

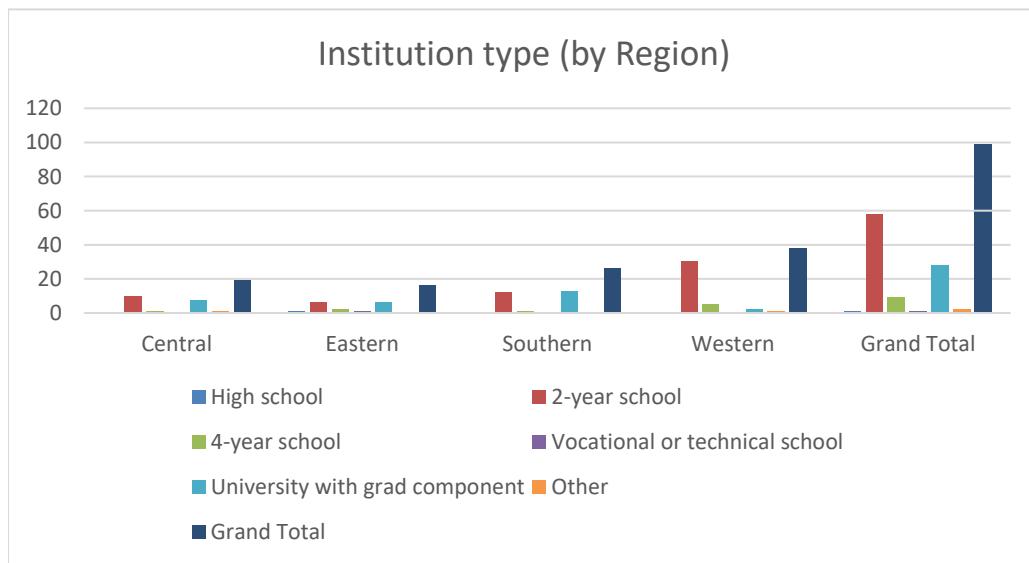
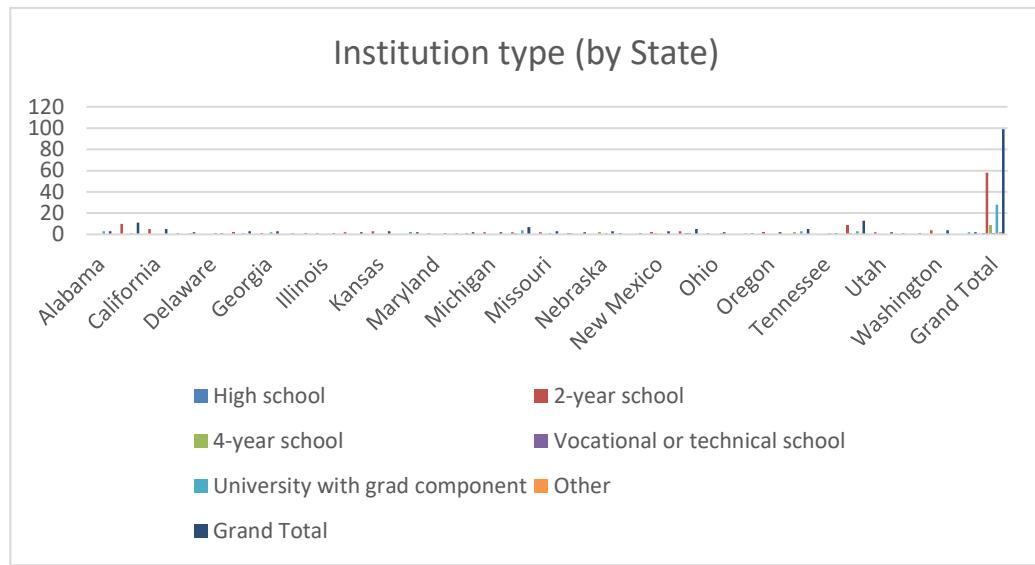
State	High school	2-year school	4-year school	Vocational or technical school		University with grad component	Other	Grand Total
Alabama						3		3
Arizona		10				1		11
California		5						5
Colorado		1					1	2
Delaware						1		1
Florida		2				1		3
Georgia		1				2		3
Idaho			1					1
Illinois		1						1
Indiana		2						2
Kansas		3						3
Kentucky						2		2
Maryland		1						1
Massachusetts		1				1		2
Michigan		2						2
Minnesota		2	1			4		7
Missouri		2				1		3
Montana		1	1					2
Nebraska			2			1		3
New Jersey	1							1
New Mexico		2	1					3
New York		3		1		1		5
Ohio		1					1	2
Oklahoma						1		1
Oregon		2						2
Pennsylvania			2			3		5
Tennessee						1		1
Texas		9	1			3		13

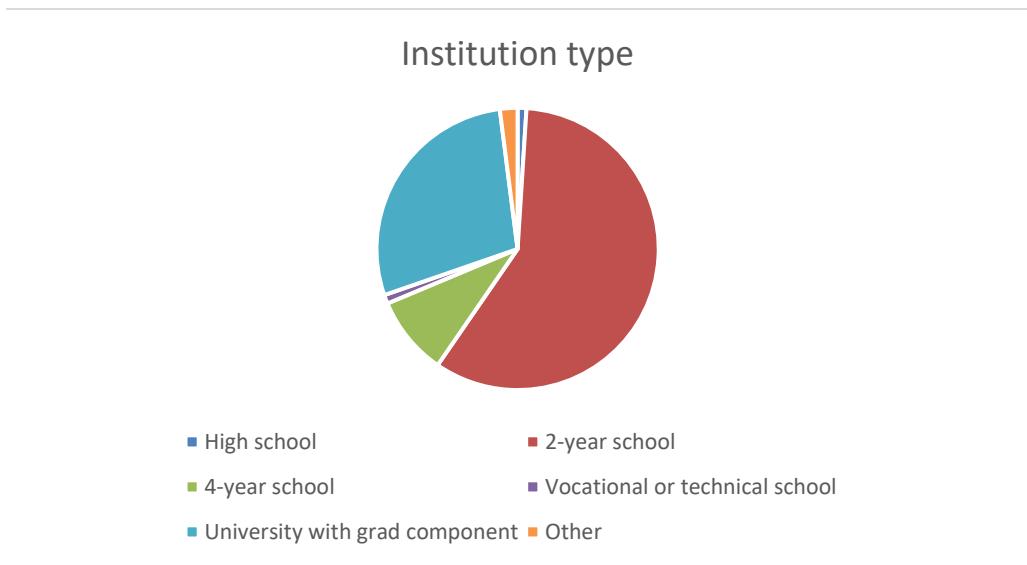
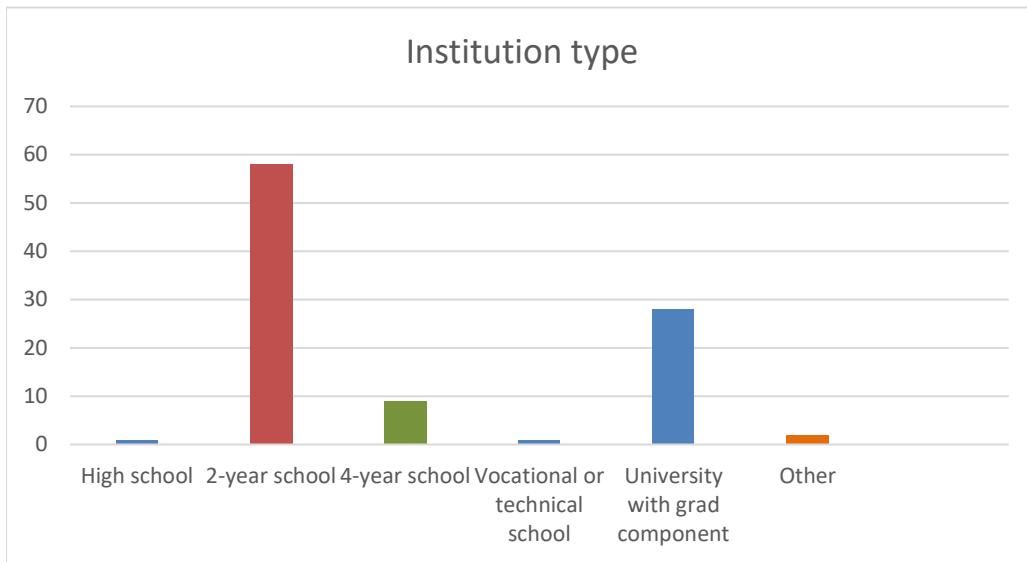
Utah	2	2
Virginia	1	1
Washington	4	4
Wisconsin	2	2
<b>Grand Total</b>	<b>1</b>	<b>58</b>

Region	High school	2-year school	4-year school	Postsecondary or technical with grad com	Other	Grand Total
Central		10	1	7	1	19
Eastern	1	6	2	1	6	16
Southern		12	1	13		26
Western		30	5	2	1	38
<b>Grand Total</b>	<b>1</b>	<b>58</b>	<b>9</b>	<b>1</b>	<b>28</b>	<b>99</b>

Region	High school	2-year school	4-year school	Postsecondary or technical with grad com	Other
<b>Grand Total</b>	<b>1</b>	<b>58</b>	<b>9</b>	<b>1</b>	<b>28</b>

Region	High school	2-year school	4-year school	Postsecondary or technical with grad com	Other
<b>Grand Total</b>	<b>1</b>	<b>58</b>	<b>9</b>	<b>1</b>	<b>28</b>





State	1 term anatomy & physiology course	1 term physiology only course	multi-term anatomy & physiology course	Other	Grand Total
Alabama			2	1	3
Arizona	2	1	8		11
California		3	1	1	5
Colorado	1		1		2
Delaware			1		1
Florida	1		2		3
Georgia			2	1	3
Idaho			1		1
Illinois			1		1
Indiana			2		2
Kansas		1	2		3
Kentucky			2		2
Maryland	1				1
Massachusetts	1			1	2
Michigan			2		2
Minnesota	1	2	3	1	7
Missouri		1	1	1	3
Montana			2		2
Nebraska		2	1		3
New Jersey			1		1
New Mexico			2	1	3
New York			5		5
Ohio			2		2
Oklahoma		1			1
Oregon			2		2
Pennsylvania		1	3	1	5
Tennessee			1		1
Texas	3	1	9		13

