

# Online Lab Preparation

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# History of Online Lab Preparation

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i.e. videos of the slide shows with voice-over



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For presentation in the lab, information was adapted into slide shows
- Eventually (2011) I started doing “**screencasts**”;  
i.e. videos of the slide shows with voice-over
- In the lab students would read documents or watch videos as they work

# History of Online Lab Preparation (continued)

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- Later, I *encouraged* students to read documents or watch videos before lab (2012)

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## History of Online Lab Preparation (continued)

- Later, I *encouraged* students to read documents or watch videos before lab (2012)
- Then (2013) I had students do a MyLS quiz on the videos or documents before the lab
- Now I no longer go through introductory material in lab

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- Students can review the introduction as much as they want

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- Once it's done correctly, it can be fine for years  
(Each year I only revise the ones that have problems)

# Format



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Before the lab, students

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- 1 *Read* online document(s) or *watch* online video(s)

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- ③ *Repeat* as necessary (up to 3 quiz attempts)

# Format

Before the lab, students

- ① *Read* online document(s) or *watch* online video(s)  
(Most videos are screencasts of text documents)
- ② *Answer* quiz questions on MyLearningSpace
- ③ *Repeat* as necessary (up to 3 quiz attempts)

Note: The quiz is typically open for a couple of days

# Results

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# Results

- At least 75% do each quiz  
(typically over 80%)
- Quiz averages are over 85%
- From surveys,
  - 40% prefer text documents
  - 20% prefer videos
  - 40% say preference *depends on the topic*

# Lab completion

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- In each section, I track:



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When the *first* group finishes

## Lab completion

- In each section, I track:
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**There can be a very slow group in some sections**

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  - The last group usually takes 2 to 2.5 times as long as the first group

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# History of Online Lab Preparation Benefits of Online Lab Preparation Format Results

	A	B	C	D	E	F	G	H	I	J
1										
2										
3		2012P								
4	1	30	36							
5		56	63							
6		55	65							
7										
8	2	45	39							
9		80	76							
10		60	60							
11										
12	3	20	26							
13		60	56							
14		06	00							
15										
16	4	30	22							
17		62	42							
18		08	45							
19										
20	5	36	42							
21		66	67							
22		67	70							
23										
24	6	30	56							
25										
26										
27										
28	7	37	39							
29		60	54							
30		70	64							
31										
32										
33	8	45	36							
34		76	52							
35		80	57							
36										
37										
38										
39										
40										
41										

Fall 2012; in week 6, some groups went over

# History of Online Lab Preparation

## Benefits of Online Lab Preparation

### Format

### Results

	A	B	C	D	E	F	G	H	I	J	K
1											
2											
3		2013W									
4	1	29	40	30	23						
5		60	70	50	48						
6		85	80	66	52						
7											
8	2	35		50	35						
9		80		70	70						
10											
11											
12	3	25	25	20	25						
13		60	65	60	55						
14		65	70	83							
15											
16											
17	4	40	27	30	40						
18		70	75	66	60						
19		87	83	68	75						
20											
21	5	40	50	40	42						
22		80	80	80	80						
23		80	80	80	80						
24	6	40	50	60	70						
25		80	80	80	80						
26		80	80	80	80						
27											
28	7	45	43	50	37						
29		80	75	75	73						
30		80	80	80	78						
31											
32	8	40	40	40	40						
33		60	60	60	60						
34		70	70	70	70						
35											
36											
37											
38											
39											
40											
41											

Winter 2013

# History of Online Lab Preparation

## Benefits of Online Lab Preparation

### Format

### Results

Handout\_jefferts.xls - LibreOffice Calc

	A	B	C	D	E	F	G	H	I	J	K
1											
2		2013F									
3	1	36	30		52						
4		60	40		60						
5		70	45		74						
6											
7	2	25	43		35						
8		60	65		70						
9		67	67		72						
10											
11											
12	3	21	27		28						
13		30	52		62						
14		55	58		65						
15											
16	4	10	37		30						
17		25	75		44						
18		60	75		55						
19											
20	5	37	44		35						
21		70	70		68						
22					73						
23											
24	6	30	45		37						
25		71	81								
26		77	80								
27											
28	7	37	47		40						
29		67	68		85						
30					85						
31											
32	8	16	30		37						
33		30	67								
34		60	80								
35											
36											
37											
38											
39											
40											
41											

Fall 2013; beginning of online quizzes

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### Results

	A	B	C	D	E	F	G	H	I	J	K
1											
2											
3		2014W									
4	1	30	20	25	41	35					
5		52	60	55	69	61					
6		52	60	55	72	65					
7											
8	2	43	30	15	40	37					
9		66	63	45	61	56					
10		60	70	60							73.6666
11											
12											
13	3	40	34	22	35	30					
14		64	63	36	55	60					
15		75	64	50	60	61					
16											
17	4	36	30	15	18	16					
18		65	64	50	65	54					
19		66	64	50	75	55					
20											
21	5	50	45	34	50	48					
22		74	60	60	60	102					
23		65	60	60	67	100					
24											
25	6	43	62	26	31	16					
26		64	64	60	48	60					
27		65	64	69	71	114					
28											
29	7	45	40	30	29	45					
30		60	60	71	61	72					
31		60	60	74	60	64					
32											
33	8	45	34	4	40	48					
34		60	56	60	60	60					
35		66	72	61	36						
36											
37											
38											
39											
40											
41											

