

CSE 4291 R (000): Algs for Modern Compute System, CSE 529LEC (000): Algs for Modern Computer Syst

Fall 2014 | Russ Miller

157 | Students Enrolled

87 | Students Responded

55.41% | Response Rate

Quantitative

Please rate your agreement with each of the following statements about this course:											
Overall, this was an excellent course.	0% (0)	1.15% (1)	0% (0)	19.54% (17)	79.31% (69)		87	0	0.5	4.77	
	Required for Major	Elective for Major	Required for General Education	Personal Interest			N	DNA	SD	M	
For what primary reason did you enroll in this course?	63.95% (55)	5.81% (5)	3.49% (3)	26.74% (23)			86	0	-	-	
Please rate your satisfaction with the instructional facilities for the course:											
	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied	Not Applicable	N	DNA	SD	M	
Classroom Space	9.3% (8)	19.77% (17)	0% (0)	29.07% (25)	41.86% (36)	0% (0)	86	0	1.41	3.74	
Classroom Technology	4.65% (4)	6.98% (6)	0% (0)	39.53% (34)	46.51% (40)	2.33% (2)	86	0	1.07	4.19	
Recitation Space	0% (0)	0% (0)	0% (0)	17.44% (15)	29.07% (25)	53.49% (46)	86	0	0.48	4.62	
Lab Space	0% (0)	0% (0)	0% (0)	13.95% (12)	22.09% (19)	63.95% (55)	86	0	0.49	4.61	
Please rate the course instructor according to each of the following statements:											
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable/Don't know	N	DNA	SD	M	
The instructor clearly presented what students should learn (the expected learning outcomes) for the course.	0% (0)	0% (0)	0% (0)	17.44% (15)	82.56% (71)	0% (0)	86	0	0.38	4.83	
The instructor was enthusiastic about teaching the course.	0% (0)	1.16% (1)	0% (0)	17.44% (15)	81.4% (70)	0% (0)	86	0	0.49	4.79	
The instructor made students feel welcome in seeking help/advice in or outside of class.	1.16% (1)	0% (0)	0% (0)	17.44% (15)	81.4% (70)	0% (0)	86	0	0.56	4.78	
The instructor presented material clearly.	0% (0)	2.33% (2)	0% (0)	11.63% (10)	86.05% (74)	0% (0)	86	0	0.54	4.81	
Overall, this was an excellent instructor.	0% (0)	0% (0)	0% (0)	12.79% (11)	87.21% (75)	0% (0)	86	0	0.33	4.87	
Please rate your agreement with each of the following aspects of this course:											
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree		N	DNA	SD	M	
The instructor had high achievement standards for this class.	0% (0)	1.18% (1)	4.71% (4)	36.47% (31)	57.65% (49)		85	0	0.64	4.51	
The instructor clearly showed the relevance of the course to my discipline.	0% (0)	0% (0)	3.53% (3)	21.18% (18)	75.29% (64)		85	0	0.52	4.72	
The instructor provided useful and timely feedback on graded work.	0% (0)	0% (0)	1.18% (1)	29.41% (25)	69.41% (59)		85	0	0.49	4.68	
Violations of Academic Integrity standards did not occur in class.	0% (0)	2.35% (2)	3.53% (3)	23.53% (20)	70.59% (60)		85	0	0.67	4.62	
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree		N	DNA	SD	M	
The teaching assistant(s) were effective in the recitation/lab and office hours.	0% (0)	100% (1)	0% (0)	0% (0)	0% (0)		1	0	0	2	