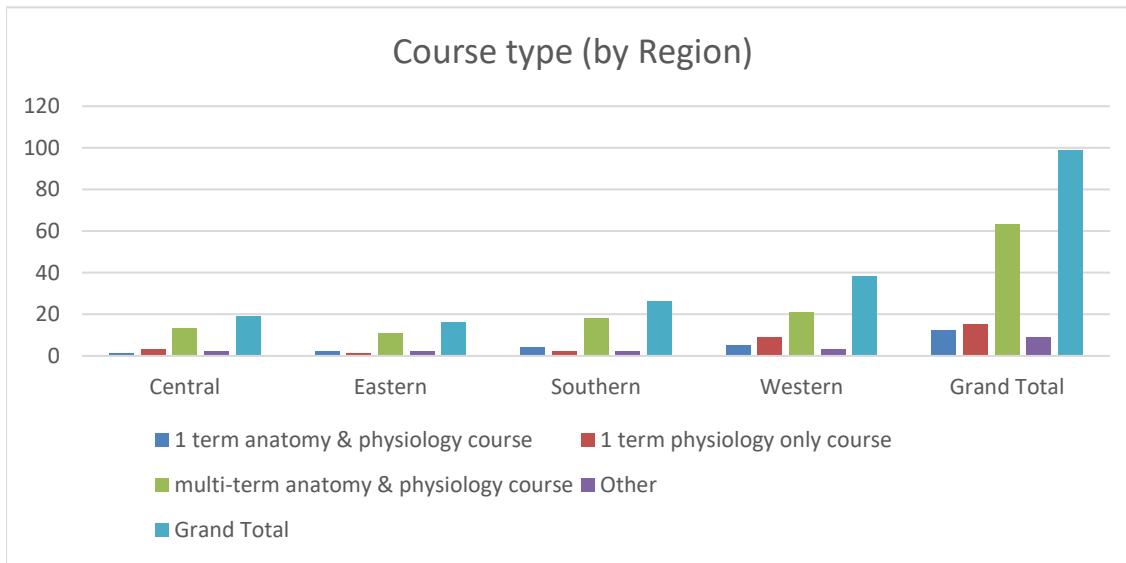
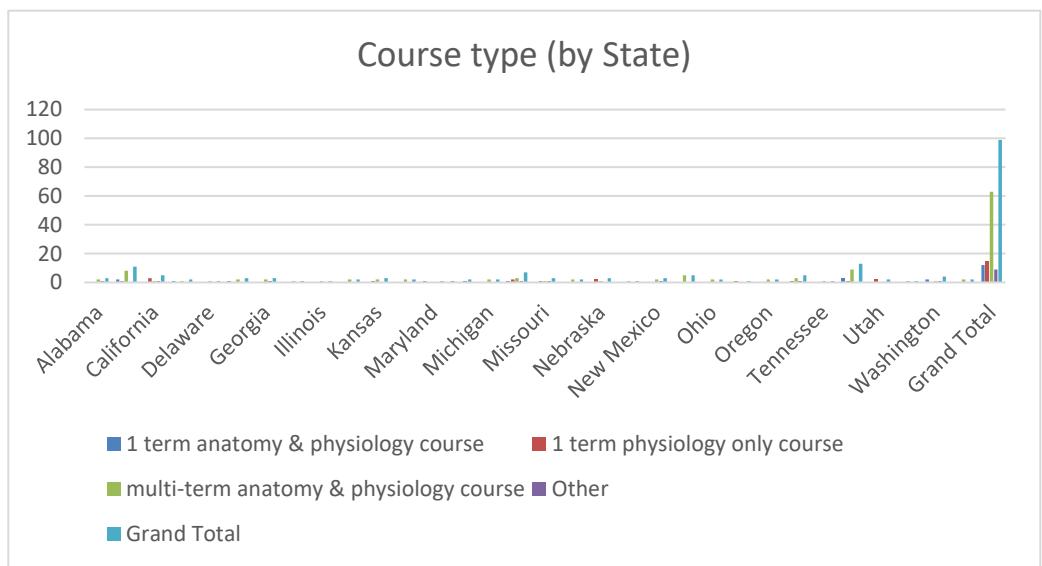
Utah	2				2
Virginia		1			1
Washington	2	1		1	4
Wisconsin		2			2
<b>Grand Total</b>	<b>12</b>	<b>15</b>	<b>63</b>	<b>9</b>	<b>99</b>

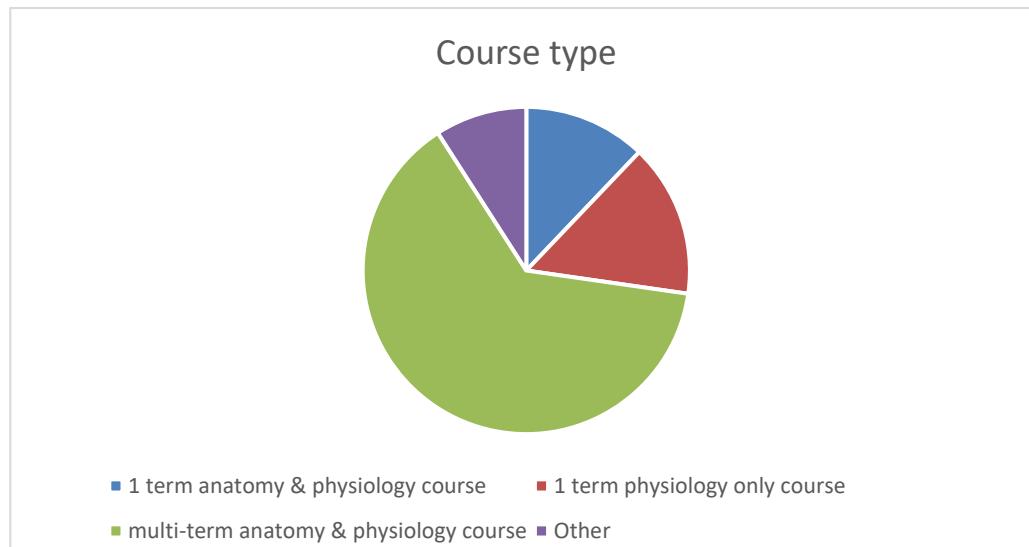
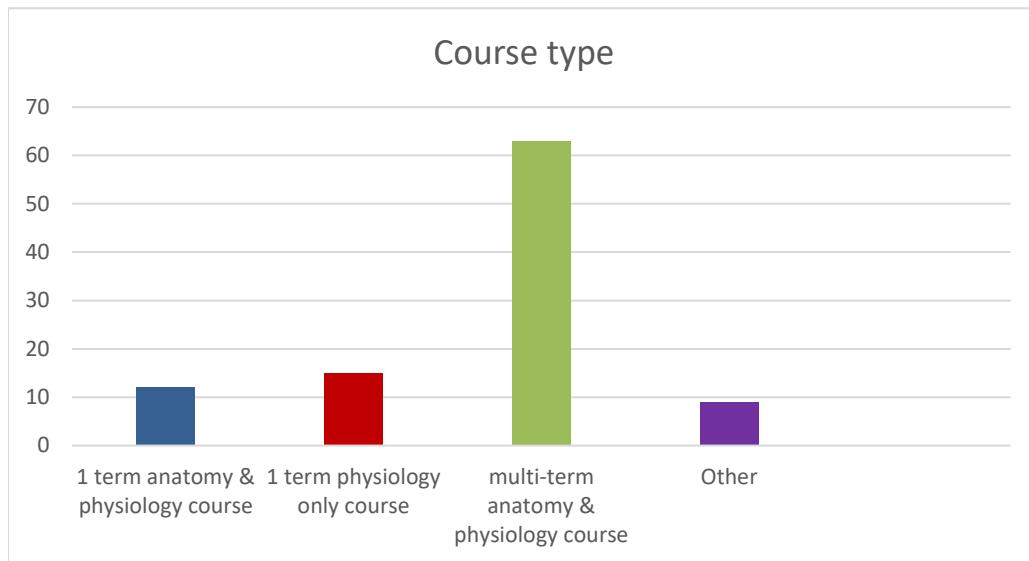
Region	1 term anatomy & physiology course	1 term physiology only course	multi-term anatomy & physiology course	Other	Grand Total
Central	1	3	13	2	19
Eastern	2	1	11	2	16
Southern	4	2	18	2	26
Western	5	9	21	3	38
<b>Grand Total</b>	<b>12</b>	<b>15</b>	<b>63</b>	<b>9</b>	<b>99</b>

Region	1 term anatomy & physiology course	1 term physiology only course	multi-term anatomy & physiology course	Other
<b>Grand Total</b>	<b>12</b>	<b>15</b>	<b>63</b>	<b>9</b>

Region	1 term anatomy & physiology course	1 term physiology only course	multi-term anatomy & physiology course	Other
<b>Grand Total</b>	<b>12</b>	<b>15</b>	<b>63</b>	<b>9</b>







