

# PLB 116 Winter 2015

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Created on: 11/17/2014  
Sections:  
Lab rooms:

## Lab 1 Review Of Anatomy And Life Cycle

Jan 6, 2015

Quantity	Plant Material	Date planted	Days	Directions
1	Equisetum	Jan 6, 2015		
1	Fern	Jan 6, 2015		
1	Fern	Jan 6, 2015		
	Pine branch with old cones	Jan 6, 2015		

## Lab 2 Charophyta, Bryophytes, Rhyniophyta

Jan 8, 2015

Quantity	Plant Material	Date planted	Days	Directions
	Anthoceros (hornwort)	Jan 8, 2015		
	Chara or Nitella	Jan 8, 2015		
	Coleochaete on slides, started 11/20	Jan 8, 2015		
	Japanese Psilotum with sporangia on tips.	Jan 8, 2015		
	Marchantia w/sporophytes	Nov 27, 2014	42	For student dissection
	Marchantia with Gemmae	Jan 8, 2015		
	Moss w/sporophytes	Jan 8, 2015		For student dissection
	Moss with tiny, upright sporophytes.	Jan 8, 2015		
2	Ricciocarpos	Jan 8, 2015		Enter directions here

## Lab 3 Lycopodium

Jan 13, 2015

Quantity	Plant Material	Date planted	Days	Directions
	Lycopodium lucidulum	Jan 13, 2015		
	Lycopodium squarrosum	Jan 13, 2015		
2 plants	Ruselia flowers	Jan 13, 2015		Enter directions here

## Lab 4 Selaginella, Angle Meristem Experiment

Jan 15, 2015

Quantity	Plant Material	Date planted	Days	Directions
???	Fern gametophytes, some with sporophytes	Jan 15, 2015		

Selaginella hardeiformes (red one)	Jan 15, 2015
Selaginella martensii (2 flats)and	Jan 15, 2015
Selaginella pallescens	Jan 15, 2015
Selaginella sp.	Jan 15, 2015
Selaginella sporelings still attached to	Jan 15, 2015
Selaginella uncinata (blue one)	Jan 15, 2015
Selaginella viticulosa	Jan 15, 2015
Selaginella, many diverse species.	Jan 15, 2015

## **Lab 5 Lepidodendrales**

Jan 20, 2015

Quantity	Plant Material	Date planted	Days	Directions
	100 plastic petri dishes of washed agar, .5X	Jan 20, 2015		
	40 4" pots, labels, and sunshine mix, liter	Jan 20, 2015		
	5 species of fern spores to sow--COLLECT	Jan 20, 2015		
???	Fern gametophytes, some with sporophytes	Jan 20, 2015		
	Fern spores for students	Jan 20, 2015		
	Lycopodium, anything available	Jan 20, 2015		
	Sow fern spores	Jan 20, 2015		

## **Lab 6 Isoetes, Mold Cast Technique**

Jan 22, 2015

Quantity	Plant Material	Date planted	Days	Directions
	Any small plant for molding	Jan 22, 2015		
	Isoetes	Jan 22, 2015		
	Small plant parts for molding demo: petals,	Jan 22, 2015		

## **Lab 7 Psilophyta**

Jan 27, 2015

Quantity	Plant Material	Date planted	Days	Directions
2 pots	Psilotum & gametophytes	Jan 27, 2015		
	Psilotum nudum'Bunryuzan'	Jan 27, 2015		

## Lab 8 Spenophyta

Jan 29, 2013

Quantity	Plant Material	Date planted	Days	Directions
	Bring in lots of E. diffusum and one in	Jan 29, 2013		
	E. giganteum	Jan 29, 2013		
	E. giganteum B93.314	Jan 29, 2013		
	E. ramosissimum	Jan 29, 2013		
	E. ramosissimum B85.024 small, near	Jan 29, 2013		
2	Equisetum	Dec 15, 2012	45	Move to warm long days. Weier is good for this.
2	Equisetum diffusum strobili	Dec 20, 2012	40	Dig up and move into greenhouse.
	Equisetum--all available species and	Jan 29, 2013		

## Lab 9 Eusporangiate Ferns

Feb 3, 2015

Quantity	Plant Material	Date planted	Days	Directions
	Angiopteris pinnae	Feb 3, 2015		
	Angiopteris--lg fern in main room	Feb 3, 2015		
	Botrychium	Feb 3, 2015		
	Botrychium--in 2nd fern room B98.084	Feb 3, 2015		
	Danaea	Feb 3, 2015		
	Macroglossum--1st fern room B89.353	Feb 3, 2015		
	Marattia	Feb 3, 2015		
	Marattia fraxinea--2nd fern room B88.074	Feb 3, 2015		
	Ophioglossum	Feb 3, 2015		
2	Ophioglossum	Feb 3, 2015		
	Ophioglossum B59.137	Feb 3, 2015		
	Polypodium chunks	Feb 3, 2015		
	Polypodium plant chunks--lg, hanging in	Feb 3, 2015		

