#### ENGR (21173)

INSTRUCTORS: Sherriff, Mark (mss2x)

adamta, 44 / Emmeller 

ummary: CS 4720-001 Web and Mobile Systems - S	Spring 2014 (21173)								
<b>Dverall Course Rating</b> CS-4720-001 Mean 4.40 CS-4720-001 Std Dev 0.71 CS-4720-001 Response Count 205		Overall Instructor Rating INSTRUCTOR: Sherriff, Mark Mean 4.64 Std Dev 0.60 Response Count 285							
Difference from Category Mean, Expressed in Category Standard Deviations	0.23	Difference from Category Mean, Expressed in Category Standard Deviations							
SEAS, 4000-level courses Mean 4.19 SEAS, 4000-level courses Std Dev 0.89 SEAS, 4000-level courses Response Count 9293		SEAS, 4000-level courses Mean 4.38 SEAS, 4000-level courses Std Dev 0.80 SEAS, 4000-level courses Response Count 13773							
~ QUESTIONS AND DETAILS ~		~ ANSWER MATRICES ~							
1. How effective were the guest	Results for CS-4720-00	01, Sherriff, Mark							
ectures? Comments or suggestions for the future?	Total	Individual Answers See below for Individual Results							
~ Question Type: Short Answer	37	See below for Individual Results							
contributed by Sherriff, Mark (mss2x)									
	I think they were useful. It's nice being able to see a real life application of what we learned.								
	The guest lectures were interesting and gave some insight into the web and mobile industry.								
	The guest lecturers we	ere not all that entertaining; however, they were extremely informative.							
	WillowTree App was th	ne most interesting one. Others were informative and okay.							
		but in terms of material that was useful to the course, not particularly effective.							
		working with those people							
	I thought the guest lectures were really interesting, because they tied in what we were learning in class with real world applications. I would say keep the same number of guest lectures as you had this semester, because it was enough to be interesting but not so much as to take us off track from class.								
	I found them very wort	hwhile							
	They were great! I four at some of the real wo	nd their lectures to be very interesting. It was a really great way to get a glimpsor rld applications of the material that we were learning in class.							
	it was interesting to learn how mobile apps are applied in the real world. but i was looking for more								
	info on being better mo	obile app developers, which wasn't covered in any of the lectures.							

They were definitely interesting and provided some perspective for the topics we covered. However, they were not technically useful for our understanding of material, excepting as providing examples.

#### it was great.

The guest lectures were pretty effective and interesting. I think there could be more guest lectures.

They were alright I guess? It was cool to see an actual company use the stuff we learned about.

I think some were better than others, but for the most part they were effective and I enjoyed them. Some seemed to boil down to focusing on companies rather than the technologies they use, which was somewhat interesting but not especially helpful.

I thought they were interesting.

Very helpful. I actually ended up with intern in ENSCO during the summer.

Very effective. Keep it up

I learned a lot! Enjoyed them. Thank you for setting them up. Would love more guest lectures if possible, wouldn't mind attending guest lectures outside of the regular class time if asked.

I really enjoyed the guest lectures (ENSCO, WillowTree, Deloitte). Gave me a sense of the way that mobile development is done in the real world.

The information in this document is private and confidential. Please handle accordingly.

~ QUESTIONS AND DETAILS ~				~ ANSWER	MATRICES ~						
CODSTICUSTING DEFINED	very inform	native		THIS WERE							
			od! Engaging	and informati	Ve						
			ere very usefu								
			ng from them	0							
			ures very muc								
		0	were all real		nd it was nice	to see some	real-world ap	plications.			
	It also was nice that you asked relevant questions to guide them.										
	I enjoyed hearing about these topics and especially liked how they related so well to our class. Sadly I missed the one I wanted to see most (Willow Tree) but really enjoyed the others.										
	Very interesting, I enjoyed hearing about the embedded programming with Ensco and mobile development with Willow Tree.										
	I thought all of the guest lecturers were great. They provided a lot of insight into professional web and mobile development.										
	Eh. I didn't in.	really care fo	or them, most	of them seem	ned like emplo	yer pitches I	wasn't terribly	y interested			
	They were	really helpful	l and it was ni	ce to see wha	at people do ir	n practice.					
	Guest lectu	ures were go	od additions to	o the course.	I don't like Ac	centure's tho	ugh.				
	major over	all. I think it'd	e different wa be great to d like to work f	o even more i	in the future! I	arning in the t's a good wa	course and ir ay to give stuc	n the CS lents an			
			nix up the indu			f possible					
		, ,	tive. Deloitte				like thev use	aithub and			
			uld let them kr					5			
	analysis th	ey are doing	and the partic	ular security	concerns are	very interesti	ng. Thank you	f data u, Prof.			
		Ŭ	e people put a			0					
	guest lectu	ires were goo	od. It was nice	to see applic	ations of the o	course in the	work environi	ment			
2. To what degree do you agree with		00 1700 001									
this statement: the team size from the project was appropriate (please	Total	Mean	, Sherriff, Ma Std Dev	K Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)			
elaborate in your class comments). Question Type: Likert	40	4.60	0.55	(5) 25 (62.50%)	14 (35.00%)	1 (2.50%)	0 (0.00%)	0 (0.00%)			
contributed by Sherriff, Mark (mss2x)	Results for	SEAS 4000-	level courses								
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)			
	67	4.43	0.70	(5) 35 (52.24%)	28 (41.79%)	2 (2.99%)	2 (2.99%)	0 (0.00%)			
3. How accurate is this statement for	Results for	CS-4720-001	, Sherriff, Ma	rk							
you: The project was of acceptable length. $\tilde{\sim}$	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)			
Question Type: Likert	40	4.52	0.51	21	19	0	0	0			
contributed by Sherriff, $Mark(mss2x)$				(52.50%)	(47.50%)	(0.00%)	(0.00%)	(0.00%)			
			level courses	Ohra I			Dist	Oliver			
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)			
	67	4.42	0.72	34 (50.75%)	30 (44.78%)	0 (0.00%)	3 (4.48%)	0 (0.00%)			