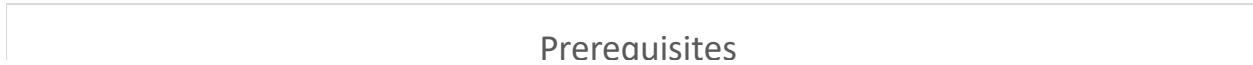
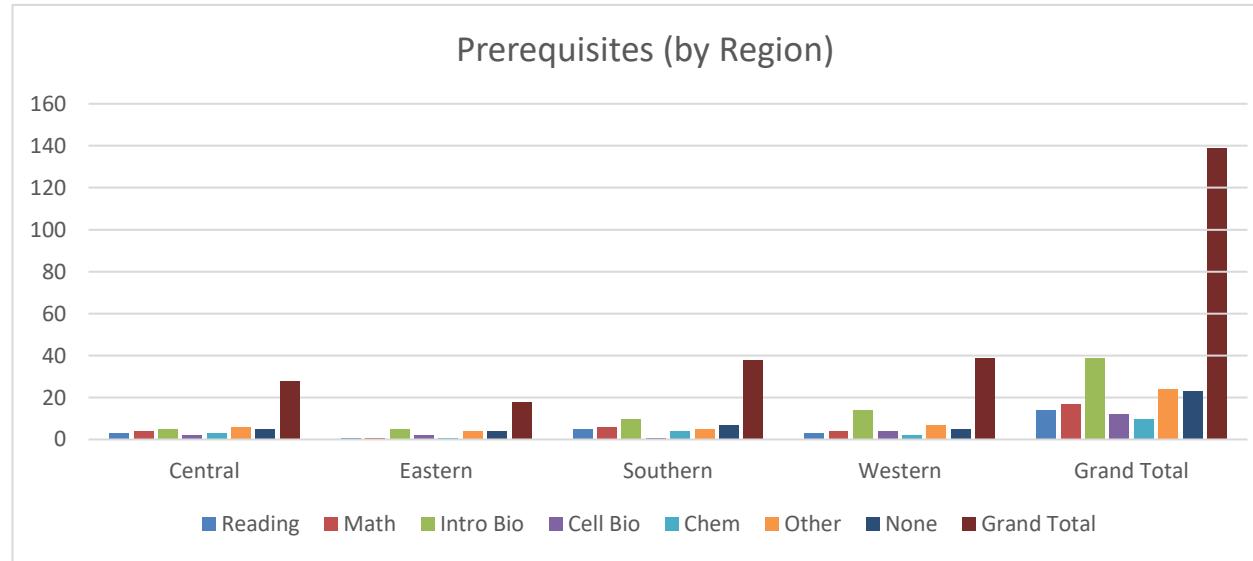
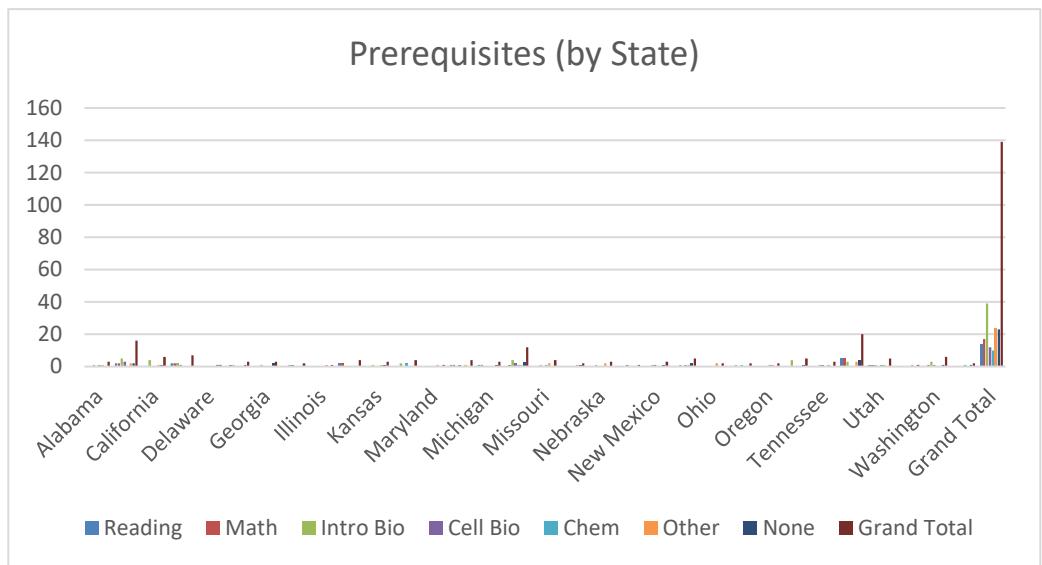
Most of the courses surveyed are multi-term A&P courses.

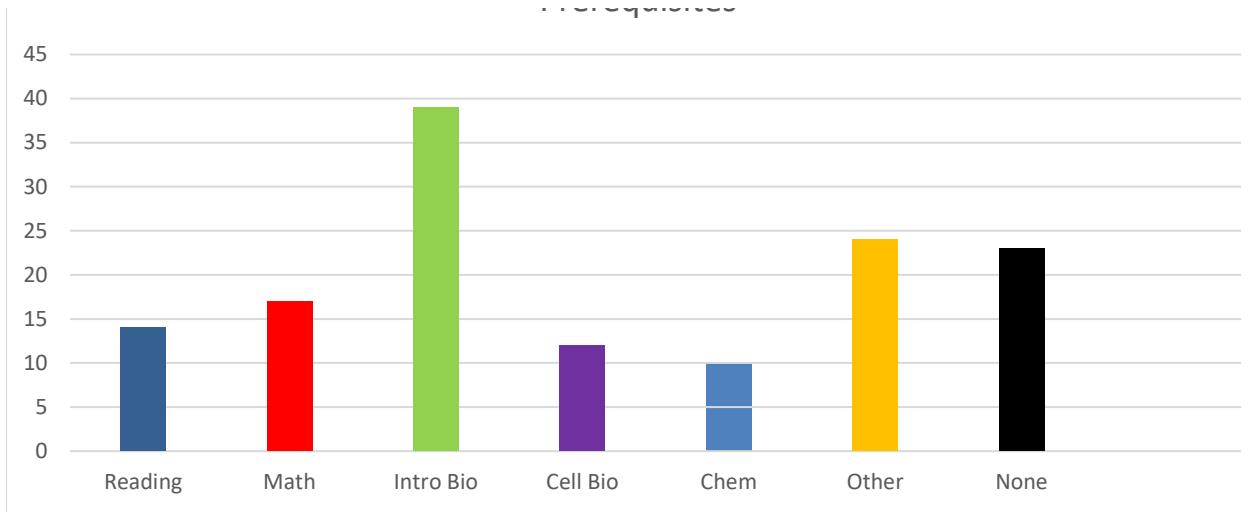
State	Reading	Math	Intro Bio	Cell Bio	Chem	Other	None	Grand Total
Alabama			1		1	1		3
Arizona	2	2	5	3		2	2	16
California			4			1	1	6
Colorado	2	2	2	1				7
Delaware							1	1
Florida		1	1				1	3
Georgia			1				2	3
Idaho			1	1				2
Illinois						1		1
Indiana	2	2						4
Kansas			1			1	1	3
Kentucky			2		2			4
Maryland						1		1
Massachusetts	1	1		1		1		4
Michigan	1	1					1	3
Minnesota		1	4	2	1	1	3	12
Missouri			1		1	2		4
Montana						1	1	2
Nebraska			1			2		3
New Jersey				1				1
New Mexico			1	1			1	3
New York			1		1	1	2	5
Ohio						2		2
Oklahoma			1		1			2
Oregon					1	1		2
Pennsylvania			4				1	5
Tennessee			1	1		1		3
Texas	5	5	3			3	4	20
Utah	1	1	1		1	1		5
Virginia						1		1
Washington		1	3	1			1	6

Wisconsin				1		1		2
<b>Grand Total</b>	<b>14</b>	<b>17</b>	<b>39</b>	<b>12</b>	<b>10</b>	<b>24</b>	<b>23</b>	<b>139</b>

Region	Reading	Math	Intro Bio	Cell Bio	Chem	Other	None	Grand Total
Central	3	4	5	2	3	6	5	28
Eastern	1	1	5	2	1	4	4	18
Southern	5	6	10	1	4	5	7	38
Western	3	4	14	4	2	7	5	39
<b>Grand Total</b>	<b>14</b>	<b>17</b>	<b>39</b>	<b>12</b>	<b>10</b>	<b>24</b>	<b>23</b>	<b>139</b>

Prereq	Reading	Math	Intro Bio	Cell Bio	Chem	Other	None
<b>Grand Total</b>	<b>14</b>	<b>17</b>	<b>39</b>	<b>12</b>	<b>10</b>	<b>24</b>	<b>23</b>





80% of the courses have some kind of prerequisite.

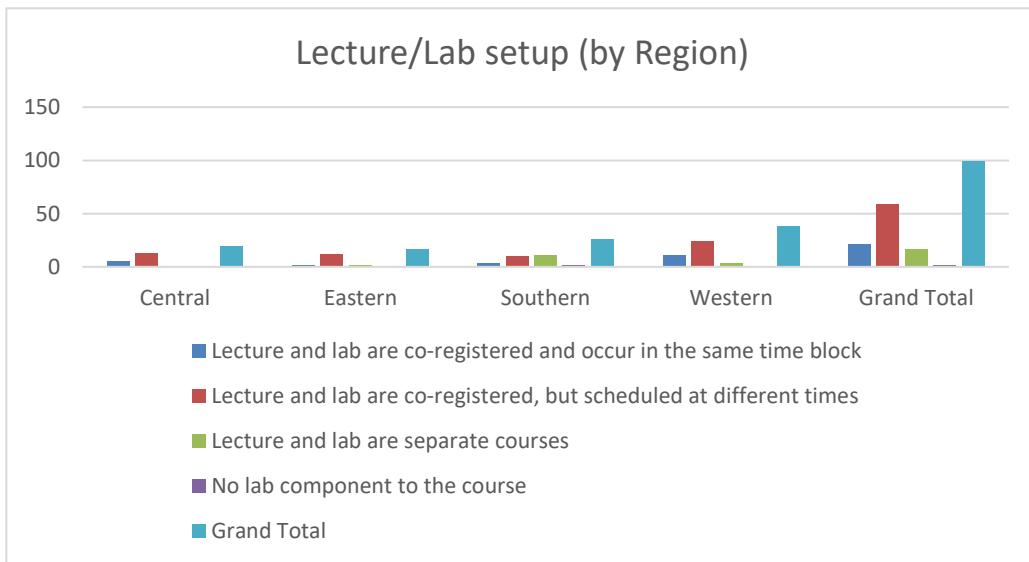
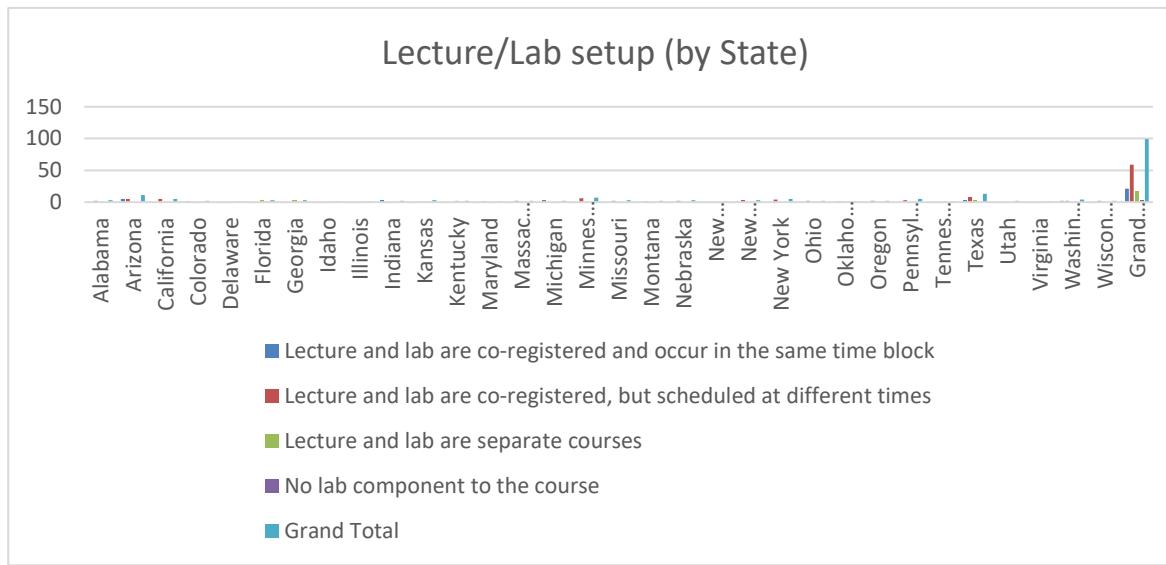
Some courses have multiple prerequisites.

