's department/college budget cannot support these expenditures.
 - o Describe the benefit this revenue will provide to the students who are paying it.
 - o If your request is denied describe what impact this will have on your program.
 - If you require other fees to support the same program(s) where these particular fees are applied, you will need to describe those other fees and indicate the total cost to the students in those programs.

Special Course and Academic Program Fee Application Form

JUSTIFICATION for the DEPARTMETN OF CHEMISTRY AND PHYSICS LABORATORY FEE

The Department of Chemistry and Physics was established in the Fall of 2015 and represents half of the discontinued Department of Natural Sciences. The Department of Natural Sciences charged a laboratory fee of \$35 per student enrolled in a laboratory course or research course at CSU. The Department of Chemistry and Physics will continue this laboratory fee as without this revenue stream we would not be able to offer laboratory courses at CSU. These fees are used to purchase all of the consumable supplies such as chemicals, equipment and instrumentation which are used daily in the laboratories. We use these fees to maintain and service the instrumentation which students use regularly (weekly) throughout their chemistry and physics laboratory experiences and which is vital to our program including HPLC, FTIR, UV/VIS, NMR, AE, GC/MS. We also use these fees for safety equipment and to cover the cost of the disposal of the chemical waste that is generated and associated with these laboratories.

During the FY 14 the total expenditures from the Natural Science Fee budget was \$107,321.61 This fee budget was used to cover all BIOL, CHEM, PHYS, ASTR and SCI laboratory courses with a previously approved laboratory fee associated with them. A sample listing of the FY 14 supplies that were purchased with this fee is included at the end of this application. It is expected that the fee will be used in the same way that it has been in the past.

The typical operating budget of a department (OS&E) is not designed or allocated in a manner that would support laboratory equipment, chemical supplies and the waste management needs of a laboratory program. In examining the Natural Sciences OS&E budget, which would need to be used to cover these costs if a lab fee was not charged, the OS&E budget has not been increased since 2000, yet we have expanded our program/degree offerings, the number of courses and laboratories we teach and now split the department. Without this additional fee and budget stream, the Department of Chemistry and Physics would not be able to offer laboratory classes, we would not have the supplies, equipment or safety measures needed for such classes.

Every student who registers for a laboratory course at CSU gets hands on experience with/and access to the laboratory supplies purchased by this fee; for example, in Astronomy, this fee goes to the purchase and upkeep of telescopes that the students use each week in lab, in chemistry, this fee goes towards the purchase of the chemicals and supplies they use each week. Students coming to CSU often have very limited experience in a laboratory setting and extremely limited hands-on experiences in science. This fee is extremely important for our students so that they gain the hands-on skills that they need to be successful in future science careers and activities. For those students not going on in science, this fee and their laboratory course (required in area D of the core) in general, gives them a very important laboratory experience, one they have never had before and probably won't ever have again.

FY 14 for the Department of Natural Sciences Expenditures: 714000-Supplies and Materials** \$79,000.76

715000-Repairs and Maintenance \$26,385.30 719000-Rents (Non Real Estate) \$1,487.41

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Sample listing of supplies/equipment purchased with the FY 14 Natural Sciences Fee Budget.

IR dessicant Fisher chemistry \$ 134.68

GC parts PERKIN ELMER chemistry lab supplies \$ 42.25

GC parts Perkin Elmer chemistry \$ 167.39

distilling flasks for 2411 chemistry VWR chemistry \$ 586.06

filter paper, buffer Fisher chemistry lab supplies \$ 179.29

Liquid N2 purchase O2 Plus chemistry \$ 150.80

GC parts PERKIN ELMER chemistry lab supplies - \$ 10.56

dropper bottles and caps Fisher chemistry lab supplies \$ 230.15

gloves VWR chemistry lab supplies \$ 72.84

gloves VWR chemistry lab supplies \$ 75.72

beakers VWR chemistry \$ 117.38

beakers VWR chemistry \$ 92.15

Tape case VWR biology and chemistry lab supplies \$ 46.23

cyclohexene, propionalde VWR chemistry lab supplies \$ 136.20

chemicals Fisher chemistry lab supplies \$ 370.04

Potassium hydroxide Carolina chemistry lab supplies \$ 44.08

Primers for biochemistry Integrated DNA Technologies chemistry lab supplies \$ 51.35

gloves, HCI VWR chemistry lab supplies \$ 159.82

gloves VWR chemistry lab supplies \$ 180.00

chlorosulfonic acid Fisher chemistry 2412L \$ 53.87

sodium octanohydroxamVWR chemistry lab supplies \$ 360.71

competent cells for CHEM Invitrogen chemistry lab supplies \$ 139.50

waste jugs Fisher chemistry lab supplies \$ 308.20

competent cells for CHEM Invitrogen chemistry lab supplies \$ 78.00

Kanamycin sulfate VWR chemistry lab supplies \$ 60.44

mutagenisis kit for CHEM New England BioLabs chemistry lab supplies \$ 203.00

agarose VWR chemistry lab supplies \$ 113.45

ethanol, kleck clamps, sodium metal and rubber bulbs Fisher Chemistry lab supplies\$ 3 34.45

pipette tips, chemicals, graduated cylinders, UV lamp stands and filter paper VWR biology and chemistry lab supplies \$ 968.36

