Teaching Statement

Lin Jiu

"Teaching and learning promote and enhance each other."	
	—The Book of Rite, Warring States period

This Chinese quote on teaching and learning reveals the mutual benefit between them. Although I read it as a teenager, not until 2014, when I first taught as an instructor, did I finally begin to better understand the nature and connections between teaching and learning. There are several key concepts, such as

- *motivation* and *inspiration*: as William Arthur Ward said "The mediocre teacher tells. The good teacher explains. The superior teacher demonstrates. The great teacher inspires.";
- engagement, by, e.g., group discussion, asking and answering questions;
- systematical *training plans* and *course designs*, by organizing materials, setting appropriate homework assignments, quizzes, and tests;
- involvement of student research projects (, as my published my first paper as a junior student);
- and finally the cultivation in active pursuing.

For instance, teaching objects are no long restricted to course materials. Besides the basic definition, formulas, examples, etc., it is more important to foster a deeper understanding, to cultivate a self-independent learning, and to guide students with problem-solving skills. My ultimate goal is to cultivate the students necessary skills in problem solving, such as critical thinking and communication, and finally to guide the students into becoming self/independent math learners outside the classroom. TTo fulfill those goals, certain pedagogical strategies are applied.

- 1. Experiential teaching enriches the contents and activities in class. Besides traditional ones e.g., group discussion on problems with interactions, model tools, such as presentations on simulation demos, can catch the attention and stimulate students to further explore materials. Connecting a real-world problem to mathematical theory, not only encourages interdisciplinary learning for students; but also reveals the process of analyzing and solving real problems.
- 2. Research-driven teaching opens the door of higher-level research projects to undergraduate students. Some homework problems, especially in high level courses, are particularly selected. They are either directly from research projects or published papers, to offer the opportunity to the students participating certain projects; or are given in a literature review format, as the opening step to research topics. For example, presentation on topics related but beyond the teaching materials is one of such formats.
- 3. Ed-tech innovative teaching becomes increasingly a major part. The use of software such as Mathematica¹ and SageMath² is not restricted in presenting simulations and plots. Programming homework, dynamic notes, etc. always appear in my class.

1 Diverse and Abundant Experiences

Throughout all three institutes I have taught: Tulane University, Dalhousie University, and Duke Kunshan University, I experienced from private university, public university to the joint-venture liberal arts college. As shown in Appendix B, up to now, I have lectured (including current teaching ones)

¹https://www.wolfram.com/mathematica/

²https://www.sagemath.org/

- 23 sections, of 10 different regular math courses, including various levels of calculus, linear algebra, probability, complex analysis, and number theory, at three different institutes;
- 1 miniterm, i.e., 1-week short course, and 5 independent study, i.e., reading courses, for completely different topics, e.g., combinatorics, analytic number theory, quantum computing, and algebraic geometry.

In general, for basic math courses, e.g. calculus, linear algebra, probability and statistics, I have no preference, as all such courses are essential and important to students majoring in STEM. Meanwhile, as my research topics include several branches, such as combinatorics, (analytic and algebraic) number theory, etc., many advanced courses, e.g., complex analysis, abstract algebra, also fit my area perfectly. Take MATH301–Advanced Introduction to Probability at Duke Kunshan University (DKU) as an example. This course was designed by me upon my arrival at DKU. Many ingredients were taken into consideration, including but not restricted to the seven-week session structure at DKU, undergraduate curriculum, related major requirements, and other courses. The course serves as an elective in math major, and also consists of important materials for further courses, such as MATH405—Financial Mathematics. Some research topics, e.g., probabilistic methods, Shor's algorithms in quantum computing are also introduced as the very end of the class.

2 Adjustment, Improvement, and Innovation

Teaching and learning is a dynamic process, so adjustment is required almost every single time. I am always willing to modify part of my teaching and adopt new already tested techniques into my course. This continuous adjustment encourages me to constantly reconsider the purpose and aims of the course and my teaching strategies. Moreover, comments on each course's evaluation are also helpful for improvement. The current average of the overall score and some comments show that I am a "good teacher"; still, there is room and space be become a better instructor. In order to constantly improve my teaching, I am also engaged in many activities. For instance, I led two sessions by the Center for Teaching and Learning (CTL) of DKU, on the usage of MaxHub³, a digital whiteboard in hybrid teaching; and WeBWorK⁴.

Also facilitated by the CTL, I was selected as one of the two instructors at DKU to conduct the Gradescope⁵ Research Project, awarded a grant of \$2,000. Gradescope is a digital grading system that allows instructors to scan and upload exams, and to grade them online. It reduces the grading time for classes of large size and digitizes the tests. Right now, I am selected as a member of Faculty Learning Community (FLC) 2022-2023, across all disciplines, to discuss and learn from each other in teaching.

