

Arizona Department of Education

Career and Technical Education

Recommended Equipment List

Program: Bioscience
CIP#: 41.0100.00

NOTE: The following items and descriptions are the recommended equipment guidelines for each **CTE Bioscience** program. Please note that this list of recommended items does not necessarily need to be supported financially by Federal Perkins or State Priority funding sources. In many cases, local school district funds are used to purchase items on a regular basis (i.e. furniture, consumables, etc.) Further, please understand that this is not an exhaustive list. Local program and business needs may necessitate the purchase of additional equipment and software resources, as may the rapidly-changing nature of the industry-specific technologies used in the program.

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Item	Notes
Small Refrigerators	
Regular Refrigerators (frost free)	
(-)20 Freezer Manual Defrost 14.1 C	
neg 86 Freezer	
Dishwasher (under counter)	
Microwave (large for 1L Flask)	
Shaking Water Bath 16L Capacity	
Ohaus, Navigator Balance 0.002	
Balance-Adventurer 65Gx0.1 mg	
Spectronic Colormeter model 20D+	
UV Spec	
UV Spec Cuvette 5 mm	
UV Spec Cuvette 10 mm	
MyCycler Thermal Cycler 120V	
UV Lamps	
Incubation Oven 120V	
Mini Centrifuge	
Autoclave	
Mesh Basket for Autoclave	
Oven, Utility 12x17.5x23.5	
Ice Maker	
6L Water Bath	
Sterilizer Water System	
Cartridge for above Water System	
Still 1.4lph w/Poly BTL -mp- 1	
Heat Block	
Block, Taperedhole	
Block, Taperedhole	
Purif, VRT CLN BCH, w/UV Lite Lamir	
Mixer, Rotomix ORB 120V m 71735	
Chemical Fume Hood	
Crosslinker, UV, CL-1000 115V	
16K Microcentrifuge	
Hot Plate/Stirrer - MDL PC420	
Vacuum/Pressure Pump	
Bact-cinerator III Loop Sterilizer	

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Item	Notes
6 Place Table Centrifuge	
Large Laminar Flow Hood	
Micor Pipet Holders	
Micropipetor 5-10ul	
Micropipetor 10-20ul	
Micropipetor 20-200ul	
Micropipetor 100-1000ul	
Biodoc-it System m-26 115V	
Printer, Thermal, Video/Analog	
Thermal Paper	
Converter Plate, UVP, UV to White	
Horizontal Chamber	
Mini Protein Dbl-sided 10x10cm	
Mini Vortexer, 120V	
Power Supply 250V	
Microscopes	
Loading Guides 10well	
UV Transluminater	
Dissecting Scopes	
Printer	
VCR/DVD Player	
LCD Projector Unit	
Speaker	
Microsoft Windows Software	
Rubbermaid Carts	
BioSafety Cabinet	
Mobile Demo Carts	
Upholstered Seat Back Fixed	
Table 24x54x30 Epoxy	
Scholar Craft Ply Shell Chair 17 1/2 (black) Fixed Height	
Bare Bones Mobile Lab Table	
24x48x30 Epoxy (plain) Table	
96-WELL Elisa Plate U Bottom	
Dissecting Trays 19.7x25x3.8cm	
0.5ML Microtube	
10KD Microcentrifuge Filter Tubes	

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Item	Notes
114 MM Forceps	
125 MM Polystyrene Funnels	
13x100 Glass Culture Tubes 100/CS	
13x100 Test Tubes	
Plug Caps for Culture Tubes	
15ML Graduated Cylinder 18/CSS 2	
VWR Cube Racks	
1L Plastic Beaker	
24-WELL Microtiter Plate	
2X, 5X, or 10X Hand Magnifying Lens	
50ML Beaker	
Assorted Rubber Stoppers	
25ML Graduated Cylinder	
100ML Graduated Cylinder	
Beaker 1000ML 1000 48 CS	
Beaker 100ML 1000 48 CS	
Beaker 250ML 1000 48 CS	
Beaker 400ML 1000 48 CS	
Beaker 600ML 1000 48 CS	
Beaker, Heavy Duty, 4L	
Bottle, Grad, w/Cap, 1000ML	
Bottle, Grad, w/Cap, 125ML 48/CS	
Bottle, Grad, w/Cap, 250ML 48/CS	
Test Tube Clamps	
Beaker Tongs	
Dialysis Tubing	
Flask 1000ML 6/PK	
Flask 500ML 12/PK	
Flask 250ML 12/PK	
Flask 125ML 12/PK	
Floating Rack (0.5ML Tubes)	
Floating Rack (1.5ML Tubes)	
Glass Rods 12/PK	
Spatula Stainless Steel	
Grow Lights 120cm Long	
Hot Hand, Hand Protector	