### Qualitative

Please comment on the elements of the course you found particularly effective. -

- Mr.Miller was extremely efficient in teaching and made sure the students understood the concepts before moving on to the next topic. Excellent course.
- The lectures were the best, apart from being intellectually stimulating this course was also a stress reliever as the professor made it a point that the students is calm, relaxed and absorbed. Sometimes he makes witty jokes that make the class burst in laughter and ensures high turn-up in the class.
- A good and easy algorithms topic.
- The style of teaching and the pace were extremely effective and beneficial. Covering the topics in detail at the pace we did was much much better than smashing through 800 pages of a technical book using power-point slides. I really feel that what have an intuitive grasp of the material covered and on top of that, learned to enjoy the subject.
- Algos for parallel machines were interesting and quiet different from what we generally study in algo
- The lectures were very very informative. Although contents-wise, it was a subset of what is in the textbook, significant emphasis was given on how and why things are done in a specific way. Taking notes in class does help as one understands better when he write things himself than he does by going through presentation slides.The optional homework for the interested ones made sure that we have enough to work upon what has been taught in the class, allowing the students to finish it their own time rather than finishing it haphazardly through external help.
- Lectures were amazingly simple to understand.
- Parallel computing approach was good!
- Amazing!!!!!! prof Amazing!!!!!! Perfect course for someone who likes the field of algorithms!
- The coursework was presented in a blackboard and classroom style of teaching rather than using presentation slides which was pretty effective for a course based on algorithms. The course content and organization was quite logical, which me tie up all I learnt while keeping the big picture in mind.
- Teaching style
- Since I was doing my major project in parallel computing, this course helped me a lot to get the basics right.
- The lectures were brilliant.
- Teaching ability of the professor is very good.
- I have liked the way the course was paced and thoroughly enjoyed the way professor has dealt with it.
- The ways to solve problems like parallel prefix, The ways to apply parallel algorithms in merge sort .. mesh ..hyper cube really nice ::-)
- The use of the board to teach the students
- Professors teaching
- slides would be very helpful ..
- Professor's way of ingraining concepts into student's mind
- Very well organized course.
- Techniques to teach
- Explanations by the professor with the help of boards and chalks was more effective than it would have been with the slides.
- This course helped me understand how to calculate the time complexity of various algorithms. It also helped me understand the different models of computation and how to solve some complex problems on these models. This well definitely help me write faster algorithms.
- The materials were explained thoroughly and at a pace that allows for the material to be absorbed and sinked in.
- I enjoyed how the teacher wrote everything on the cardboard and said it out loud as well. If you actually pay attention you do learn a lot during the lectures this way
- The instructor and his style of teaching were very effective. The course managed to generate my interest in a field I was not particularly keen on following
- Leaves basis of parallel systems.
- very good lectures
- teaching method, (using marker/board and not using slides)
- Learning on board Balanced load distribution Intriguing exams Professor!
- conceptual teaching and efficiency in solving queries
- Course structure was very effective and up-to-date.
- The course is well organized and clear to learn
- I liked the blackboard teaching style and the methodology Dr. Miller used lecture.
- Sense of humour of the professor helps me a lot.
- Course material was all discussed and given on the black board. Professor thoroughly discussed and wrote everything as he went through the topics. Unlike most of the other courses offered by the department, which use slides, it is not easy to loose interest in class.

Please comment on course improvements you would suggest. -

Please comment on the elements of the course you found particularly effective. -

• Mr. Miller was extremely efficient in teaching and made sure the students understood the concepts before moving on to the next topic. Excellent course.

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• The style of teaching and the pace were extremely effective and beneficial. Covering the topics in detail at the pace we did was much much better than smashing through 800 pages of a technical book using power-point slides. I really feel that I have an intuitive grasp of the material covered and on top of that, learned to enjoy the subject.

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• The ways to solve problems like parallel prefix. The ways to apply parallel algorithms in merge sort, mesh, hypercube really nice. :-)

• The use of the board to teach the students

• Professors teaching

• Slides would be very helpful.

• Professor's way of ingrainning concepts into student's mind

• Very well organized course.

• techniques to teach

• Explanations by the professor with the help of boards and chalk was more effective than it would have been with the slides.

• This course helped me understand how to calculate the time complexity of various algorithms. It also helped me understand the different models of computation and how to solve some complex problems on these models. This will definitely help me write faster algorithms.

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• Learnt basics of parallel systems.

• Very good lectures

• Teaching method, using marker/board and not using slides

• Learning on board. Balanced load distribution. Intriguing exams. Professor!

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Please comment on course improvements you would suggest. -

• Because there weren't enough TAs, projects and assignments were not given. More resources would make this course perfect.

• I don't think there is any, maybe have a break during class? because for an asian guy the habit of noon nap helps a lot (the course starts from 14:00)

• I would suggest the instructor to assign some homework for student to do, so they can have better understanding of what they have learned in class

• I feel that having a smaller class size would have been more beneficial.

• May be some homework for practice.

• perfect course and professor

• none

• More hands-on approach, with practical assignments to implement parallel algorithms on a multi-processor system

• Please make this course more tough by giving students a project to implement a parallel system. That would be perfect. Many graduate students like me lack proper coding skills here. many fail in the first round of coding interview for top companies. As this is a graduate level course a project on parallel systems would have made this perfect.

• No improvements. The course is excellent as it is

• Even though practice problems were provided, I think more practice problems closer to the scope of the materials being covered would have assisted better in putting to practice the materials learned.

• Prof. Miller can help students by uploading slides. This is just a suggestion as he made it very clear in the beginning of the semester that he does not believe in uploading lecture slides.