4. How accurate is this statement for	Poculto for	<u> </u>	, Sherriff, Mai	rk —							
you: The project was of acceptable difficulty.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongl Disagre (1)			
Question Type: Likert	39	4.51	0.56	21 (53.85%)	17 (43.59%)	1 (2.56%)	0 (0.00%)	0 (0.00%			
contributed by Sherriff, Mark (mss2x)	Results for SEAS, 4000-level courses										
						•• • •					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagre (1)			
	66	4.50	0.53	34 (51.52%)	31 (46.97%)	1 (1.52%)	0 (0.00%)	0 (0.00%			
5. How accurate is this statement for	Results for C	CS-4720-001	, Sherriff, Mai	rk							
you: The project helped me better iderstand the phases and intricacies of software development.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagre (1)			
Question Type: Likert	40	4.40	0.67	20 (50.00%)	16 (40.00%)	4 (10.00%)	0 (0.00%)	0 (0.00%			
contributed by Sherriff, $Mark(mss2x)$	Results for S	SEAS, 4000-	level courses								
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagre (1)			
	67	4.40	0.63	32 (47.76%)	30 (44.78%)	5 (7.46%)	0 (0.00%)	0 (0.00%			
Which topic/lecture in this course was	Results for (	CS-4720-001	, Sherriff, Mai	rk							
your favorite and why?	Total				Individual Ans						
Question Type: Short Answer ~ contributed by Sherriff, Mark (mss2x)	38			See be	elow for Individ	dual Results					
	lectures wit	h history inte	e the topic rea	ally interests r	ne						
	lectures with IOS vs. And I actually re- systems, th decisions a Pho becaus Usability lea MVC. It was Torrent/P2I My favorite heavy on d Heartbleed Web servic and integra Web servic code. Usability ar applications	h history inte droid becaus eally enjoyed e evolution of nd tools we se it was ctures becau s interesting topic was w atabase mar pertinent a es. I had exp te services in es, because ad Accessibil s and it's a re	eresting. e the topic reating the lectures the of HTML and C have today. se I never reating to see how eating to see how eating to see how eating to see how eating to see how eating thatever had to hatever hat to hat the time and hatever hat to hat hatever hat to hatever hatever hat to hatever hatever hat to hatever hatever	ally interests r hat covered s CSS, and othe alized how har ach of these c o do with MyS I enjoyed wo d well put many of the o ure. ious knowledg it was really a	me ome of the his ers. They prov rd it would be components w QL. I had an rking on it age ther subjects, ge on them an pplicable to w e design that y	story of the to vided perspect to create a g vorked. internship las ain. but I enjoyed hd they were	ppics. Especia tive for the de ood user-frier t summer tha d learning how actually pretty e in the design ly think about	Illy P2P esign adly app. t was t was t to use fun to n of our			
	lectures with IOS vs. And I actually re- systems, th decisions a Pho becaus Usability lee MVC. It was Torrent/P2F My favorite heavy on d Heartbleed Web servic and integra Web servic code. Usability ar applications Design/arcl structure m	h history inte droid becaus eally enjoyed e evolution of nd tools we less interesting ctures becau s interesting topic was we atabase mar pertinent a es. I had exp te services in es, because and Accessibil s and it's a re hitecture prin y services/ap	eresting. e the topic reat the lectures to of HTML and C have today. use I never reat to see how eat hatever had to hagement and at the time and perience with r in an architectu I had no prev ity - because i	ally interests r hat covered s CSS, and othe alized how har ach of these c o do with MyS I enjoyed wo d well put many of the o ure. ious knowledg it was really a t aspect of the experience. e to apply what	me ome of the hi ers. They prov rd it would be components w QL. I had an rking on it aga ther subjects, ge on them ar pplicable to w e design that y d n-tier archite at I was learn	story of the to vided perspect to create a g vorked. internship las ain. but I enjoyed hd they were vhere we were vou don't real ecture, becau	ppics. Especia tive for the de ood user-frier t summer that d learning how actually pretty e in the design ly think about use learning how	Illy P2P esign adly app. t was t t was t to use f to use f to use f to use f to use of to use of to use			