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Lab Scoop 6/PK	
Large Test Tube	
Light Bank	
Magnetic Stir Bars 16/Pk	
Metric Ruler	
Microscope Slides	
Coverslips	
Botl, Carboy, w/spig	
Micro-test Tube Locking Caps	
Mortar and Pestle	
Pipet Pump Blue VWR 2ML	
Pipet Pump Green VWR 10ML	
Planting Pots (film tubes)	
Rack for Reaction Tubes	
Stainless Steel Scissors	
Test Tube Holder	
Test Tube (peg) Racks Full View Polypropylene	
Pipet Support Rack	
Thermometers	
Watch Glass	
Water Mat	
Water Reservoir	
Wooden Stakes	
10ML Dispos Serol Pipets Indiv 200/CS	
Tube, PP, ST, GRD, CS-500, VWR, 15ML	
12.5cm Filter Paper Whatman 8UM Retention	
60x15 Sterile Plastic Petri Dishes 500/CS	
Loop Inoc. 24GA 4mm 12/PK	
10ul Disposable Inoculation Loop 1000/CS	
TBR 40 500/BX	
TBR 14 1000/BX	
TBR 35 1000/Bag	
TBR 35 200/Rack, 1000/BX	
TBR 40 100/Rack 1000/BX	
TBR 14 96/Rack, 960/BX	
1ML Glass Pipets 1000/CS	

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2ML Glass Pipets 500/CS	
5ML Glass Pipets 500/CS	
10ML Glass Pipets 500/CS	
Tube, VWR, GRD, Natrl, 1.7ML 500/PK	
Gloves 10/CS	
Tube, ST, VWR, 50 ML 500 CS	
Tube (PET) 50 ML ST	
200ul Gel Loading Tips Prot/Elec Tip 1000/BX	
2ML Dispos Serol Pipets Indiv	
11cm VWR Filter Paper 5 UM Retention	
5ML Dispos Serol Pipets Indiv	
Plastic Syringes 10 ML 100/PK	
Filter 50/PK	
Vacuum Filter Flasks .22UM 150 ML	
Vacuum Filter Flasks .22UM 250 ML	
Vacuum Filter Flasks .22UM 500 ML	
1ML Dispos Serol Pipet Indiv	
Parafilm	
Biorad Polyprep Columns	
3ML Transfer Pipet 500/PK	
Dish, Petri 100X 15MM, ST 500/CS	
Dish, Petri 150X15 100CS	
Water Sick Strips	
Plant Label Sticks or Tape	
Dried Bees	
Planting Pots (film tubes) or quads	
Water Mat	
Sterile Scaple Handles	
Sterile Scaple blades #20 4/PK	
4.6ML Transfer Pipet	
25X120MM tissue Culture Tube	
25MM tissue Culture tube Caps	
Murashige-Skoog Multiplication Medium	
Murashige-Skoog Pre-Transparent Medium for African Violets	
KimWipes, 30PKS/280EA, 4.5"X8.5"	
VWR Disposable Cuvettes UV Grade Methyl Acrylate	

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0.65ML Reacting Tubes	
Staining Tray/Weigh Boat 8.9x8.9x2.5cm 500/CS	
0.2ML PCR Tubes	
Nitrocellulose Membrane	
Glass Wool Pyrex	
Assortment Lab Tape	
Tape Dispenser Mult 500	
Autoclave Tape	
Autoclave Bags	
Steri-Wrap 24x24 500/CS	
Extralong 30.5cm Transfer Pipet	
White Lab Tape	
Capillary Tubes	
Blotted H+ Nylon Membrane	
Black Fine Tipped Markers	
3', 3', 5', 5' - Tetramethylb 100ML	
50X TAE Electro Buffer 1L	
95% Ethanol 4L 4/CS	
Acetic Anhyd 150ML	
Actin (AB-1) Kit-1 EA	
AGAR	
AGAROSE< Genetic 100G	
Albumin	
Alconox Powder	
Det-O-Jet Liquid Detergent	
Ampicillin 25G	
BCIP/NBT Color 1.25/2.5ML	
Benedicts Solution 1L Quant	
Bicine, Ultrol Grade 100GM	
BIS-TRIS, Ultrol Grade 100GM	
Biuret Solution	
Boric Acid ACS Reagent GR500GM	
Bromophenol Blue 5G	
Buffer PH4.01 475ML	
Buffer, Color COD PH 7.0 475ML	
Caffeine	