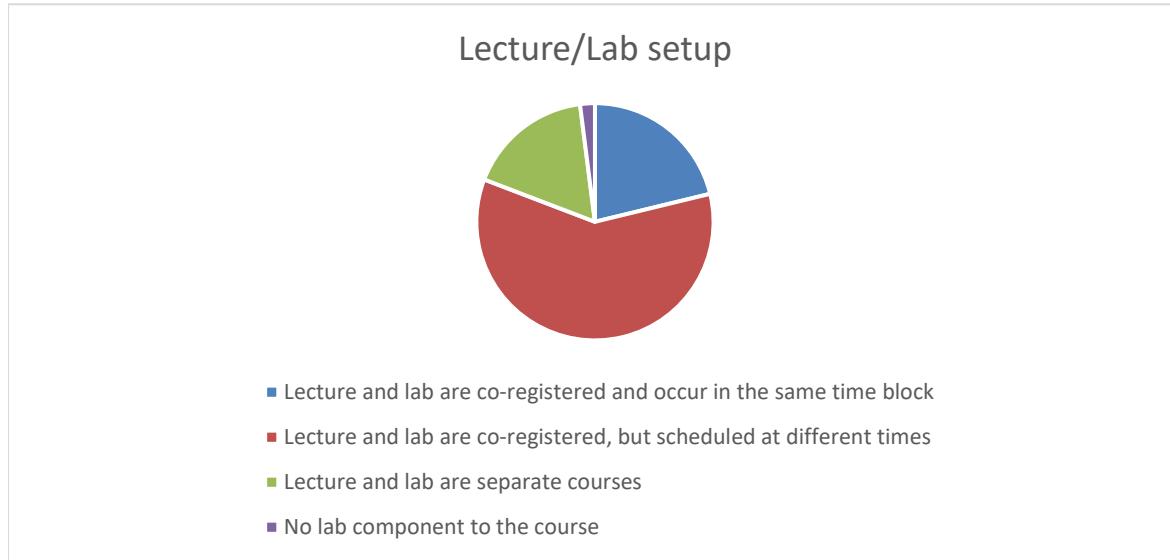
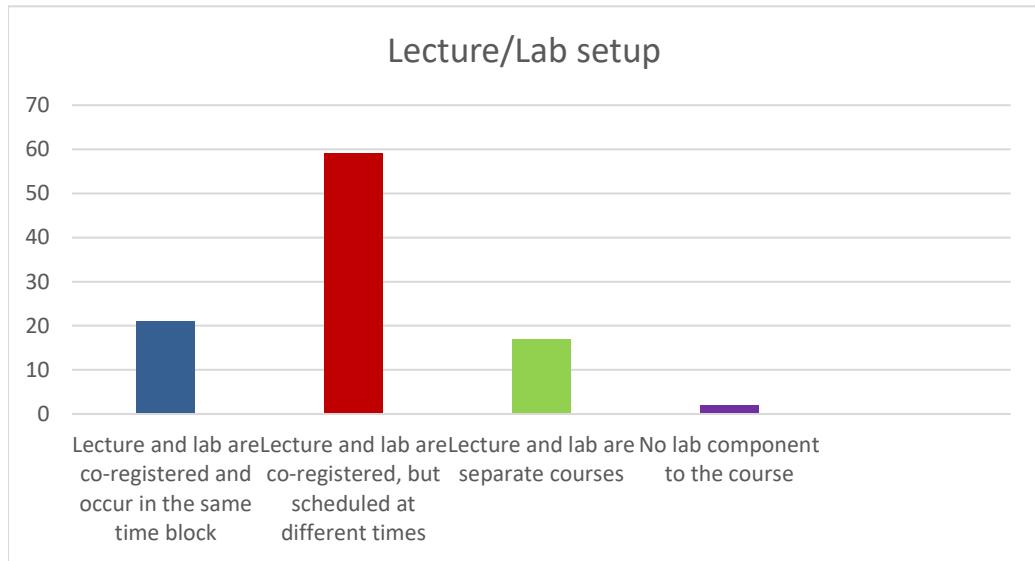
State	Lecture and lab are co-registered and occur in the same time block	Lecture and lab are co-registered, but scheduled at different times	Lecture and lab are separate courses	No lab component to the course	Grand Total
Alabama		2		1	3
Arizona	5	5	1		11
California		5			5
Colorado	1	1			2
Delaware		1			1
Florida			3		3
Georgia			3		3
Idaho		1			1
Illinois		1			1
Indiana	2				2
Kansas	1	1	1		3
Kentucky			2		2
Maryland		1			1
Massachusetts		2			2
Michigan	2				2
Minnesota		6	1		7
Missouri	1	2			3
Montana	1	1			2
Nebraska	1	2			3
New Jersey	1				1
New Mexico		3			3
New York		4	1		5
Ohio		2			2
Oklahoma		1			1
Oregon		2			2
Pennsylvania	1	3	1		5
Tennessee				1	1

Texas	3	7	3	13
Utah		1	1	2
Virginia		1		1
Washington	2	2		4
Wisconsin		2		2
<b>Grand Total</b>	<b>21</b>	<b>59</b>	<b>17</b>	<b>2</b>
				<b>99</b>

Region	Lecture and lab are co-registered and occur in the same time block	Lecture and lab are co-registered, but scheduled at different times	Lecture and lab are separate courses	No lab component to the course	Grand Total
Central	5	13	1		19
Eastern	2	12	2		16
Southern	3	10	11	2	26
Western	11	24	3		38
<b>Grand Total</b>	<b>21</b>	<b>59</b>	<b>17</b>	<b>2</b>	<b>99</b>

Lecture/Lab	Lecture and lab are co-registered and occur in the same time block	Lecture and lab are co-registered, but scheduled at different times	Lecture and lab are separate courses	No lab component to the course
<b>Grand Total</b>	<b>21</b>	<b>59</b>	<b>17</b>	<b>2</b>





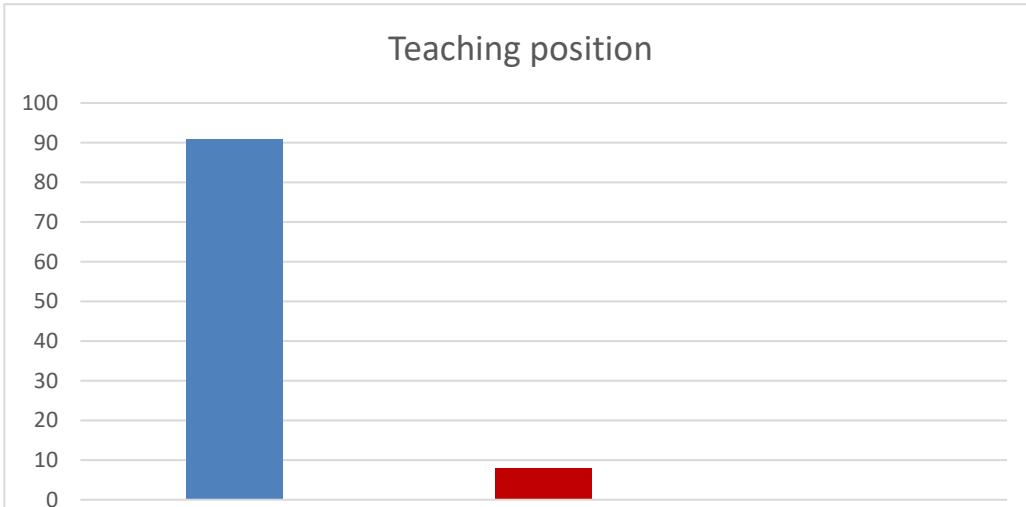
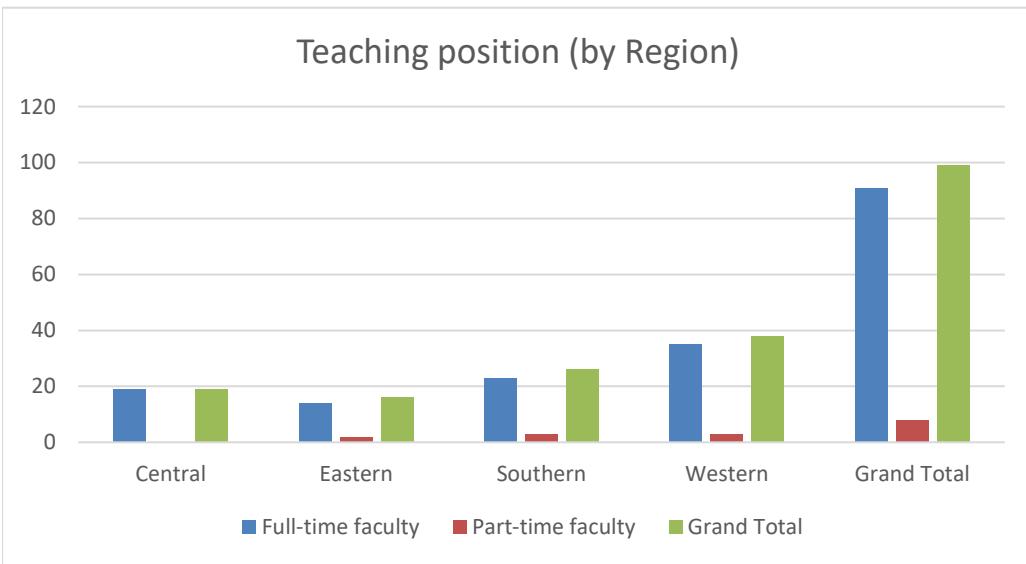
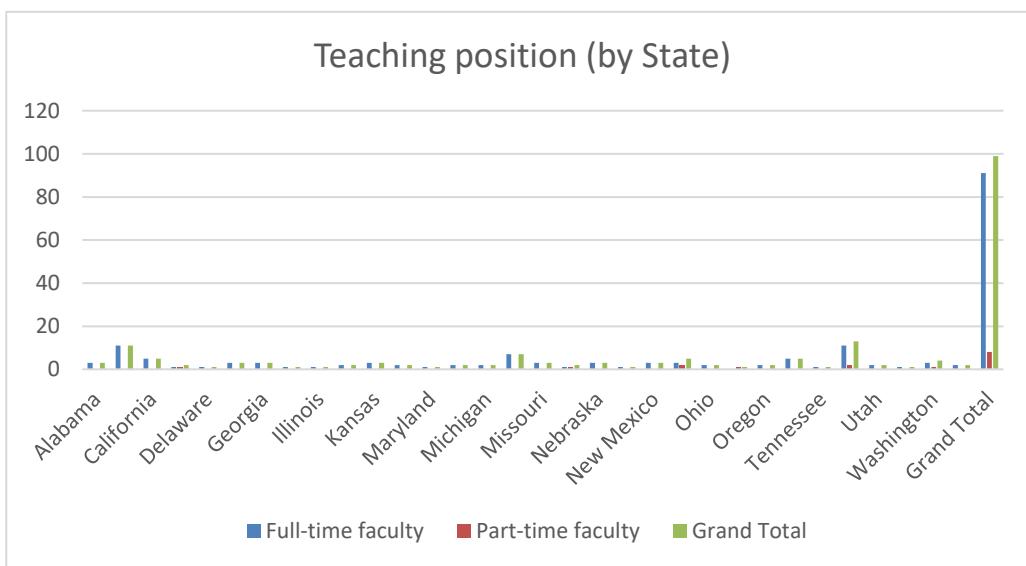
Most courses are co-registered.