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~							
	I really like the UI lectures. I have taken HCI and it was fun to apply the principles learned in that class to Android/iOS layouts.							
	I liked learning about web development, just because it's of my personal interest.							
	Usability and Interface							
	javascript							
	PHP, JSON, Database. Web services. These are most practical and useful topics.							
	I really liked all of the inclass follow along activities that showcased ajax, general html5, css, and basic web development because I had no prior experience.							
	I really enjoyed all the topics dealing with website development such as AJAX, jQuery, Javascri PHP, etc. I a have always wanted to learn more about these different web topics, and this class great way to introduce these topics and allow me to apply them.							
	The more high concept lectures, such as on security.							
	Usability and accessibility was probably my favorite topic. As software designers it's easy to forget about what is most user-friendly to people who aren't as tech-savvy, and we often do not consider people who need modifications to be able to effectively use the technologies we create.							
	I enjoyed the lectures about mobile development and wish we did not miss so many. I also enjoyed learning about the history of HTML because that's probably not something I would have looked up on my own.							
	I really enjoyed the cloud computing lecture.							
	The jQuery because I could make stuff draggable on my website.							
	Web Design							
	node.js. It was interesting to create your own client/server architecture, thus making it a lot easier than using php and wamp server.							
	Architecture discussion (MVC, SOA, Three-Tier Model) because I'd had the least exposure to them before, they were interesting, and were beneficial in job interviews.							
	I found the first security lecture interesting because Professor Sherriff talked about the heartbleed bug and it showed how relevant security concerns are in today's society.							
	Peer to Peer stuff was really, really cool							
	Usability. It taught the subtle but very important things that an app needs to be successful. (Importance of simple and sleek design with recognizable symbols)							
	I really enjoyed the HTML/CSS topics							
	Cloud Computing - very hot topic and relevant to today's computing environment. We don't realize how much we all rely on cloud services daily and it was great to get some perspective on its history.							
	JQuery, Javascript, AJAX, learning what the DOM is, learning about GET and POST These are all pretty essential to building online applications and I hadn't really learned much about them in other classes. Making useful real web applications was FUN!							
	ajax/node.js							
7. Which topic/lecture in this class do	Results for CS-4720-001, Sherriff, Mark							
you think you will find the most useful	Total Individual Answers							
in the future?	36 See below for Individual Results							
Question Type: Short Answer								
contributed by Sherriff, Mark (mss2x)								
	MySQL, RESTful							
	Everything really but for my purposes MySQL will come in the most handy. For general purposes, I'd have to say improving my Android development skills was very worth it.							
	Probably the Android stuff.							
	Again, the architecture lectures prove helpful. Their format can be applied to a number of software							
	development projects.							

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	I think I would find web development components - RESTfulness, AJAX, php, HTML5, and CSS - most useful in the future.
	MVC
	I think everything had its place. Mobile development and concepts relating to architecture and REST. Although some of the architecture stuff was a little too dense and did not immediately appear web/mobile-related more examples would be useful.
	Service oriented architecture
	Too many to just name one, but I guess REST.
	Technical lectures about how to build Android applications
	Actually, the model types, even if I don't fully get them still
	i think all of the material concerning web development will be most useful. It was difficult to fully grasp the material due to the little time we had between each assignment. It would be good to spend more time on web development or even make it a separate course all together.
	JQuery, Javascript, AJAX, learning what the DOM is, learning about GET and POST
	All of the web/php/html stuff
	Security and Privacy/ Usability/ SOA
	Enterprise? Maybe NodeJS.
	pretty much everything. mobile development in android, security, restful apps, web development in various technologies.
	I think the web development side is a very marketable skill.
	HTML5, CSS3, and Android. Expertise in these areas can be applied in so many different career fields.
	Usability and Accessibility, because it can really make the difference between a good and a great app.
	Usability and Interface
	Everything related to web service design. REST design specifically.
	In general, learning more about web services and the architecture of web systems has been extremely helpful.
	Android development - I'm already planning apps to develop.
	web security
	web services
	The Android project is most useful to me.
	All of them? Web and mobile are the two fields I am most interested in working in so every lecture helped.
	The android development stuff most likely. It was cool to create an application.
	Enterprise
	The lectures on service-oriented architecture I found useful because I have been asked about it on interview questions before but never really knew what it was. I also found the lecture on MVC interesting because we were using it both in this class and in another class.
	Either the android development lectures or the usability lectures.
	Web services
	ajax/php
	I think the string of lectures on web technologies, html, php, javascript, and node js will be the most useful
	All the topics from creating a websites Especially being able to connect and interacting with a database using SQL queries, as well as manipulating JSON strings.