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Calcium Chloride, AHNS DES500GM	
Calcium Nitrate ACS REAGE500GM	
Cellulose 500G	
Chlorobutanol 25KG	
Colorphast Strip PH0-14 100/PK	
Colorphast Strip PH2-9 100/PK	
Colorphast Strip PH7.5-14 100/PK	
Coomassie Blue Stain	
Cupric Sulfate (copper) CRY500GM	
Dextrose RE Anhyd Gran 500GM	
Diphenylamine (DPA) 125G	
EDTA, Disodium Salt 250G	
Ethidium Bromide 10ML	
Ferric Nitrate, Nonahyd 500GM	
Fertilizer Pellets	
Fructose BA Biochemical 500GM	
Galactose 100G	
Gel Loading Dye	
Glacial Acetic Acid 2.5L	
Hydrochl Acid Sol, 6.0N 500ML	
Iodine Crystals 100G	
Isopropanol 99% 3.8L	
Lactose 500G	
LB AGAR 500G	
LB Broth Base 500G Lennox	
Lugol's Iodine Solution 500ML	
Maltose 500G	
MES Monohydrate 100G	
Methylene Blue 500ML	
Methanol 3.785L	
MGCL2 Solution	
Nutrient AGAR 454G	
O-Acetylsalicylic Acid 99% 500G	
Page Loading Dye	
Page Running Buffer	
Petroleum Ether	

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PH 10.01 Buffer, Color CD 475ML	
Potassium Acetate Reag CR500GM	
Potassium Chloride	
Potassium Hydroxide AR 500GR	
Potassium Phosphate Mono 500G	
Potatoe Dextrose AGAR	
Potting Mix (soil)	
Salicylic Acid	
Saline Solution	
01M DTT	
100 BP DNA Standard	
10XPCR Buffer	
10X PCR Buffer	
1G Salamon Sperm DNA	
25MM MGCL2	
Actin (AB-1) Kit-1EA	
Amplitaq Gold DNA Ploymerase	
Amplitaq Polymerase	
Amylase	
Animal Rennin 25G	
Anti-Actin Developed in Rabiit 0.5ML	
Anti-Pig IGG Conjugated With HRP	
Applied BIOSystems PCR Kit	
Arabidopsis Thaliana Seeds	
Aspergillus SP Stock Plate	
BAMHI Enzymes, Ice Cold	
Biorad Polyprep Columns	
Biorad Reagent	
Biotin-Tagged AP Solution	
Biotin-Tagged Primer	
Bovine Actin 5MG	
Bovine Rennin 25G	
BSA, Fraction V, Heatshock 100G	
Cellulase 1G	
Chelex Resin Beads	
Chymosin	

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complete Nucleotide Mix Cow Serum	
Cymbidium Protocorms	
-DTAP, -DCTP, -DGTP, -DTTP Mixes	
DEAE Sepharose for Columns	
DNA Standard Size Markers	
DNA Standards	
Pig Serum Plant DNA	
Plant Tissue Culture AGAR	
Plasmid DNA	
Primer Mix	
Puregene Cell and Tissue Kit	
Puregene Cell and Tissue Kit	
Reaction Buffer	
Reverse Primer: 5'TGACTGCCTCTTCGCTGTAC3'	
RNASE IF	
Scaleup Broth	
See Blue Molecular Weight Standards	
See Blue Molecular Weight Protein Standard	
Sequenase	
STE Buffer	
Stop Mix	
Stop Mix	
Streptavidin	
Subtilisin	
Suspected Actin/Seafood Samples	
TBE Gels	
TBE GL 8X10M 75MM 10WLL 10% 10/PK	
TMB Solution	
Western Blot Module and Sponges	
White Willow Leaf/Bark	
Xcell II Blot Module CE Mark	
Xcell Surelock Mini-Cell CE	
Onion Root Tip Slides	
Yeast Extract 500G	