## Lab 10 Filicales

Feb 5, 2015

Quantity	Plant Material	Date planted	Days	Directions
	Adiantum	Feb 5, 2015		
	Asplenium	Feb 5, 2015		

	Asplenium, Cionidium	Feb 5, 2015	
	Cyrtomium	Feb 5, 2015	
	Davallia	Feb 5, 2015	
	Davallia--about 10 inches of rhizomes	Feb 5, 2015	
	Dennstaedtia	Feb 5, 2015	
	Dryopteris	Feb 5, 2015	
	Dryopteris, Cyrtomium, Woodwardia w/	Feb 5, 2015	
	Fern fronds showing soral and sporangial	Feb 5, 2015	
	FronDs of Polypodium and	Feb 5, 2015	
	Lygodium	Feb 5, 2015	
	Lygodium, Osmunda, Dennstaedtia,	Feb 5, 2015	
	Osmunda	Feb 5, 2015	
	Platycerium	Feb 5, 2015	
	Polypodium portions	Feb 5, 2015	
	Rhizomes of Hypolepis (or Polypodium)	Feb 5, 2015	
	Rumohra and Cystopteris	Feb 5, 2015	Can use different genera.
2 plants	Silverback Fern	Feb 5, 2015	Enter directions here
	Woodwardia	Feb 5, 2015	

## **Lab 11 Filicales, Marsileales, Salviniiales**

Feb 10, 2015

Quantity	Plant Material	Date planted	Days	Directions
	Azolla	Feb 10, 2015		
	Azolla, Marsilea, Pilularia, Regnellidium	Feb 10, 2015		
	Hypolepis rhizomes to section	Feb 10, 2015		
	Marsilea	Feb 10, 2015		
	Marsilea drummondii sporocarps	Feb 10, 2015		
	Pilularia-check 2 weeks ahead to be sure	Feb 10, 2015		
	Regnellidium--west of 61. check with Tim 2	Feb 10, 2015		
	Salvinia--in fern/orchid room and heat	Feb 10, 2015		

## **Lab 12 Seed Ferns And Cycads, Cycad Tour**

Feb 12, 2015

Quantity	Plant Material	Date planted	Days	Directions
	Bowenia (leaf like) B84.298	Feb 12, 2015		
	Dioon sp. B90.482	Feb 12, 2015		
	Encephalartos horridus (spikey one)	Feb 12, 2015		
	small Cycas revoluta B89.003	Feb 12, 2015		
	small Zamia	Feb 12, 2015		
	Stangeria B 89.006	Feb 12, 2015		
	Zamia pumila	Feb 12, 2015		

## **Lab 13 Cycadales And Ginkgo**

Feb 17, 2015

Quantity	Plant Material	Date planted	Days	Directions
24 seed	Cycad seed, large - no germinate	Feb 17, 2015		
1 cone	Cycad, female cones	Feb 17, 2015		
2	Ginkgo	Dec 29, 2014	50	Move to long days.
	Ginkgo--forced tree and 6or 7 18" branches	Feb 17, 2015		

## **Lab 14 Coniferales And Conifer Tour**

Feb 19, 2015

Quantity	Plant Material	Date planted	Days	Directions
	any potted conifers available, including	Feb 19, 2015		
	Araucaria	Feb 19, 2015		
	branches, with cones of: Abies	Feb 19, 2015		
	Calocedrus	Feb 19, 2015		
	Cedrus	Feb 19, 2015		
	Cupressus	Feb 19, 2015		
	Juniperus	Feb 19, 2015		
	lots of 1st and 2nd year cones	Feb 19, 2015		
	Metasequoia	Feb 19, 2015		
	Picea	Feb 19, 2015		
	Pinus coulteri	Feb 19, 2015		
	Pinus halepensis, 2-3 years of cones.	Feb 19, 2015		

Pinus sabiniana	Feb 19, 2015
Pinus torreyana	Feb 19, 2015
Podocarpus, C St bet 5th and 6th	Feb 19, 2015
Pseudotsuga	Feb 19, 2015
Sequoia	Feb 19, 2015
Sequoiadendron	Feb 19, 2015
Taxus	Feb 19, 2015
Thuja, by Mrak	Feb 19, 2015
Torreya, 25 yds west of desert bridge.	Feb 19, 2015

### **Lab 15 Coniferales**

Feb 24, 2015

Quantity	Plant Material	Date planted	Days	Directions
1/4 pound of	Pinyon pine seed	Feb 24, 2015		
3 - 4" pots	Pinyon pine seedlings	Dec 16, 2014	70	21 seed, refrigerate, wet paper towel

### **Lab 16 Gnetophyta And Greenhouse Tour**

Feb 26, 2015

Quantity	Plant Material	Date planted	Days	Directions
	Ephedra	Feb 26, 2015		
	Ephedra	Feb 26, 2015		
1	Gnetum	Feb 26, 2015		
1	Gnetum, cones if available	Feb 26, 2015		
1/4 pound of	Pinyon pine seed	Feb 26, 2015		
2 seedlings	Welwitschia seedlings with cotyledons	Dec 13, 2014	75	8 - rose pots, new MUC
	Welwitschia, mature plants, seedlings,	Feb 26, 2015		