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
8. What lecture/topic(s) in this class	Results for CS-4720-001, Sherriff, Mark
	Total Individual Answers
~	32 See below for Individual Results
contributed by Sherriff, Mark (mss2x)	
"did not work" or were not seen as useful in the long run? Question Type: Short Answer	Total Individual Answers
	N/A
	N/A The mobile oriented lectures seemed less useful - to me, most of the mobile stuff I learned I felt I learned from the hands on 'doing' of the project.
	I think all of the lecture topics were valuable.
	P2P
	na
	The days on iOS development/objective C seemed wasted to me, since we never actually did anything with them.
	I think most lectures were good but Usability/Accessibility is more of an HCI thing and could be reduced to one lecture instead of two.
	Nothing really comes to mind.

~ QUESTIONS AND DETAILS ~					~ ANS	SWER MATR	ICES ~			
						than they cou been benefic		en. I think a	a broader ov	verview of
	in class d	emos were	a little ha	rd to foll	w					
						rds end of se	mesterl pr	efer depth	over breadt	٦.
				.,,	lona			oron dopting	orer predati	
9. How accurate is this statement for	Desults for	00 4700 0	04 <b>O</b> h							
you if you used the podcasts from this class: Podcasts were useful to catch up	Results for Total	Mean	Std De	v Stro	ongly	Agree	Neutral	Disagree	Strongly	Not
on material that I missed due to				(	ree 5)	(4)	(3)	(2)	Disagree (1)	(NA)
absences.	39	4.48	0.75		7 59%)	6 (15.38%)	4 (10.26%)	0 (0.00%)	0 (0.00%)	12 (30.77%)
Question Type: Likert	Results for	SEAS 400	)0-level c	nurses						
contributed by Sherriff, Mark (mss2x)	Total	Mean	Std De	v Stro	ongly	Agree	Neutral	Disagree	Strongly	Not
				AQ	ree 5)	(4)	(3)	(2)	Disagree (1)	Applicable (NA)
	66	4.38	0.82		24 36%)	11 (16.67%)	6 (9.09%)	1 (1.52%)	0 (0.00%)	24 (36.36%)
10. How accurate is this statement for	Results for	CS-4720-0	)01 Sher	riff Mark						
you if you used the podcasts from this class: The podcasts were useful to review material that I was unclear on.	Total	Mean	Std De	v Stro	ongly ree 5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
Question Type: Likert	40	4.64	0.62		20 00%)	6 (15.00%)	2 (5.00%)	0 (0.00%)	0 (0.00%)	12 (30.00%)
contributed by Sherriff, Mark (mss $2x$ )	Results for	SEAS 400	)0-level c	ourses						
	Total	Mean	Std De	v Stro	ongly	Agree	Neutral	Disagree	Strongly	Not
				(	ree 5)	(4)	(3)	(2)	Disagree (1)	Applicable (NA)
	67	4.38	0.88		25 31%)	10 (14.93%)	5 (7.46%)	2 (2.99%)	0 (0.00%)	25 (37.31%)
11. How often did you listen to the	Results for	CS-4720-0	01, Sher	riff, Mark						
podcast for a lecture?	Total	Every I (N		learly ev		Whenever I needed to	Only wh		ndomly to see	Never (NA)
Question Type: Multiple Choice				(NA)		review a topi (NA)	c class (NA)	s wha	t it was like	(,
contributed by Sherriff, Mark ( $mss2x$ )	40	1		0		19	7	(	NA) 1	12
		(2.5	0%)	(0.00%	)	(47.50%)	(17.50	%) (2.	50%)	(30.00%)
	Results for	SEAS, 400	0-level c	ourses						
	Total	Every I (N		learly ev lecture		Whenever I needed to	Only wh missed		ndomly to see	Never (NA)
				(NA)		review a topi (NA)	c class (NA)		t it was like	
	67	1		0		27	11	(	NA) 2	26
		(1.49	9%)	(0.00%	)	(40.30%)	(16.429	%) (2.	99%)	(38.81%)
12. Do you have any suggestions/comments that we should	Results for	CS-4720-0	01, Sher	riff, Mark						
take into account for future projects for this course?	Total 26					Individ See below fo	ual Answers r Individual			
Question Type: Short Answer	L									
contributed by Sherriff, Mark (mss2x)										
	Make it de	eployable to	o gooale r	lay store	).					
						ext year, whe	ther that's v	vith Azure o	r Heroku or	another
	system				2.0 10					