There is diversity in scheduling lecture and lab.

State	Full-time faculty	Part-time faculty	Grand Total
Alabama	3		3
Arizona	11		11
California	5		5
Colorado	1	1	2
Delaware	1		1
Florida	3		3
Georgia	3		3
Idaho	1		1
Illinois	1		1
Indiana	2		2
Kansas	3		3
Kentucky	2		2
Maryland	1		1
Massachusetts	2		2
Michigan	2		2
Minnesota	7		7
Missouri	3		3
Montana	1	1	2
Nebraska	3		3
New Jersey	1		1
New Mexico	3		3
New York	3	2	5
Ohio	2		2
Oklahoma		1	1
Oregon	2		2
Pennsylvania	5		5
Tennessee	1		1
Texas	11	2	13
Utah	2		2
Virginia	1		1
Washington	3	1	4
Wisconsin	2		2
<b>Grand Total</b>	<b>91</b>	<b>8</b>	<b>99</b>

Region	Full-time faculty	Part-time faculty	Grand Total
Central	19		19
Eastern	14	2	16
Southern	23	3	26
Western	35	3	38
<b>Grand Total</b>	<b>91</b>	<b>8</b>	<b>99</b>

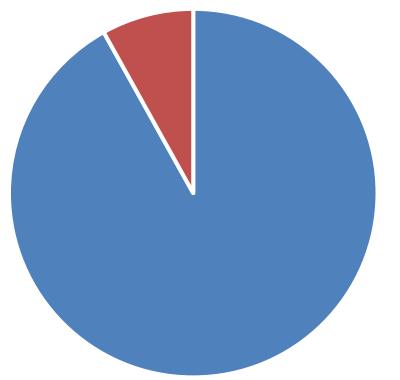
<b>Teaching pos.</b>	<b>Full-time faculty</b>	<b>Part-time faculty</b>
<b>Grand Total</b>	<b>91</b>	<b>8</b>



Full-time faculty

Part-time faculty

Teaching position



Most of the respondents are full-time faculty.

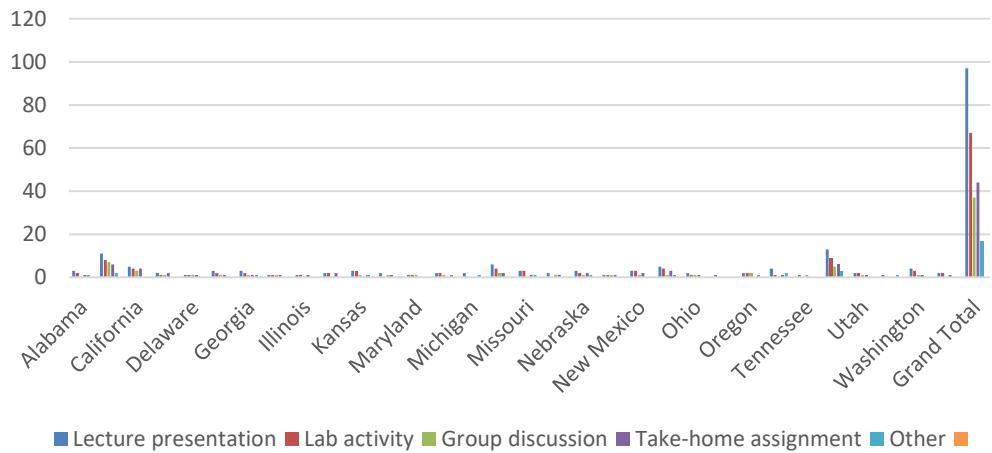
State	Lecture presentation	Lab activity	Group discussion	Take-home assignment	Other
Alabama	3	2		1	1
Arizona	11	8	7	6	2
California	5	4	3	4	
Colorado	2	1	1	2	
Delaware	1	1	1	1	
Florida	3	2	1	1	
Georgia	3	2	1	1	1
Idaho	1	1	1	1	
Illinois	1	1		1	
Indiana	2	2		2	
Kansas	3	3	1		1
Kentucky	2		1	1	
Maryland	1	1	1		
Massachusetts	2	2	1		1
Michigan	2				1
Minnesota	6	4	2	2	
Missouri	3	3		1	1
Montana	2		1	1	
Nebraska	3	2	1	2	1
New Jersey	1	1	1	1	
New Mexico	3	3	1	2	
New York	5	4	1	3	1
Ohio	2	1	1	1	
Oklahoma	1				
Oregon	2	2	2		1
Pennsylvania	4	1		1	2
Tennessee	1		1		
Texas	13	9	5	6	3
Utah	2	2	1	1	

Virginia	1				1
Washington	4	3	1	1	
Wisconsin	2	2		1	
<b>Grand Total</b>	<b>97</b>	<b>67</b>	<b>37</b>	<b>44</b>	<b>17</b>

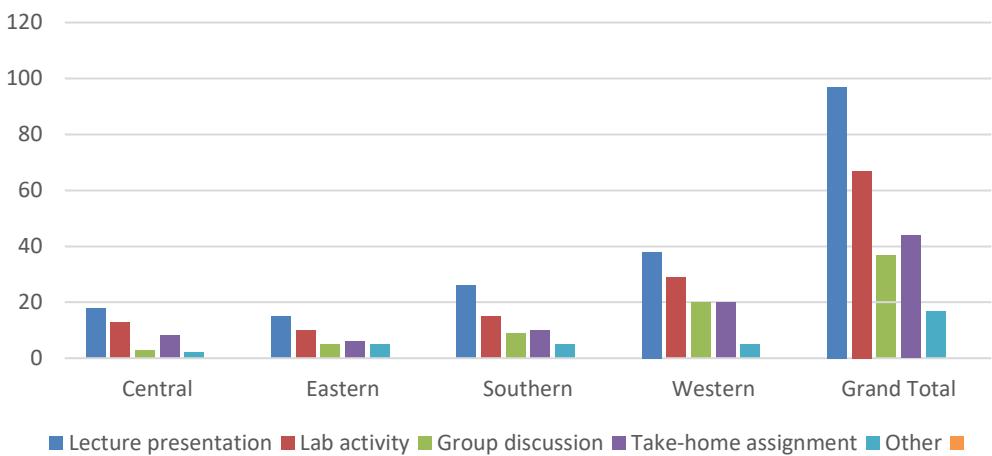
Region	Lecture presentation	Lab activity	Group discussion	Take-home assignment	Other
Central	18	13	3	8	2
Eastern	15	10	5	6	5
Southern	26	15	9	10	5
Western	38	29	20	20	5
<b>Grand Total</b>	<b>97</b>	<b>67</b>	<b>37</b>	<b>44</b>	<b>17</b>

Presented	Lecture presentation	Lab activity	Group discussion	Take-home assignment	Other
<b>Grand Total</b>	<b>97</b>	<b>67</b>	<b>37</b>	<b>44</b>	<b>17</b>

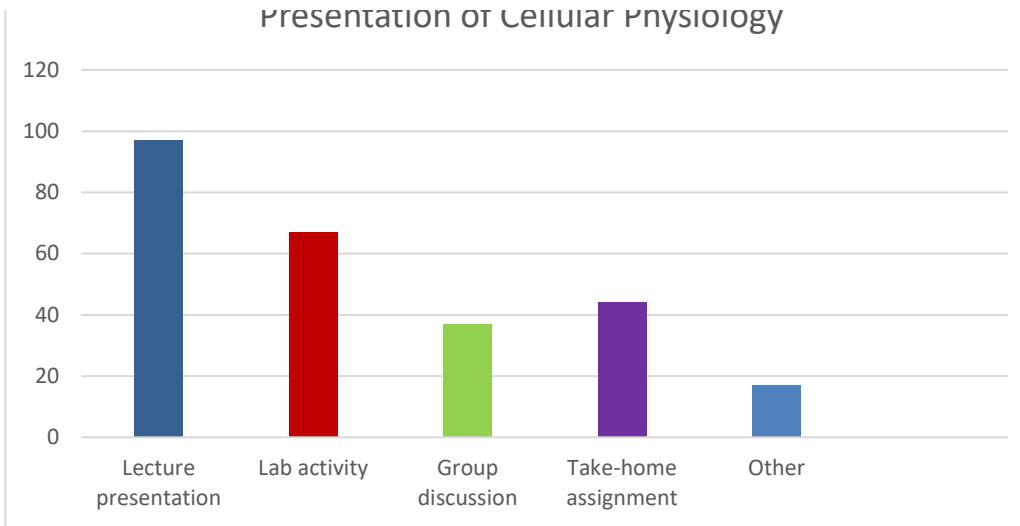
### Presentation of Cell Physio (by State)