Winter 2014

# History of Online Lab Preparation Benefits of Online Lab Preparation Format Results

The screenshot shows a LibreOffice Calc spreadsheet with the following data:

	A	B	C	D	E	F	G	H	I	J	K
1											
2		2014P									
3											
4	1	20	30								
5		56	56								
6		62	66								
7											
8	2	45	17								
9		61	66								
10		66	66								
11											
12											
13	3	26	26								
14		61	67								
15		62	69								
16											
17	4	32	17								
18		60	46								
19		70	53								
20											
21	5	29	30								
22		61	66								
23		74	66								
24											
25	6	54	46								
26		64	69								
27		68	66								
28											
29	7	26	30								
30		54	74								
31		66	66								
32											
33	8	21	26								
34		66	66								
35											
36											
37											
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39											
40											
41											

Fall 2014

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	A	B	C	D	E	F	G	H	I	J	K
1											
2		2012W									
3	1	33	42	60	43	50					
4		42	54	78	68	65					
5		54	62	80	70	69					
6											
7	2	39	37	37	32	35					
8		70	84	78	68	83					
9		60	66	60	35	67					
10											
11											
12	3	26	21	26	32	28					
13		60	62	73	54	60					
14		65	65	84	60	65					
15											
16	4	30	30	36	22	26					
17		54	75	74	75	80					
18		64	60	66	65	66					
19											
20	5	47	36	64	33	57					
21		44	44	44	64	66					
22		49	49	49	54	67					
23											
24	6	50	60	63	54	55					
25											
26		44	44	44	64	66					
27											
28	7	40	25	33	31	38					
29		64	40	44	77	70					
30		75	66	64	60	62					
31											
32											
33	H										
34											
35											
36											
37											
38											
39											
40											
41											

Winter 2015

# History of Online Lab Preparation

## Benefits of Online Lab Preparation

### Format

### Results

Handbook\_jefferts.xls - LibreOffice Calc

File Edit View Insert Format Sheet Data Tools Window Help

LibreOffice Sans 10

O2

	A	B	C	D	E	F	G	H	I	J	K
1											
2											
3											
4		2012P									
5		1	46	37							
6			50	67							
7			55	72							
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13			39	60							
14			60	64							
15											
16		4	30	29							
17			46	81							
18			72	80							
19											
20		5	30	47							
21			87	84							
22			86	86							
23											
24		6	33	50							
25			44	58							
26			44	58							
27											
28		7	27	55							
29			50	80							
30			50	80							
31											
32		8	30	55							
33			50	72							
34			55	74							
35											
36											
37											
38											
39											
40											
41											

Sheet 7 of 9

Find  Formatted Display  Match Case

Default | Average: Sum: 0 | 100%

Fall 2015; change to 2<sup>nd</sup> year course

# History of Online Lab Preparation

## Benefits of Online Lab Preparation

### Format Results

LibreOffice Calc spreadsheet showing a data table with columns A through Q and rows 1 through 41. The spreadsheet contains numerical data and some cells are highlighted in red. The interface includes a menu bar, toolbar, and status bar.

	A	B	C	D	E	F	G	H	I	J	L	M	N	O	P
1															
2		1	2	3	4	5	6	7	8	9	11				
3		200P													
4	1	45	40	30	35	30	35	40	38	40					
5		60	62	50	51	55	55	58	60	50					
6		60	62	60	51	55	58	57	61	55					
7															
8	2	40	30	31	25	30	30	34	35	40					
9		60	65	55	50	65	60	60	55	55					
10		75	80	55	53	75	65	72	65	60					
11															
12	3	15	20	20	27	34	40	45	38	30					
13		30	64	60	50	55	75	60	60	45					
14		50	66	63	62	60	60	62	62	45					
15															
16	4	15	15	30	27	30	30	35	31	15					
17		45	60	48	48	60	45	44	70	35					
18		37	77	72	63	65	55	48	72	35					
19															
20	5	30	30	42	33	28	32	27	38	20					
21		75	60	51	63	70	63	63	63	36					
22		75	79	53	65	75	65	64	75	50					
23															
24	6	40	22	41	34	45	33	35	35	38					
25		75	53	53	61	75	60	62	70	64					
26		75	48	67	62	68	75	72	71	48					
27															
28	7	30	20	32	27	45	33	40	33	30					
29		65	70	56	62	70	70	71	65	55					
30		68	68	68	68	75	75	75	75	62					
31															
32	8	25	23	22	31	35	45	33	33	30					
33		59	67	48	68	65	45	61	62	60					
34		59	61	52	72	75	75	65	70	55					
35															
36	9	2													
37	Completed														
38															
39															
40															
41															

Fall 2016