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	My project had lots of difficulties because our plan for the project didn't really match the assigned tasks. We had to incorporate web services that weren't really critical to what we wanted to accomplish just to say we accomplished the task - and this hurt our ability to manage our time, as we would spend a week working on something that wasn't actually important to our core functionality. I think either you should do a better job policing what type of projects you allow (to see if they fit the grading requirements) or allow more flexibility in what is submitted on a week to week basis (i.e. teams just have to demonstrate good progress on their goal, instead of completing specific benchmarks)
	None, the project seemed fine to me. Though next semester's class sounds like it'll be a load of fun.
	Nothing astounding
	Please spend more time on Android development (actual in class demos) and some tips for making better apps (optimization, common and best practices, etc.)
	maybe have some web coding questions on the exam
	No suggestions, it went great!
	Maybe give examples of what you expect from people web service wise
	N/A
	N/A
	Honestly I think there should be a Web class and a Mobile class. The amount of practical knowledge and skill learned in this class could and should DEFINITELY be split into two. Both web applications and mobile development are up and coming fields that should have a stronger focus in college.
	No I thought the project was well structured
	No
	No
	The team sizes were perfect (any more and someone would have been left with nothing to do, any less and it would have been a bit much for two people).
	I think the Android development should start before the web services because I found that we were just making a web service to get credit for the phase, when we didn't really know exactly what we would need from the service.
	Honestly this was the best group project I've ever worked on. Because the project involved developing discrete services in addition to an add, it was easy for us to divide the work. I wish we had reviewed or gone over using version control though (or maybe we did and I didn't pay attention?).
	It was awesome that my team got bonus points for acting as a team of two because our third member contributed nothing.
	More guidance of overall android development. Due to snow days, the android lecture was skipped because it was assumed that everyone had previous knowledge from CS2110. However, I was not selected to do the android project when I took the course. More guidance on the structure of android would have been nice. I feel that our project implemented a lot of the functionality in hacky ways. I want to know how to do it the right way.
	Try and make them a little less deadline oriented, it led to my group only doing the bare minimum
	I think it would be cool to add to the android project a requirement for an accessibility feature for users with disabilities.
	Don't make the group size too large! It gets to be impossible to meet with your team and to collaborate effectively. Also, we found it helpful, but not necessary, to have an additional android device on which to develop.
	There should be an option for the project to be web development based. Instead of an android application, the team would make a fully operational, polished website implementing one of the web architectures discussed in class. This would be a better option for those who are more interested in pure web development than mobile development.
	No.
	We actually rebuilt all our web services in the final phase because we didn't have a specific plan at the beginning of the project and the web service we built in the previous phase did't fit our final project. I think a project schedule during phase 0 is needed.

~ QUESTIONS AND DETAILS ~			~ AN	SWER MATRIC	CES ~						
13. During the project, how many hours	Results for CS	S-4720-001 St	erriff Mark								
per week did you dedicate specifically to project work?	Total	0-2 (NA)	3-5 (NA)	6-8 (NA)	9-12 (NA)	13-16 (NA)	17 or more (NA)				
Question Type: Multiple Choice	40	0 (0.00%)	20 (50.00%)	13 (32.50%)	4 (10.00%)	2 (5.00%)	1 (2.50%)				
contributed by Sherriff, Mark (mss2x)	Doculto for SE										
	Results for SE Total	0-2	3-5	6-8	9-12	13-16	17 or more				
	67	(NA) 0	(NA) 27	(NA) 22	(NA) 10	(NA) 6	(NA) 2				
	(0.00%) (40.30%) (32.84%) (14.93%) (8.96%)										
14. What other topics do you wish we had time to cover or which topics did	Results for CS	S-4720-001, St	nerriff, Mark								
we cover that you wish we could have covered more deeply?	Total Individual Answers   26 See below for Individual Results										
Question Type: Short Answer											
$\sim$ contributed by Sherriff, Mark (mss2x)											
	Security - Ap	ache - Encrypt	ion								
	Networking!										
	Cloud Comp	uting									
	Setting up/ma	anaging a serv	er platform such	n as Apache.							
	code written	in html, css, js	into mobile app	lications for win	dows, android,	negap. this technology converts android, and apple. learning other					
	backend tech heroku).	nologies (wind	lows azure was	great, but we c	ould have learn	t others like pa	arse and				
	Just more thi am ideas, so	ngs in both we maybe that's a	b and the mobile a bad indicator	e half. I am, ho	wever, thinking	more coding a	nd stuff than I				
	Advanced Ar	ndroid developi	ment								
	Perhaps mor	e android tutor	ials								
	doing a big w	eb developme	to web develop nt project would it never fit in the	be really cool.	Wish I had mo	re database kr	nowledge				
	More time on	cloud comput	ing might have b	been fun!							
	None, I thoug	ght the time on	each subject wa	as pretty adequ	late.						
	modern webs	sites are create	v how to build a ed. Covering mo e semester wou	ore of the tools a	available for wel	m not sure that bsite design ar	's how nd creation				
	l would have php, for exan		nore about best	practices in ho	w to actually im	plement web s	ervices in				
	None that co	me to mind									
	The creation	of web applica	tions as oppose	ed to native mol	oile apps.						
	ASP .NET										
	N/A										
	N/A										
	Mobile gamir	ıg.									
	n/a										
	Android Deve	elopment									
	Cover androi entirely sepa		more deeply. T	There so much	possibilities in a	ndroid that it c	ould be an				
	IOS developr	ment									