• Slides would be better.

• Practical assignments should be included

• None

• None, the course is very good as it is.

• Please make the advanced level of this course (CSE633) available in the Fall instead of Spring, when there are a lot of heavy courses.

• Please give some simple assignments. please give some tricky questions in class. BUT, very few in exams

• I don't really find anything to be improved in anyway the course was dealt with. I liked the way professor explained every minute details and made us understand the topics covered so far.

• None.

• If professor could include graded homework in this course, that would be good. Because few vital concepts are simple to understand but they are also confusing, which costs students straight in the exam. Homework can help people understand things in much better way.

• no comment

• At times, I felt like we were learning about facts (rather than concepts), with not much to think upon. However, this may be due to the limitations of the subject being taught.

• Nothing! It was perfect! Wouldn't want a change in anything!

• Give more assignments. The TAs can easily handle Homework and even programming assignments for the current class size. They seem to have no work except grading midterms. Course can be made more competitive.

• Would have liked to see practice exams.

• It is well-tailored to meet the requirements stated by professor, in the beginning of the semester. The course details should be updated on the HUB Student Center (My Academics section). I still say CSE529 does not satisfy core area requirement although the professor confirmed otherwise at the beginning of course.

• Some projects should be assigned so that students can implement what they learned in class.

• A better student to lecturer ratio, more befitting of a graduate course, a better lecture hall (the one we had is a terrible hall with very bad acoustics and difficult to see the boards from 60% of the room) and graded homeworks. This was deemed impractical due limited resources being supplied to support the lecture.

• Maybe some industrial exposure leading to project works will help students take a lot from the course.

If you were dissatisfied with any of the instructional facilities, please explain: -

• In a word terrible. Rubbing shoulders with people. Poor lighting, rickety writing board that is far too small for comfort for any period of time let alone an 80 minute lecture. Poor side boards, white on brown has a terrible contrast ratio. Too few desks and waaaaaay too many people crowded in that room. It should be torn down at best, at worst completely redesigned/modeled. Extremely glad to never have to be in that room again.

• The classroom provided was very small and crowded. The way the blackboards and seats are arranged is not proper. Students don't get a proper view of the board.

Please comment on how effective the instructor was in teaching this course. -

• The instructor was effective in teaching this course.

• Prof. Miller was very effective in teaching the course. He was clear in expressing the ideas and helped the students by solving their queries.

• The instructor was amazing in teaching

• Very good instructor, I felt that he made the concepts easy to understand

• He teaching is very clear and easy to understand. But please make this course more tougher, so that people learn more from the course. Everyone just memorizes some algorithms 1 day before the exam. Some of my friends don't even know the meaning of pseudo code and have completed a graduate level course looks odd to me.

• Professor Miller was really clear in every detail he explained in class and also was really helpful in making us understand in case of any difficulties. He is the best

• Gives Crystal clear explanation...crisp...sharp...but curt...

• Prof. Miller is very clear and concise with his lectures, and the way he presents the content is coherent.

• he was very effective. He spent a lot of time to patiently teach the concepts and make sure that the students understand everything.

• Was very effective in his teaching methods. Instead of teaching students very risky and explained the concepts well when in doubt.

• He is an excellent professor who insure everyone learned the concepts and give optimum time to absorb ideas.

• Amazing! One of the best professors!

• An excellent instructor. His jovial nature makes the learning easy and fun filled

• He is a veteran. And it shows. Not only does he have the knowledge, he is aware of the current technological advancements and relates the course contents to practical applications in the world, wherever applicable. That helps a great deal in developing interest in the course and the field itself. And yes, he's funny too.

• One of the best professors I have ever had. Presented the material very clearly and to the point.

• Best professor yet.

• Extremely effective

• Russ Miller is an excellent professor. I like his intelligence and sense of humour which makes us enjoy the subject!

• Excellent professor teaches very well and is fair

• Brilliant guy. Feel very happy to be associated with such accomplished people

• Russ is a great professor. I liked his teaching approach. He clears the doubt then and there. I am happy that I took this course.

• He is probably the only prof who teaches on the blackboard and I love the fact that he does. It gives a better idea of everything, and the fact that he doesn't have slides makes you attend classes which is a brilliant move on his part. he teaches superb! And the fact that he uses his own book...how cool is that! He knows his stuff and it is too good in it! I would recommend his course to anyone who has an interest in algo...or may be even otherwise. one would develop attending his class! Despite the fact that he leaves it completely on his students to go through the material without giving formal assignments, everyone takes his subject seriously and revere him!!