### Presentation of Cell Physio (by Region)



### Presentation of Cellular Physiology



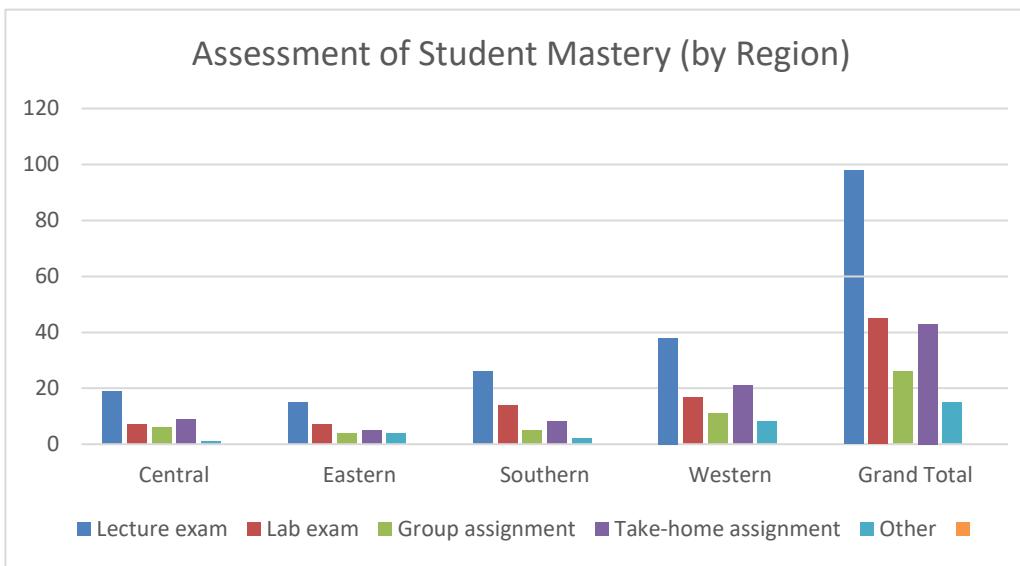
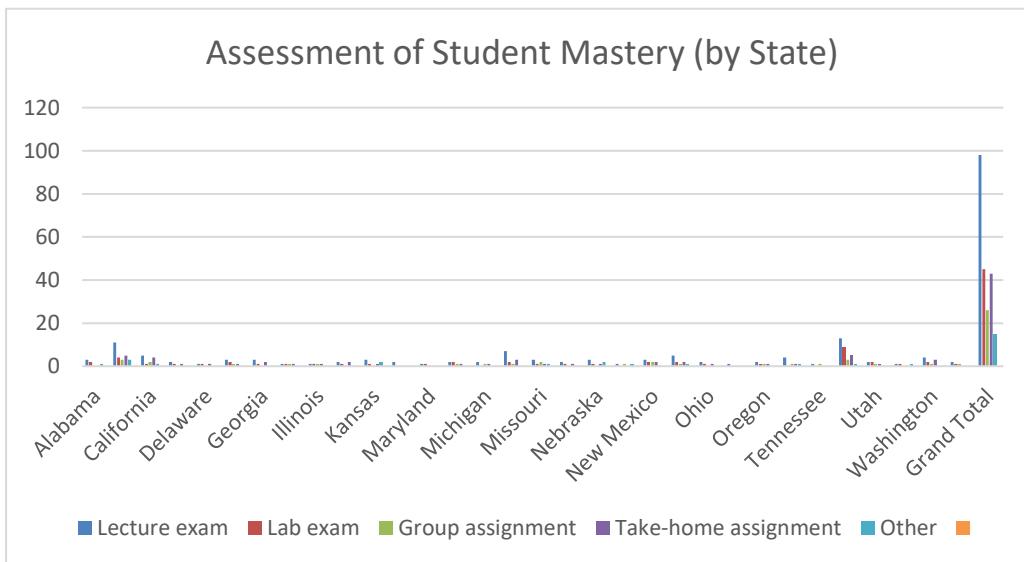
Cellular physiology (specifically membrane transport) is covered in some way.

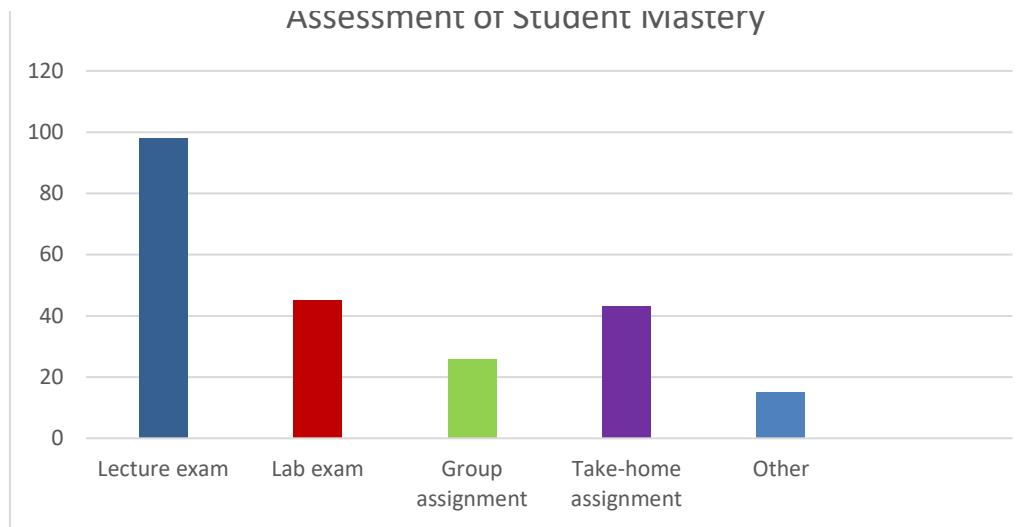
State	Lecture exam	Lab exam	Group assignment	Take-home assignment	Other
Alabama	3	2			1
Arizona	11	4	3	5	3
California	5	1	2	4	1
Colorado	2	1		1	
Delaware	1	1		1	
Florida	3	2	1	1	
Georgia	3	1		2	
Idaho	1	1	1	1	
Illinois	1	1	1	1	
Indiana	2	1		2	
Kansas	3	1		1	2
Kentucky	2				
Maryland	1	1			
Massachusetts	2	2	1	1	
Michigan	2		1	1	
Minnesota	7	2	1	3	
Missouri	3	1	2	1	1
Montana	2	1		1	
Nebraska	3	1		1	2
New Jersey	1		1		1
New Mexico	3	2	2	2	
New York	5	2	1	2	1
Ohio	2	1		1	
Oklahoma	1				
Oregon	2	1	1	1	
Pennsylvania	4		1	1	1
Tennessee	1		1		
Texas	13	9	3	5	1
Utah	2	2	1	1	

Virginia	1	1			1
Washington	4	2	1	3	
Wisconsin	2	1	1		
<b>Grand Total</b>	<b>98</b>	<b>45</b>	<b>26</b>	<b>43</b>	<b>15</b>

Region	Lecture exam	Lab exam	Group assignment	Take-home assignment	Other
Central	19	7	6	9	1
Eastern	15	7	4	5	4
Southern	26	14	5	8	2
Western	38	17	11	21	8
<b>Grand Total</b>	<b>98</b>	<b>45</b>	<b>26</b>	<b>43</b>	<b>15</b>

Mastery	Lecture exam	Lab exam	Group assignment	Take-home assignment	Other
<b>Grand Total</b>	<b>98</b>	<b>45</b>	<b>26</b>	<b>43</b>	<b>15</b>





Most assessment is through lecture exams.

State	Face to Face (F2F) lecture only, no lab	Online lecture only, no lab	Hybrid (combination of F2F and online) lecture, no lab	F2F lecture, F2F lab
Alabama	1		3	2
Arizona			11	10
California	1		5	4
Colorado			2	2
Delaware			1	1
Florida			3	3
Georgia			3	3
Idaho	1		1	
Illinois			1	1
Indiana	1		2	1
Kansas		1	3	2
Kentucky			2	2
Maryland			1	1
Massachusetts			2	2
Michigan			2	2
Minnesota	2		7	4
Missouri			3	3
Montana			2	2
Nebraska			3	3
New Jersey			1	1
New Mexico	1		3	2
New York	1		5	4
Ohio			2	2
Oklahoma			1	1
Oregon			2	2
Pennsylvania	1		5	4
Tennessee	1		1	
Texas	2		13	11
Utah			2	2
Virginia			1	1
Washington			4	4
Wisconsin			2	2
<b>Grand Total</b>	<b>12</b>	<b>1</b>	<b>99</b>	<b>84</b>

Region	Face to Face (F2F) lecture only, no lab	Online lecture only, no lab	Hybrid (combination of F2F and online) lecture, no lab	F2F lecture, F2F lab
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Central	3	0	19	15
Eastern	2	0	16	14
Southern	4	0	26	22
Western	3	1	38	33
<b>Grand Total</b>	<b>12</b>	<b>1</b>	<b>99</b>	<b>84</b>

	Face to Face (F2F) lecture only, no lab	Online lecture only, no lab	Hybrid (combination of F2F and online) lecture, no lab	F2F lecture, F2F lab
Pre-COVID				
<b>Grand Total</b>	<b>12</b>	<b>1</b>	<b>99</b>	<b>84</b>

	Face to Face (F2F) lecture only, no lab	Online lecture only, no lab	Hybrid (combination of F2F and online) lecture, no lab	F2F lecture, F2F lab
Pre-COVID				
<b>Grand Total</b>	<b>12</b>	<b>1</b>	<b>99</b>	<b>84</b>