Admittedly, there is always a distance from being a great teacher, and I am willing to constantly improve in teaching. As my experience growth, my teaching will be more effective, diverse, and innovative. My enthusiasm and commitment will never decrease.

Appendix

A TEACHING AWARDS

2022.12–2024.06 Faculty Learning Community Grant Duke Kunshan University 2022.01–2022.12 Gradescope Research Project Grant Gradescope

Facilitated by Center for Teaching and Learning at Duke Kunshan University

Gradescope for math courses.

2012–2013 Excellent Graduate Student Teacher Math Dept., Tulane Univ.

³https://www.maxhub.com/

⁴https://openwebwork.org/

⁵https://www.gradescope.com/

B Teaching Experience

DUKE KUNSHA	AN UNIVERSITY	
2023 Fall	MATH 105	Calculus
	MATH 202	Linear Algebra
	MATH 105	Calculus
	MATH 301	Advanced Introduction to Probability
2023 Spring	MATH 205	Probability and Statistics
2022 Fall	MINITERM 102 INDSTU 391	Experimental Mathematics and Symbolic Computation
2022 Fall	MATH 105	Introduction to Algebraic Geometry Calculus
	MATH 105 MATH 306	
		Number Theory
2022 Spring	MATH 301 INDSTU 391	Advanced Introduction to Probability Variational Quantum Algorithms
2022 Spring	MATH 201	Multivariable Calculus
	MATH 301	
	MATH 201	Advanced Introduction to Probability Multivariable Calculus
2021 Fall	MATH 105	Calculus
	INDSTU 391	Riemann Zeta-Function
	INDSTU 391	Quantum Algorithm
	MATH 306	Number Theory
2021 Spring	INDSTU 391 MATH 205	Combinatorics Probability and Statistics
	MATH 301	Advanced Introduction to Probability
2020 Fall	MATH 105	Calculus
	MATH 201	Multivariable Calculus
DALHOUSIE U		
2019 Summer	MATH 1030	Matrix Theory and Linear Algebra I
2019 Winter	MATH 3080	Introduction to Complex Variables
TULANE UNIV		
2016 Spring	MATH 1060	Long Calculus II
2015 Fall	MATH 1310	Consolidated Calculus
2015 Spring	MATH 1210	Long Calculus I
2014 Summer	MATH 1160	Long Calculus II

C Sampled Course Syllabi and Evaluations

MATH 201

Multivariable Calculus



Semester 3 Spring 2022

Lectures: MoTuWeTh: 13:15--14:30

Recitations: MoWe 7:15—8:15
Academic credit: 4 DKU credits

Instructor's information

Dr. Lin Jiu: Lecturer of Mathematics, Duke Kunshan University

Assistant Professor of the Practice, Duke University

Email: lin.jiu@dukekunshan.edu.cn

Office: CC2057

Office Hours: Mondays and Tuesdays 14:30—16:00 CC2057

Wednesday 20:00—21:00 Online 952 7201 2990

or by appointment

Teaching Assistants (for recitation, WeBWork, & Mathematica)

Edward Yue Heng. Yue@dukekunshan.edu.cn

Office Hours Fridays 20:30-21:30 Zoom 96976215376

Lunji Zhu <u>Linji.Zhu@dukekunshan.edu.cn</u>

Office Hours Tuesdays 20:30-21:30 Zoom 8019763007

ZOOM PASSCODE: MATH201

What is this course about?

This course is a continuation of MATH 101/105 in which essential topics and concepts of single variable calculus are introduced. We live in a three-dimensional world. Whether to fully understand Kepler's Laws of planetary motion discovered four hundred years ago, or the two linked, intertwined parallel helixes as the structure of the DNA molecule discovered in the 1950s, whether to calculate atmospheric pressure at a given time which is a function of longitude and latitude, or to find the rate of fluid flow across a surface, and to answer many more questions in physical and social life sciences related to multi-dimensional structures, multivariable calculus is the course to start from. Main topics of this course include vectors and vector functions, the geometry of higher dimensional Euclidean spaces, partial derivatives, multiple integrals, line integrals, vector fields, Green's Theorem, Stokes' Theorem and the Divergence Theorem.

What background knowledge do I need before taking this course?

Prerequisite: MATH 101/105.

What will I learn in this course?

Upon successful completion of the course, students will be able to

- Parametrize plane and space curves, surfaces.
- Curves in polar coordinates
- Interpret real-world situations in terms of related multivariable calculus concepts.
- Understand the concept of vectors and its connection to physics, apply operations on vectors

- Algebraically and geometrically, calculate the dot product and the cross product of vectors.
- Develop analytical and computational skills required for working with lines, curves, planes, and surfaces in space
- Find limits, partial derivatives, directional derivatives, tangent plane, linear approximation and the gradient of functions of several variables
- Understand the definitions of double integrals, triple integrals, line integrals, and surface integrals;
- Recognize and implement appropriate techniques to evaluate them, and apply them to solve
- Apply the Fundamental Theorem of Line Integrals, Green's Theorem, Stokes' Theorem, and the Divergence Theorem, to simplify integration problems.