~ QUESTIONS AND DETAILS ~				~ ANS	WER MATR	ICES ~			
			d cloud com d tricks, thou						
	Ū	•	I realize it's	•					
	iOS	5 11010, 541							
	100								
15. The course addressed technically		00 1700	204						
rigorous subject matter consistent with the course objectives.	Total	CS-4720-0 Mean	Std Dev	Strongly Agree	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree	
Question Type: Likert	41	4.51	0.55	(5) 22	18	1	0	(1)	(NA) 0
contributed by Dean of the School of Engineering and Applied Science				(53.66%)	(43.90%)	(2.44%)	(0.00%)	(0.00%)	(0.00%)
unu Applieu Science	Results for	SEAS, 40	00-level cou	rses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	1860	4.40	0.72	934 (50.22%)	769 (41.34%)	89 (4.78%)	33 (1.77%)	12 (0.65%)	23 (1.24%)
16. The instructor used methods other	Results for	CS-4720-0	001, Sherriff	Mark					
than/in addition to traditional lectures (for example, active learning, in-class problems, collaborative learning, in-	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
class discussion) effectively in this course.	40	4.52	0.64	24 (60.00%)	13 (32.50%)	3 (7.50%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Question Type: Likert	Results for	SEAS, 40	00-level cou	rses		1			
contributed by Dean of the School of Engineering and Applied Science	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	1974	4.29	0.86	924 (46.81%)	731 (37.03%)	161 (8.16%)	63 (3.19%)	26 (1.32%)	69 (3.50%)
17. There was a reasonable level of	Results for	CS-4720-(	001						
effort expected for the credit hours received.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
Question Type: Likert <i>contributed by Dean of the School of Engineering</i>	41	4.54	0.67	25 (60.98%)	14 (34.15%)	1 (2.44%)	1 (2.44%)	0 (0.00%)	0 (0.00%)
and Applied Science	Results for	SEAS, 40	00-level cou	ses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	1860	4.30	0.84	875 (47.04%)	779 (41.88%)	111 (5.97%)	63 (3.39%)	26 (1.40%)	6 (0.32%)
18. The homework assignments helped	Results for	CS-4720-0	001						
me learn the subject matter. Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
contributed by Dean of the School of Engineering and Applied Science	41	4.61	0.59	27 (65.85%)	12 (29.27%)	2 (4.88%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Results for	SEAS, 40	00-level cou	ses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	1860	4.20	0.89	724 (38.92%)	680 (36.56%)	191 (10.27%)	56 (3.01%)	30 (1.61%)	179 (9.62%)

~ QUESTIONS AND DETAILS ~				~ ANS	WER MATR	ICES ~			
19. The textbook increased my	Results for	CS <u>-4720-0</u>	001						
understanding of the material.	Total	Mean	Std Dev	Strongly	Agree	Neutral	Disagree	Strongly	Not
Question Type: Likert				Agree (5)	(4)	(3)	(2)	Disagree (1)	Applicat (NA)
contributed by Dean of the School of Engineering and Applied Science	41	3.44	0.63	1 (2.44%)	5 (12.20%)	10 (24.39%)	0 (0.00%)	0 (0.00%)	25 (60.98%
	Results for	SEAS 10	00-level cou	202					
	Total	Mean	Std Dev	Strongly	Agree	Neutral	Disagree	Strongly	Not
		Mean		Agree (5)	(4)	(3)	(2)	Disagree (1)	Applica (NA)
	1854	3.80	1.07	346 (18.66%)	387 (20.87%)	258 (13.92%)	109 (5.88%)	34 (1.83%)	720 (38.83
20. The course material was well	Results for	CS-4720-0	001, Sherriff	Mark					
organized and developed. $\tilde{y}$ Question Type: Likert	Total	Mean	Std Dev	Strongly Agree	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree	Not Applical
contributed by Dean of the School of Engineering	41	4.54	0.55	(5) 23 (56.10%)	17 (41.46%)	1 (2.44%)	0 (0.00%)	(1) 0 (0.00%)	(NA) 0 (0.00%
and Applied Science			1	(22112,2)	(	(	(0.00,0,0)	(0.007.0)	(0.000)
			00-level cou						
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applical (NA)
	1959	4.22	0.88	823 (42.01%)	803 (40.99%)	165 (8.42%)	75 (3.83%)	31 (1.58%)	62 (3.16%
21. The instructor was knowledgeable	Results for	CS-4720-0	001, Sherriff	Mark					
about the subject matter.	Total	Mean	Std Dev	Strongly	Agree	Neutral	Disagree	Strongly	Not
Question Type: Likert				Agree (5)	(4)	(3)	(2)	Disagree (1)	Applica (NA)
contributed by Dean of the School of Engineering and Applied Science	41	4.73	0.50	31 (75.61%)	9 (21.95%)	1 (2.44%)	0 (0.00%)	0 (0.00%)	0 (0.00%
	Results for	SEAS, 400	00-level cou	ses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applica (NA)
	1966	4.65	0.58	1344 (68.36%)	536 (27.26%)	44 (2.24%)	10 (0.51%)	6 (0.31%)	26 (1.32%
22. The instructor was well prepared	Results for	CS-4720-(	001, Sherriff.	Mark					
for class.			Std Dev		Agree	Neutral	Disagree	Strongly	Not
~ Question Type: Likert				Agree (5)	(4)	(3)	(2)	Disagree (1)	Applica (NA)
contributed by Dean of the School of Engineering and Applied Science	40	4.78	0.48	32 (80.00%)	7 (17.50%)	1 (2.50%)	0 (0.00%)	0 (0.00%)	0 (0.00%
	Results for	SEAS, 400	00-level cou	rses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applica (NA)
	1967	4.48	0.72	1111 (56.48%)	654 (33.25%)	105 (5.34%)	22 (1.12%)	13 (0.66%)	62 (3.15%
23. I received adequate preparation		00-1700							
from the prior courses in the	Results for Total	CS-4720-0 Mean	Std Dev	Strongly	Agree	Neutral	Disagree	Strongly	Not
curriculum to be successful in this course.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	(3)	Disagree (2)	Strongly Disagree (1)	Applica (NA)
Question Type: Likert	41	4.32	0.76	19 (46.34%)	17 (41.46%)	4 (9.76%)	1 (2.44%)	0 (0.00%)	0 (0.00%
contributed by Dean of the School of Engineering		0510		, ,					, ,,
and Applied Science			00-level coul		A	Nigerat 1	Direr	Charlen 1	<b>K</b> 1 -
	Total	Mean	Std Dev	Strongly Agree	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree	Not Applica
				(5)	(+)	(0)	(=)	(1)	(NA)