### **Lab 17 Angiosperm Wood Anatomy and Floral Development - Stamens And Pollen**

Mar 3, 2015

Quantity	Plant Material	Date planted	Days	Directions
2 plants	Asclepias curassavica flowers	Mar 3, 2015		Enter directions here
4 - 5.5" pots	Bean flowers	Jan 25, 2015	37	3 seed/pot, MUC
	Clematis flowers	Mar 3, 2015		
2- 2 gallon pots	Corn in bloom	Dec 31, 2014	62	4 seed/pot, 2 pl/pot, MUC
2 - 5.5" pots	Helianthus flowers	Dec 28, 2014	65	4 seed/pot, 2pl/pot MUC

2	Impatiens w/pollen--yellow and red tubular	Mar 3, 2015		
2	Impatiens, simple pink flower.	Dec 3, 2014	90	4 cuttings
3 - 4" pots	Pea flowers	Jan 13, 2015	49	4 seed/pot, MUC
2 - 1 gallon	Tomato flowers	Dec 30, 2014	63	1 - 4"pot, 12 seeds
	Tradescantia	Mar 3, 2015		
	Tradescantia flowers w/pollen	Mar 3, 2015		

## **Lab 18 Angiosperm Reproduction - Embryo Sac And Embryogeny**

Mar 5, 2015

Quantity	Plant Material	Date planted	Days	Directions
2 - 6"pots	Capsella bursa-pastoris	Jan 22, 2015	42	2 - 6" pots, cover w/sand
2 - 6"pots	Capsella bursa-pastoris	Jan 8, 2015	56	2 - 6" pots, cover w/sand
2 - 6"pots	Capsella bursa-pastoris	Feb 5, 2015	28	2 - 6" pots, cover w/sand

## **Lab 19 Angiosperm Reproduction - Fruit And Seeds**

Mar 10, 2015

Quantity	Plant Material	Date planted	Days	Directions
	1 cantaloupe	Mar 10, 2015		
	1 eggplant	Mar 10, 2015		
	1 mango	Mar 10, 2015		
	1 papaya	Mar 10, 2015		
	1 pepper	Mar 10, 2015		
	1 pineapple--but a week early	Mar 10, 2015		
	10 oranges	Mar 10, 2015		
	2 avocados	Mar 10, 2015		
	2 cucumbers	Mar 10, 2015		
	2 nectarine or peach	Mar 10, 2015		
	2 pears	Mar 10, 2015		
	2 plums	Mar 10, 2015		
	4 bananas	Mar 10, 2015		
	4 kiwi	Mar 10, 2015		
20-30 seed	AꞤclepias sp. seed with dispersal fibers still	Mar 10, 2015		
	bag of apples	Mar 10, 2015		
?	Broad bean seed, Soak for 24 hours.	Mar 10, 2015		Enter directions here

	cherry tomatoes--bsk	Mar 10, 2015	
	coconut	Mar 10, 2015	
1	Corn ear	Mar 10, 2015	Purchase at store
?	Cotton seed, Soak for 24 hours.	Mar 10, 2015	Enter directions here
2 plants	Cucumber flowers	Mar 10, 2015	Enter directions here
?	Cucumber or melon seed, Soak for 24	Mar 10, 2015	Enter directions here
	dried figs--pkg. Aisle 7	Mar 10, 2015	
	get purchase order not to exceed \$75:	Mar 10, 2015	
	grapes, seeded if possible	Mar 10, 2015	
	green beans--handful	Mar 10, 2015	
	Interesting fruits from Tim & Doug	Mar 10, 2015	FRUITS AND SEEDS
	interesting fruits from Tim:Asclepias, Pop	Mar 10, 2015	
?	Lupine seed, Soak for 24 hours.	Mar 10, 2015	Enter directions here
	mixed nuts (purchased around Christmas)	Mar 10, 2015	
	okra, pickled (mild). Aisle 8	Mar 10, 2015	
?	Pea seed, SOAK FOR 24 HOURS.	Mar 10, 2015	
	peanuts--salted in bag. Aisle 7, Farmtown	Mar 10, 2015	
	pomegranate	Mar 10, 2015	
	raspberries or blackberries--bsk	Mar 10, 2015	
	Seeds: peas, kidney beans, corn radish	Mar 10, 2015	
	Seeds: Barley, Fava, Castor bean,	Mar 10, 2015	FRUITS AND SEEDS
	smoked almonds--can	Mar 10, 2015	
	snow peas--handful	Mar 10, 2015	
	strawberries--bsk	Mar 10, 2015	
	sunflower seeds, salted--bag. Aisle 7	Mar 10, 2015	

## Lab 20 Lab Final

Mar 12, 2015

Quantity	Plant Material	Date planted	Days	Directions
	Lab final, no plants requested	Mar 12, 2015		