

All Items provided by Boston University except for items highlighted in green. These items were provided by LERNET.

Session is considered one lab session

Total is for 4 sessions.

General Needs		
Item	Session	Total
Goggles (1 per packet)	~27/Session	~27
Lab Coat (1 per packet)	~27/Session	~27
“ID badge” with number (1 per packet)	~27/Session	~100
Gloves (1 box per bench)	S-4 M-4 L-2	S-4 M-4 L-2
Waste bins (we will work w whatever you have here, below is a list of suggestions) 1 Bin for glass waste/bench 1 Bin for Biohazard waste/bench 1 trash can for non-hazardous waste/bench Bins should be labeled with what will be disposed of in each	4 of each	4

Initial Table Setup: Lab safety/Synthetic Epidemic Model Table		
Item	Session	Total
Paper towels “Bounty Select A Sheet” 4 Papers/ station labeled: I.D. # and trial number (initial, round 1, round 2, round 3)	1 roll	3-4?
Paper Plates (1/student)	27	~100
Baby powder covered with foil	¼ container	1 container
Glow germ	2 g of glow germ (enough to cover plate)	1 bottle of glow germ
Black light (BIORAD Key chain)	~10	~10

Gram Staining		
Item	Session	Total
Cultures 1 18 hour broth culture of each organism/day <i>S. epidermis</i> (B, D, U) <i>E. coli</i> (C) <i>B. megatarium</i> (A)	3	12
5 slides/ table (smears will be prepped before the lab)	25	100

3 Gram Staining Kits per table Kit includes: Crystal violet, Iodine, ethanol, Safranin, sterile dH ₂ O, triangle to hold slide over sink, immersion oil	12	12
Additional Materials		
1 microscope per two students	12	12
Microscope video camera hooked up to TV (optional)	1	1

Catalase		
Item	Session	Total
Cultures <i>S. epidermis</i> on TSA plate (3 plates/ bench Labeled “C” “D” “U”) <i>M. smegmatis</i> (2 plates/ bench Labeled “A” “B”) BLANK organism on plate	12 plates “C”, “D”, “U” 8 plates “A”, “B”	
5 slides/group of 2 (15 slides/table)	60	120
Wooden transfer sticks	60	1 Box
1 bottle 3% hydrogen peroxide in dropper bottler/group of 2	12	12

Antibiotic Resistance		
Item	Session	Total
15 Muller Hinton Agar plates	15	15
1 Broth culture of <i>S. epidermis</i>	1	1
Antimicrobial discs Penicillin Ampicillin Streptomycin	8 discs of each	1 vial of each antimicrobial
Ruler (Carolina Rulers in mm in Rm 440)	15	15

Key

Gram Stain

Sample	Organism	Result
A	<i>B. megatarium</i>	Gram + Rod
B	<i>S. epidermis</i>	Gram + Cocci
C	<i>E. coli</i>	Gram - Rod
D	<i>S. epidermis</i>	Gram + Cocci
U	<i>S. epidermis</i>	Gram + Cocci

Catalase Test

Sample	Organism	Result
A	<i>M. smegmatis</i>	Negative
B	<i>M. smegmatis</i>	Negative
C	<i>S. epidermis</i>	Positive
D	<i>S. epidermis</i>	Positive
U	<i>S. epidermis</i>	Positive

Antibiotics

Sample "D" *S. epidermis*

Antimicrobial	Antimicrobial Name	Result
X	Ampicillin	Sensitive (S)
Y	Streptomycin	Intermediate (I)
Z	Penicillin	Resistant (R)