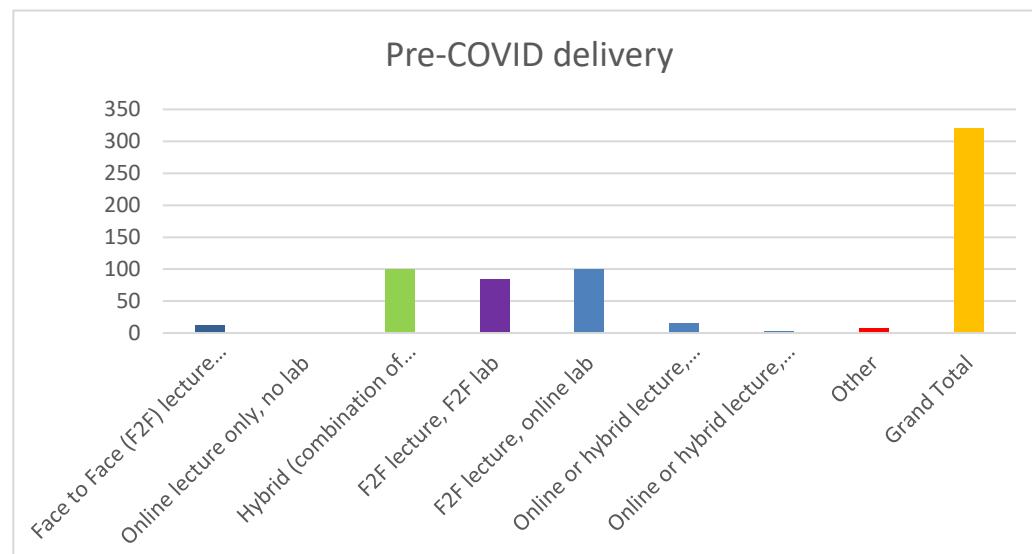
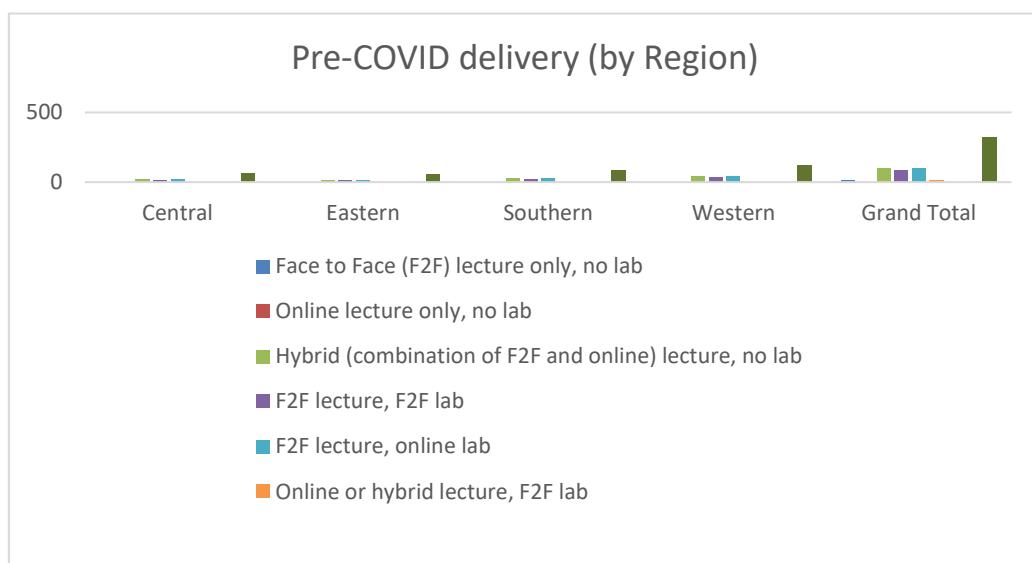
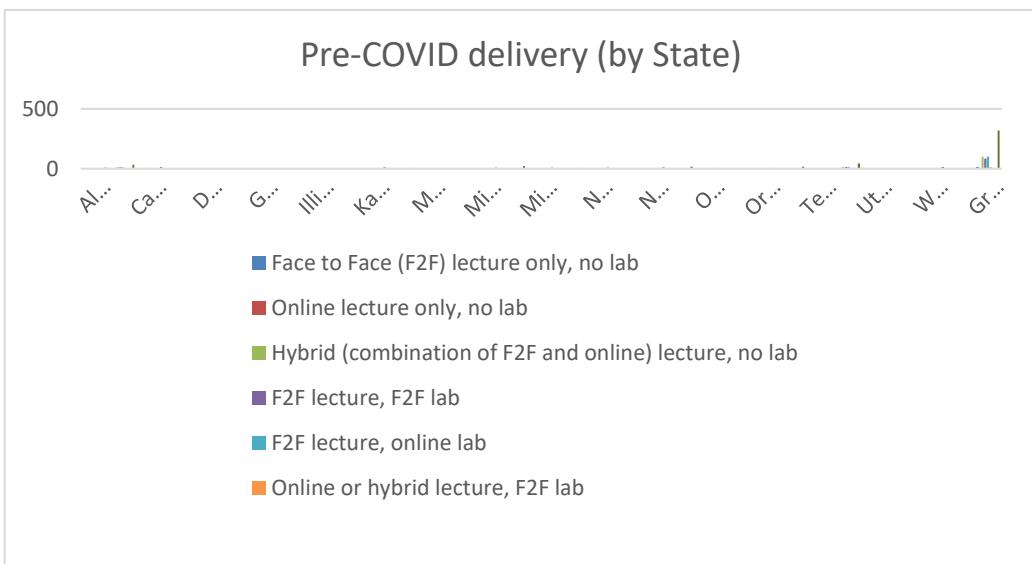
<b>F2F lecture, online lab</b>	<b>Online or hybrid lecture, F2F lab</b>	<b>Online or hybrid lecture, online lab</b>	<b>Other</b>	<b>Grand Total</b>
3				9
11	1		1	34
5				15
2				6
1				3
3				9
3				9
1				3
1				3
2				6
3			1	10
2			1	7
1	1			4
2				6
2	2	1		9
7	1		1	22
3				9
2				6
3				9
1				3
3	1		1	11
5	1	1		17
2				6
1				3
2	1			7
5		1		16
1				3
13	5			44
2			1	7
1				3
4	2			14
2			1	7
<b>99</b>	<b>15</b>	<b>3</b>	<b>7</b>	<b>320</b>

<b>F2F lecture, online lab</b>	<b>Online or hybrid lecture, F2F lab</b>	<b>Online or hybrid lecture, online lab</b>	<b>Other</b>	<b>Grand Total</b>
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19	3	1	2	62
16	2	2	0	52
26	5	0	1	84
38	5	0	4	122
<b>99</b>	<b>15</b>	<b>3</b>	<b>7</b>	<b>320</b>

F2F lecture, online lab	Online or hybrid lecture, F2F lab	Online or hybrid lecture, online lab	Other	Grand Total
<b>99</b>	<b>15</b>	<b>3</b>	<b>7</b>	<b>320</b>

F2F lecture, online lab	Online or hybrid lecture, F2F lab	Online or hybrid lecture, online lab	Other
<b>99</b>	<b>15</b>	<b>3</b>	<b>7</b>



Most courses, pre-COVID, were F2F.

### Pre-COVID



- Face to Face (F2F) lecture only, no lab
- Online lecture only, no lab
- Hybrid (combination of F2F and online) lecture, no lab
- F2F lecture, F2F lab
- F2F lecture, online lab
- Online or hybrid lecture, F2F lab

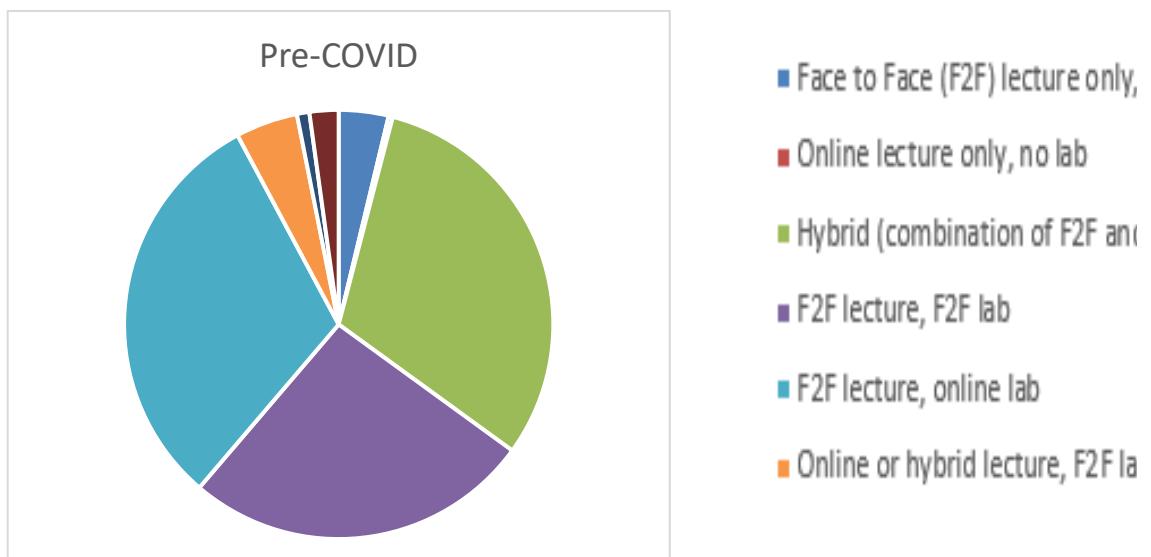
State	Face to Face (F2F) lecture only, no lab	Online lecture only, no lab	Hybrid (combination of F2F and online) lecture, no lab	F2F lecture, F2F lab
Alabama	3			
Arizona	11			1
California	5			
Colorado	2			
Delaware	1		1	1
Florida	3			
Georgia	3			1
Idaho	1			
Illinois	1			
Indiana	2			1
Kansas	3	1		
Kentucky	2			
Maryland	1			
Massachusetts	2			
Michigan	2			
Minnesota	7	2		
Missouri	3			
Montana	2			1
Nebraska	3			1
New Jersey	1			
New Mexico	3			1
New York	5			
Ohio	2			
Oklahoma	1			
Oregon	2			
Pennsylvania	5	1		
Tennessee	1	1		
Texas	13	2	1	1
Utah	2			1
Virginia	1		1	
Washington	4	1		
Wisconsin	2			
<b>Grand Total</b>	<b>99</b>	<b>8</b>	<b>3</b>	<b>9</b>