• Prof. Miller while having deep knowledge of the subject, also presented that knowledge quite effectively and kept the lectures interesting, which is quite necessary but rare in a course about algorithms. The class atmosphere he created welcomed even the silliest of doubts and he patiently answered all of them without making anyone feel stupid. The lectures sparked interest in the subject and encouraged me to study the subject outside the context of the course. He also did a great job of making us realize the importance of the concepts taught and their applications in real world through examples.

• The instructor gave us a real helpful and excellent course. Gained a lot from him. Strongly recommend this course.

• He is very good professor and have good knowledge of his course.

• He is very good and effective.

• Prof. Miller was an excellent instructor. He explained the concepts clearly and was very patient with the students' doubts.

• The professor teaches really good

• Very effective. His lectures gave me a new understanding of Algorithms

• Professor Russ Miller is very amazing and has a unique style of teaching which I enjoyed. He explained some of the very convoluted concepts with such an ease in it.

• Very effective

• Perfect professor

• absolutely effective in teaching

• Very effective and instructive

• enthusiasm, willing to answer questions, nice instructor.

• Professor was extremely lucid and clear in all the concepts he taught to us. He never hesitated to answer our very basic questions. Undoubtedly one of the best professors I have seen so far. No comments for improvements to Prof. Miller. He is simply the best! :)

• Dr. Millers lectures were very clear and well presented.

• Good, Clear and concise

• Very effective

• One of the most effective professor's I've had. Explanations were thorough

• Amazing instructor. Clear expectations, clear presentation of material, no surprises, no regret, hands down - amazing class.

What were the highlights of this course? -

• parallel algorithms

• The material is very relevant to current real-world applications.

• The idea of parallel algorithms

• Can learn basic knowledge

• Teaching

• everything

• How parallel algorithms can be applied on different architectures.

• Learning without presentations, that was effective

• the professor was the best I've seen so far

• As I had particular interest in the subject and the professor taught it the best way it can be. I have enjoyed studying it to the core.

• Parallel Prefix and Binary Sorting

• I learned the basic of parallel programming and architectures we use for them. Exams were fairly graded.

• Study and analysis of algorithms and their applications on a variety of architectures

• Algorithms

• The current scenario of algos in the world! Pretty useful!

• Style of teaching, pace of class, depth of knowledge on topics covered, completely different way to solve problems than the sequential approach.

• Parallel algorithms and various architectures

• Was very good and informative

• Professor Russ Miller and his teaching

• Good material

• Lectures were amazing!

• Classes/Lectures

• Parallel Prefix

• Well chosen topics

• excellent professor

• Algorithms

• The divide & conquer algorithms

• It was very informative and interactional

• teaching

• The manner in which Professor Russ Miller taught was the chief highlight

• My first exposure ever to parallel systems

• Content: Professor's chalk and board style of teaching and simply using slides

• professors teaching

• Complicated algorithms explained in simple way.

• Calculating Time Complexity, Models of Computation, Parallel Prefix Problems, Divide and Conquer Strategy

• Learning about parallel algorithms and finding a balanced combination of sequential and parallel algorithms for the most effective solution.

Would the students in CSE be better served if this professor taught 100-level courses instead of 400/500- and 600-level courses? Please explain. -

• No, since at that early stage, they might not be able to fully appreciate the materials this professor presents to the class.

• no, I felt that it was fine as a 500-level course

• He should be teaching 400/500 and 600 level courses.

• No, He is one of the best professor. He should teach this algorithms. Which is very required for interviews to graduate students.

• No, At least for this course some prerequisite knowledge was expected about algorithms.

• He should definitely teach 500/600 level courses

• This professor should teach MORE 500 and 600 level courses as his grasp on subject and style of teaching are just excellent.

• He's a great lecturer in general and I think undergrads and grads would both be well served if he teaches any courses.

• not!

• No.

• No, he should be teaching 600 level subjects because he is very informative on a different level which is deserved for 600 level subjects

• Yes. The professor can clearly explain concepts which would help newer students into grasping them.

• No he is good in this position

• No, He is good at what he is teaching.

• Not "instead of". Definitely not.

• No, this professor teaches courses that would otherwise be difficult in a very straightforward manner, and helps students greatly.

• No, The pre requisites of the course had nothing to do with 100 level courses

• Professor teaches the subject very well and any person attending his class would go out the class satisfied.

• No he should teach a graduate course only

• No, 100 level courses serve to introduce students to base concepts and much of the material will be generic and unfortunately, forgotten by the students. This is a waste when graduate students are demanding higher level education from a recognized leader in the field.