~ QUESTIONS AND DETAILS ~				~ ANS	WER MATR	CICES ~			
24. The grading policy was fair.	Results for	CS-4720-0	01. Sherriff	Mark					
Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
contributed by Dean of the School of Engineering and Applied Science	41	4.49	0.84	26 (63.41%)	11 (26.83%)	3 (7.32%)	0 (0.00%)	1 (2.44%)	0 (0.00%)
	Results for	SEAS, 400	0-level cou	rses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	1969	4.24	0.87	879 (44.64%)	744 (37.79%)	208 (10.56%)	72 (3.66%)	22 (1.12%)	44 (2.23%)
25. The instructor responded	Results for	CS-4720-0	01. Sherriff	Mark					
adequately to in-class questions.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
contributed by Dean of the School of Engineering and Applied Science	41	4.71	0.56	31 (75.61%)	8 (19.51%)	2 (4.88%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Results for	SEAS, 400	0-level cou	rses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	
	1973	4.48	0.70	1092 (55.35%)	715 (36.24%)	86 (4.36%)	20 (1.01%)	14 (0.71%)	46 (2.33%)
26. The instructor effectively used	Results for	CS-4720-0	01, Sherriff	Mark					
technology in support of the learning goals for this course.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
Question Type: Likert ~ contributed by Dean of the School of Engineering	41	4.71	0.56	31 (75.61%)	8 (19.51%)	2 (4.88%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
and Applied Science	Results for SEAS, 4000-level courses								
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	1965	4.28	0.82	851 (43.31%)	779 (39.64%)	169 (8.60%)	54 (2.75%)	18 (0.92%)	94 (4.78%)
27. The average number of hours per	Results for	CS-4720-0	01						
week I spent outside of class preparing for this course was:	Total	Le	ss than 1 (NA)	1 - 3 (NA)		4 - 6 (NA)	7 - 9 (NA)		0 or more (NA)
Question Type: Multiple Choice	41	(	0 0.00%)	14 (34.15%	%) ( <sup>1</sup>	18 43.90%)	7 (17.07	%)	2 (4.88%)
contributed by Office of the Provost	Results for	SEAS, 400	0-level cou	rses					
	Total	Le	ss than 1 (NA)	1 - 3 (NA)		4 - 6 (NA)	7 - 9 (NA)		0 or more (NA)
	1862	(	61 3.28%)	569 (30.56%	6) (1	776 41.68%)	281 (15.09		175 (9.40%)
28. I learned a great deal in this course.	Results for	CS-4720-0	01						
Question Type: Likert	Total	Mean	Std D	ev Stror Agr (5	ngly A ee )	gree I (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
contributed by Office of the Provost	41	4.66	0.53		3	12 .27%) (	1 2.44%)	0 (0.00%)	0 (0.00%)
	Results for	SEAS, 400	0-level.cou	rses					
	Total	Mean	Std D			gree I (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	1849	4.29	0.85		8	727 .32%) (	146 7.90%)	66 (3.57%)	22 (1.19%)

