

Equipment List for the Biotech Lab

Priority 1 Equipment:

- Vertical Gel Boxes
- Horizontal Gel Boxes
- Power Supplies
- Micropipets (suggested to begin with for each lab station)
 - 0.5 – 10 _L
 - 2 – 20 _L
 - 20 – 200 _L
 - 100- 1000 _L (instructor use or sharing)
- Pipet tips – for all sizes (order twice as many 2 –200 _L)
- Stirring Hot plates (for media prep)
- Stir bars, boiling chips, stir bar retriever
- Refrigerator (NOT frost free)
- Freezer (NOT frost free)
- pH meter – TRIS compatible
- Microwave large enough to hold 1 liter
- Wheaton Media bottle
- Centrifuge 12 G – to spin DNA and proteins
- Microtube racks
- Test tube racks
- Beakers- all sizes
- Graduated cylinders -10mL, 100mL, 1000mL
- Cylinder Graduated Pumps – to dispense reagents – 500mL and 1000mL
- Erlenmeyer flasks – glass, 500mL and 1000mL for media prep (10)
- Erlenmeyer flasks – 25mL for bacterial growth (20)
- Water bath
- Floating racks for water bath
- Lab carts
- Carboy w/Spigot (at least 2) 9 Liter
- Carboy w/spigot (at least 2) 20L
- Scoopula stainless steel
- Microspatula
- Polyethylene dispensing bottles – 30 mL
- Wheaton Media bottles – 1 liter, 500 mL and 250 mL-suggest 24 of each
- UV Lamps
- Vortexer

Priority 2 Equipment:

- DNA Sequencing System & Power Supply
- Transilluminator
- Camera
- 1000X oil immersion microscope
- Immersion oil and lens paper
- Thermal Cycler
- Balances (.001g) for some reagents and to calibrate pipets)
- Benchtop shaker (bacterial growth)
- Autoclave – large enough to hold 1 liter
- Wheaton Media Bottle
- Sterile indicator tape, autoclave bags
- Desktop organizer for gloves, Kimwipes, pipets, Parafilm, pipet tips, etc.
- Computers –
 - (Averkey, Adobe Pagemill, Micosoft Office, Configured System/Power Mac, 64?MG Ram)
 - Kodak Digital Camera, Adobe Photo deluxe, Epson Stylus Photo, Printer, Scanner, Video Projector or Monitor?)
- Wire bag holder for small autoclave bags on bench top
- Centrifuge
- Pipet Aids - Dispensers
- Water distiller
- Stop watches
- UV Cross- Linker (and replacement bulb)
- Crushed Ice Maker
- Platform Rocker
- Spectrophotometer & cuvettes (with UV capacity)
- Repipet bottletop dispenser – 20 ml
- Heating blocks
- Bactoincinerators

Reagents and Consumables:

- Polyacrylamide mini gels -for vertical gel boxes
- Agarose
- Tris Molecular Biology grade
- Polaroid Type 667 Single B& W filmpak
- LB Broth
- LB Agar
- Nutrient Agar
- Nutrient Broth
- Petri Dishes
- Restriction Enzymes
- Primers
- DNA
- Taq beads
- Eppendorf microcentrifuge tubes, Lots!! (1.5ml)
- Culture tubes (at least 10 ml capacity)
- Kimwipes
- Single edge razor blades
- Weigh boats – small and large
- Labeling tape – suggest 1 color per lab group
- Microscope slides
- Microscope covers
- Lens paper
- Permanent Markers – Extra Fine – black
- Micropipet tips-all sizes-twice as many 200_μL
- Gloves
- TAE/TBE buffer
- PAGE buffers
- Ethidium Bromide stain
- Methylene blue stain
- PAGE stain
- Loading dyes
- DNA standards
- Serological pipets
- Parafilm