• nooooo!!! I mean, obviously students being taught at 100-level would learn a lot from him but I feel he belongs in 500-600 level, the research that he has done would be useful and more appropriate to senior or graduate level students (as he can't really teach his work to 100-level students)!

• No comment

• Professor Miller, being an excellent instructor, explains concepts involved in this 400/500 level course quite effectively, which is quite rare and hence it'll be better if he continues to teach courses at this level.

• Although I agree that if Dr. Miller teaches 100- level courses then that would help students build up a good base, I would like to say this 500 level course is very important for graduate students willing to learn parallel programming and architectures.

• Explains every concept very effectively so that anyone can understand them, students will definitely benefit if he though 100 level courses as well.

• No, It would be much better if the professor taughts graduate level courses as he explains difficult and advanced topics really well.

• No.

• I think having this professor for 500/600 courses would benefit the students better. I feel he would help students understand the graduate level courses and that too by creating interest on the same.

• not sure

• He is very experienced. I dont think he will be a good fit for 100-level courses. He would expect students to know some basic stuff.

• No

• Russ should teach CSE331 along with this class

• Yes

• Yes, he's very good at explaining fundamental concepts

• N/A

• The professor suits for lecturing in high level courses

• No, Dr. Millers teaching style and material is must better suited for 400/500/600 level course.

• Possibly, Professor is very clear and I bet he can spread his love of science to younger students making them more interested in this subject.

• No

• no

Do you predict that this course will help you in your future as a card-carrying computer scientist/computer engineer? Why or why not? -

• Yes.

• Definitely. It relates to new technologies - future.

• Yes. Because parallel programming is becoming more and more important, and the course teaches the students some basics of parallel programming.

• Yes, very much so. The material covered is particularly important with the growing applications of "big data" and the use of large-scale computing centers.

• Of course yes. This is the first algorithm course I've attend and I just transferred from biology to computer science.

• Yes, parallel computing is more and more popular

• yes

• yes, field on interest

• Yes. This course deals with parallel algorithms which is in-demand nowadays in the Silicon Valley.

• Yes, because it is very much a class oriented towards current tech (multiple processor systems)

• Yes, I might take the 600 level as well.

• I believe so as algorithms is an important part of being a computer engineer

• This course created an interest in me to find a career in this subject

• Yes. Concepts that were told in class will be very useful in tackling interviews.

• Yes. The course was highly relevant to the needs of the industry and will help immensely in the present-day industry as well as in the future.

• Yes. It has already helped me in my major project.

• Yes, as a computer scientist, I'm expected to have a basic idea of computer algorithms and how they apply on various architectures, regardless of my field. This course taught how to approach these concepts which would be a great help in future.

• of course

• Yes! Absolutely! He has given us the knowledge of what is REALLY going on in the computer world right now! Parallel algo is the thing of the present!

• Yes this course will definitely help me in the future. Mainly because it taught me the idea against the algorithm.

• Yes. Technology in the real world is either parallel or moving toward parallel systems and having a fundamental knowledge of parallel algorithms is a prerequisite to being able to start utilizing such systems.

• Yes it will. Since, parallel computing is very much in demand because of the increase in the information and increased necessity of speed.

• Yes it would. This is an excellent course and the plus point being that the professor is Russ Miller.

• Yes I hope it will

• Yes it certainly would, parallel algorithms are indispensable in todays world.

• Yes, because of what it is - Algorithms for Modern Computer Systems

• Yes, as industry is moving from sequential algo to parallel

• Yes because parallel algorithms is a hot topic in today's world and there is a wide scope in the field

• yes it is a fundamental course which every computer science student have to know about

• Yes, I need to use parallel algorithms in the future to solve my project problems

• Yes

• fundamental to computer science coursework

• yes it gives me a better understanding of the programs, logic.

• Definitely, because the content is relevant today.

• yes, I believe some aspects will...some on the other hand seem very theoretical...

• It will certainly help me as the concepts taught in this course are extremely relevant in todays computer science world which thrive on parallel computing

• Yes, algorithms are the fundamentals of any good programmer

• Yes. The course introduces a whole new approach towards algorithms which essentially is the future of algorithms in today's parallel computing world.

• no, I did not do any project, so I don't know how to implement a parallel algorithm.

• Writing fast programs is a necessity in the world of computer science and this course teaches does just that.

• Yes.

• yes, because everything is more than just one processor nowadays so I felt that this course was important

• Not sure what "card-carrying" means but I believe it would help me as a computer scientist/computer engineer in the future.