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~							
29. Overall, this was a worthwhile	Results for	CS-4720-001						
<b>course.</b> Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagre (1)
contributed by $Office$ of the Provost	41	4.73	0.50	31 (75.61%)	9 (21.95%)	1 (2.44%)	0 (0.00%)	0 (0.00%
	Results for	SEAS, 4000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagre (1)
	1855	4.30	0.90	935 (50.40%)	684 (36.87%)	139 (7.49%)	58 (3.13%)	39 (2.10%
. The course's goals and requirements	Results for	CS-4720-001	, Sherriff, Ma	rk				
were defined and adhered to by the instructor.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagro (1)
Question Type: Likert	41	4.68	0.52	29 (70.73%)	11 (26.83%)	1 (2.44%)	0 (0.00%)	0 (0.00%
	Results for	SEAS, 4000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagre (1)
	1963	4.36	0.77	959 (48.85%)	828 (42.18%)	114 (5.81%)	44 (2.24%)	18 (0.92%
31. The instructor was approachable	Results for	CS-4720-001	, Sherriff, Ma	rk				
and made himself/herself available to students outside the classroom.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagr (1)
Question Type: Likert ~ contributed by Office of the Provost	41	4.46	0.74	25 (60.98%)	10 (24.39%)	6 (14.63%)	0 (0.00%)	0 (0.00%
	Results for	SEAS. 4000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagr (1)
	1964	4.45	0.78	1137 (57.89%)	643 (32.74%)	131 (6.67%)	33 (1.68%)	20 (1.02%
32. Overall, the instructor was an	Results for	CS-4720-001	, Sherriff, Ma	rk				
effective teacher. $\tilde{y}$ Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagro (1)
contributed by Office of the Provost	40	4.72	0.51	30 (75.00%)	9 (22.50%)	1 (2.50%)	0 (0.00%)	0 (0.00%
	Results for	SEAS, 4000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagr (1)
	1969	4.41	0.79	1081 (54.90%)	700 (35.55%)	130 (6.60%)	36 (1.83%)	22 (1.12%
33. Please make any overall comments or observations about this course:	Results for CS-4720-001 Total Individual Answers							
Question Type: Short Answer	Individual Answers   29 See below for Individual Results							
contributed by Office of the Provost								
	hours or as	sk questions	n class, howe	ecturer! I learn ever, because				go to offi
			teacher at U	VA. evelopment, b	ut worth the e	ffort put in		

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~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	Professor Sherriff was a great professor. He brings so much energy to class every day and made 9 am classes completely worth it and I really loved this class. The lectures were all organized really well on collab and made finding information really easy, the homework assignments were clear, and piazza was really helpful!
	i think the grading rubric on exams should be made clear beforehand.
	Good class and I learned a lot some ways that I could utilize stuff I learned into making actual applications and stuff.
	This was my first "Sherriff class" and I was impressed by Prof Sherriff's enthusiasm for teaching and for the material. This was probably my favorite class and wish that it lasted a whole year - so much to be learned in so little time. I really loved the Android project and our team worked out perfectly. The use of Piazza was great and helped in cases where I had a commonly asked question. I was so proud of my final project and I feel like web/mobile is the area of CS that I want to enter once I graduate. I'm planning on picking up some summer projects related to this class and learning more indepth some of the things we covered. Good luck and congratulations on the upcoming baby, Prof!
	Azure sucks (but what's new). I'm taking Intro to Digital Media and one of our assignments is to make a Digital Portfolio on WordPress. Meant as a way for us to advertise ourselves to potential employers. Seems like it would be a good homework assignment in 4720. Design a nice looking website that will be useful outside of the class. I've applied to some web development internships recently and I think that having a site like that would have helped me in the application process.
	I don't like the final and mid-term exam format. I don't think essays are helpful to encourage us to learn materials, and I do prefer the traditional exam format. Details were expected for essays, but how detailed we should address was not specific. Even though people have the same level understanding of the topic, they received different grade because the length the essays they wrote. I do not think it is an effective way for a computer science class.
	Concerning question 31: I love Professor Sherriff's courses and I learned a lot in them. He's very nice and awesome in class. However, (and a few students have told me this too), though he makes himself available outside of class, he becomes quite intimidating outside of class. Still loved his course though.
	Get better graders.
	Make a separate Web development and Mobile development class. If I weren't graduating I would do everything in my power to take these two classes if they were offered.
	Loved it!
	I wonder if there's a way to make this class worth more credits if you can't split it up.
	I am somewhat experienced with web and mobile development, but still enjoyed the class and learning a number of new aspects to the technology like architectures.
	useful course for CS majors.
	extremely useful course. learnt so much in there. only issue was that we didn't cover enough of iOS, but that was it.
	I worked in a team of 3 and it was the right size. I think more than 4 would be damaging to a project, especially if not all members are organized or on the same technical level.
	Once again, Sherriff has proved that he is one of the best professors at this university.
	I prefer much web-application skills rather than android. I would like to learn more abotu ASP and .NET instead of Android app
	Great CS course, glad I got to take it.
	Congrats on Baby Sherriff!
	Greaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa
	The database crash course at the beginning of the semester was really useful, but I think an effort should be made to have more people take databases before taking web and mobile.
	One of the best CS courses I've taken =)
	Great class! I would recommend it to any and all CS majors.
	Thank you for a great semester!
	Overall, I found this course to be very helpful in pushing me to look into developing web sites and mobile apps. Many job postings are looking for people who can do web and mobile development, and I feel more confident in my abilities after this course.
	Great course and great lecturer as always, even at 9 AM.