PB-210 Source Needle Pasco physics supplies \$ 55.00

thermometer, ground glass Fisher chemistry \$ 47.05

hazardous waste pickup TRADEBE chemistry and biology \$ 2,273.38

pH probe for haz waste Fisher chemistry \$ 96.90

(Liquid N2 purchase O2 Plus chemistry \$ 75.40

12 thermometers for organic chem VWR chemistry \$ 355.32

filters for HPLC samples VWR chemistry \$ 129.56

NaOH Carolina chemistry \$ 118.99

first aid kit for NBS 188 Fisher biology and chemistry \$ 36.12

NaOH Fisher chemistry \$ 141.48

rubber stoppers Carolina chemistry \$ 18.92

hazardous waste containers Fisher chemistry \$ 280.20

faucet aerators for LAB 210 VWR chemistry and biology \$ 48.90

copper and weighing boats Carolina chemistry \$ 58.67

weighing boats VWR chemistry \$ 18.07

copper turnings VWR chemistry \$ 35.73

safety goggles Carolina chemistry \$ 51.02

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sucrose, invertase, etc. - P Chem CAROLINA BIOLOGICAL SPLY chemistry \$ 79.66 octylphosphine - P. Chem VWR INTERNATIONAL INC chemistry \$ 38.36 500g copper metal turnings - chemTFS FISHERSCI ECOM ATL chemistry \$ 194.79 flasks - P Chem VWR INTERNATIONAL INC chemistry \$ 126.24 carbon tet, goggles, etc. - P Chem TFS FISHERSCI ECOM ATL chemistry \$ 583.43 totes - chemistry lab supplies TFS FISHERSCI ECOM ATL chemistry \$ 145.50 nanocrystals - P.Chem. NN-LABS - Purchase chemistry \$ 225.08 lab supplies purchase NN-LABS - Purchase chemistry \$ 75.40 torch for glass repair Bethlehem Apparatus Co chemistry \$ 207.33 sodium hydroxide Fisher chemistry \$ 39.29 cobalt chloride Fisher chemistry \$ 264.71 barium chloride Fisher chemistry \$ 11.60 Drierite Fisher chemistry \$ 144.38 mushroom tyrosinase for CHEM42Fisher chemistry \$ 138.55 PCR supplies Life Technologies (Invitrogen) chemistry \$ 432.50 formalin (histology), hexane, filter Fisher biology and chemistry \$ 230.72 chemicals, safety goggles Carolina chemistry \$ 129.32 filter paper and crucibles Fisher chemistry \$ 299.25 NAD for 4202L VWR chemistry \$ 68.05 histology supplies VWR chemistry \$ 134.06 chemistry chemicals VWR chemistry \$ 290.99 ammonium hydroxide VWR chemistry \$ 108.77 methyl t-butyl ether, ethyl ether VWR chemistry \$ 120.43 BSA standard VWR chemistry \$ 103.52 pH probes for 4202L VWR chemistry \$ 289.80 Zn powder for 4811L Fisher chemistry \$ 63.48 RNASE A/T1 MIX 1ML - CHEM4Fisher chemistry \$ 105.26 acrylic sheet for instrumental analysis Ridout Plastics chemistry 4811L \$ 56.10 Wheatstone bridge, clips VWR physics lab supplies \$245.80 PCR tubes MedSupply Partners chemistry lab supplies - \$127.54 bar magnets PASCO physics lab supplies \$94.00 syringe filters for 4811L Fisher chemistry - 4811L \$235.80 round bottom flasks VWR chemistry - organic \$111.00 1 L dewar for liquid nitro VWR chemistry lab supplies \$101.66 electrical leads - physics VWR physics lab supplies \$98.00 methylene chloride VWR chemistry \$41.92 glass 20cc syringes for CHVWR chemistry \$49.70 chemicals MEDSUPPLY PARTNERS chemistry \$69.65 safety video and manuals Fisher chemistry and biology \$361.69 2 L dewar for liquid nitro VWR chemistry lab supplies \$304.30 gloves MedSuppy Partners biology and chemistry \$889.98 sulfur hexafluoride gas Nexair chemistry \$289.40 molecular modeling kits FLINN SCIENTIFIC chemistry \$489.71 hazardous waste contain Fisher chemistry \$280.20 helium and cylinder rental NexAir chemistry \$236.44 paper towels Dade Paper biology and chemistry \$592.60