Region	Face to Face (F2F) lecture only, no lab	Online lecture only, no lab	Hybrid (combination of F2F and online) lecture, no lab	F2F lecture, F2F lab
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Central	19	2	0	1
Eastern	16	1	2	1
Southern	26	3	1	2
Western	38	2	0	5
<b>Grand Total</b>	<b>99</b>	<b>8</b>	<b>3</b>	<b>9</b>

Height of COVID	Face to Face (F2F)	Online lecture only, no lab	Hybrid (combination of F2F and online) lecture, no lab	F2F lecture, F2F lab
	lecture only, no lab	no lab	lecture, no lab	
<b>Grand Total</b>	<b>99</b>	<b>8</b>	<b>3</b>	<b>9</b>

Height of COVID	Face to Face (F2F)	Online lecture only, no lab	Hybrid (combination of F2F and online) lecture, no lab	F2F lecture, F2F lab
	lecture only, no lab	no lab	lecture, no lab	
<b>Grand Total</b>	<b>99</b>	<b>8</b>	<b>3</b>	<b>9</b>



<b>F2F lecture, online lab</b>	<b>Online or hybrid lecture, F2F lab</b>	<b>Online or hybrid lecture, online lab</b>	<b>Other</b>	<b>Grand Total</b>
3	1	2	1	10
11	5	5	3	36
5	2	5		17
2		2		6
1				4
3	2	1		9
3	2	2		11
1	1			3
1			1	3
2	1	1		7
3		1	1	9
2			2	6
1		1		3
2		2		6
2		2		6
7		4	1	21
3	1	2	1	10
2			1	6
3	1	3	1	12
1		1		3
3	1	1		9
5		5		15
2	1	1		6
1		1		3
2	1	1	1	7
5	1	3		15
1				3
13	1	10		41
2		1		6
1		1		4
4	1	3		13
2	1	1		6
<b>99</b>	<b>23</b>	<b>62</b>	<b>13</b>	<b>316</b>

<b>F2F lecture, online lab</b>	<b>Online or hybrid lecture, F2F lab</b>	<b>Online or hybrid lecture, online lab</b>	<b>Other</b>
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19	4	11	3
16	1	13	0
26	6	16	3
38	12	22	7
<b>99</b>	<b>23</b>	<b>62</b>	<b>13</b>

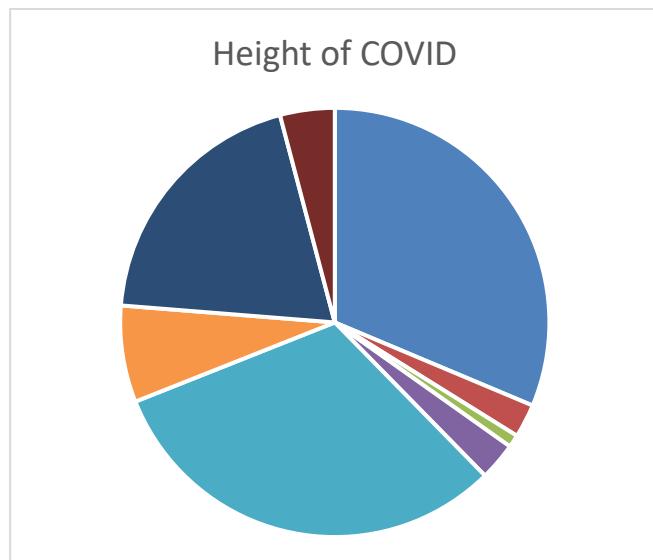
F2F lecture, online lab	Online or hybrid lecture, F2F lab	Online or hybrid lecture, online lab	Other
<b>99</b>	<b>23</b>	<b>62</b>	<b>13</b>

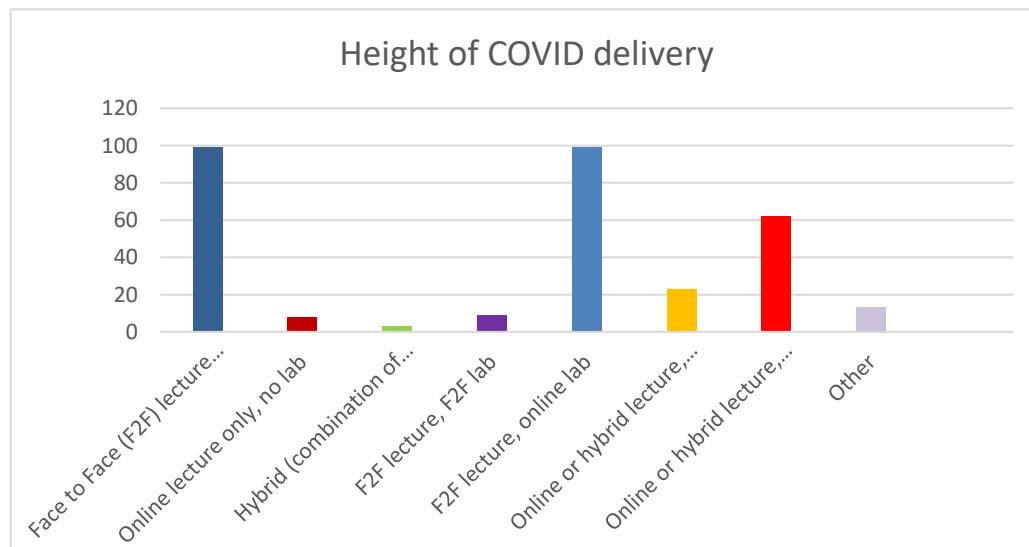
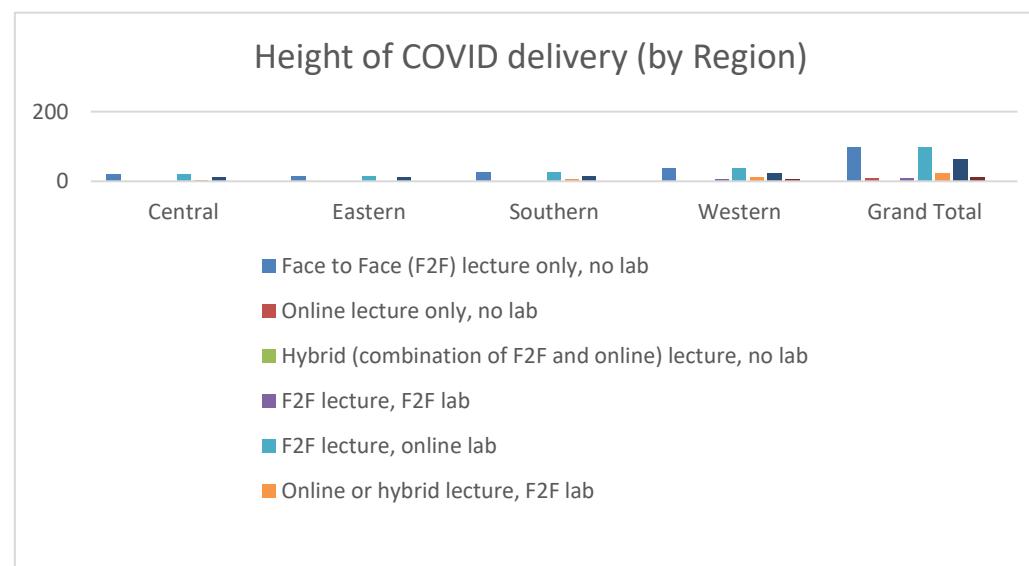
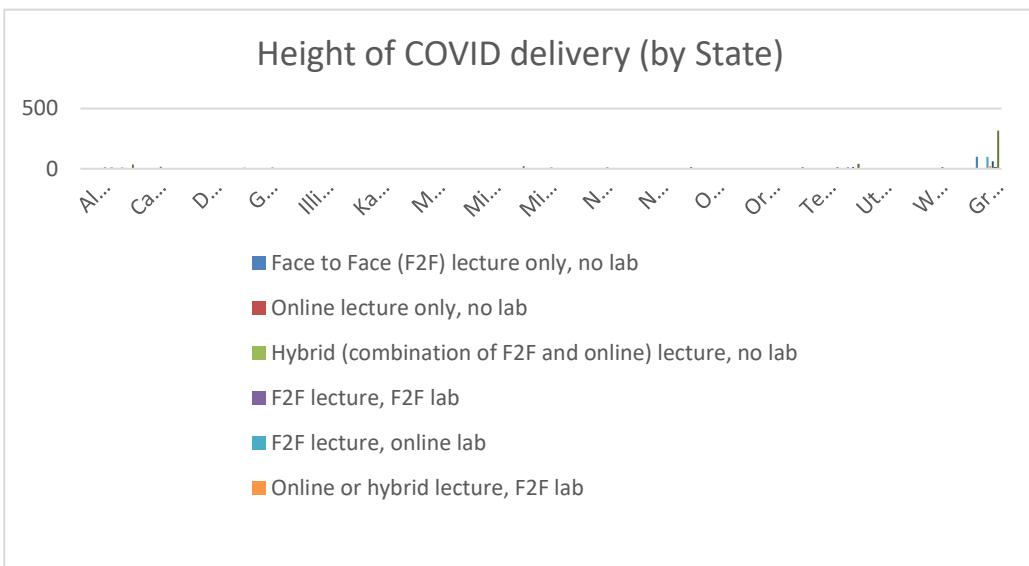
F2F lecture, online lab	Online or hybrid lecture, F2F lab	Online or hybrid lecture, online lab	Other
<b>99</b>	<b>23</b>	<b>62</b>	<b>13</b>

, no lab

and online) lecture, no lab

lab





There were still F2F lectures during COVID.

Very few F2F labs during COVID.

Height of COVID



- Face to Face (F2F) lecture only, no lab
- Online lecture only, no lab
- Hybrid (combination of F2F and online) lecture, no lab
- F2F lecture, F2F lab
- F2F lecture, online lab
- Online or hybrid lecture, F2F lab