What will I do in this course?

The course will be comprised of video lectures, synchronous meetings dedicated to problem solving and lecturing, assigned readings, homework, and exams.

How can I prepare for the class sessions to be successful?

To succeed, students should be prepared to devote several hours to this course on a daily basis. They are strongly encouraged to use the online tutoring resources of ARC, to work with classmates, and to contact instructors in a timely manner for additional help as needed.

What required texts, materials, and equipment will I need?

"Calculus, Volume III", by OpenSTAX. Find it HERE or on Sakai/Resources

What optional texts or resources might be helpful?

Any multivariate calculus book can be used as a supplement for more practice problems.

24% (=4%×6)

How will my grade be determined?

1. Homework:

	•	HW1 due	Apr. 02	23:59	
	•	HW2 due	Apr. 09	23:59	
	•	HW3 due	Apr. 16	23:59	
	•	HW4 due	Apr. 23	23:59	
	•	HW5 due	Apr. 30	23:59	
	•	HW6 due	May 07	23:59	
	•	HW7 due	May 11	23:59	
2.	Quizze	es:	8%(=2%×4)		
3.	Formu	ıla Sheet:	1%		
4.	Mathe	ematica Project	t: 12%		
5.	Midte	rm:	20%	Apr. 13 & 14	Lecture Time
6.	Final e	exam:	35%		

Please refer to the following scale for your grading. <u>This is also subject to change, based on the overall performances of the whole class.</u>

```
A+= 98.00% - 100%; A = 93.00 - 97.99%%; A- = 90.00% - 92.99%; B+=87.00% - 89.99%; B = 83.00% - 86.99%; B- = 80.00% - 82.99%; C+=77.00% - 79.99%; C = 73.00% - 76.99%; C - = 70.00% - 72.99%; D+=67.00% - 69.99%; D = 63.00% - 66.99%; D - = 60.00% - 62.99%; F =59.99% and below.
```

Remarks: In case of documented illness or family emergency or documented University sponsored trips, you may miss the midterm, but the supporting documentation must be submitted to the instructor in advance. With the document, your missing midterm score can be counted as the same as your final. Do remember: let me know **BEFORE** the exam. An unexcused absence from any exam will be counted as a zero.

Homework. Weekly homework will be assigned each Thursday and will be due on the following Saturday mindnight, except for the last week. *We will use the WeBWork system for homework assignments*. **No late homework will be accepted**. Each homework problem set is worth 4% and the LOWEST one will be dropped.

Quiz. Weekly quiz will be assigned each week during the last lecture day of each week, except for the weeks of Midterm and the 1st week. Each quiz will be counted 2% and the LOWEST one will be dropped.

Midterm. The midterm is scheduled in the 4th week and it will be separated into two parts:

- The first part is assigned via WeBWorK, during the first 25 mins of the lecture on April 13th; (5%)
- and the second written part is on April 14th, lecture time. (15%)

Midterm covers all the materials from Week 1 to Week 3.

Final Exam. May 12th, 2022, 16:00—18:00, (AB 2107 well.... Just in case)

Due to the current situation, the final exam will be online and open-book. (Therefore, the 2% of formula sheets is added to the project). An announcement will be made in the 7th week, on more details about the final exam. It will be on Sakai->Tests&&Quizzes (instead of Gradescope, though I will grade your submissions via Gradescope).

Formula Sheet. You are REQUIRED to prepare ONE piece of formula sheet for the midterm, and it can have at maximum an A4 size, double sided. **Brining more pieces or larger size of sheets, will be considered as cheating, and leads to 0 for the corresponding test**. This piece is worth 1%. Note that this is not automatically given: if you failed or forgot to turn in your formula sheet, you will lose the point.

Mathematica Project. We shall form 10 groups, with each group consisting of 3-4 students. A list of projects will be given in the 4th week and each group should pick one by the end of 5th week. First come first served. The deadline for submitting the programming file is May 14th, NOON. Plagiarism of the code will lead to 0 for the project.

What are the course policies?

Collaboration with peers on homework is allowed, but solutions are to be written individually. You are not allowed to use other books/online resources. Late homework will not be accepted.

We do not give make-up exams for any reason if you miss a midterm exam. Thus, missing an exam is a very serious matter. An unexcused delay in taking any exam will be counted as a zero. Excuses may be accepted, at the discretion of the instructor, and any alternative arrangements must be made well in advance.

Academic Integrity:

As a student, you should abide by the academic honesty standard of the Duke Kunshan University. Its community Standard states: "Duke Kunshan University is a community comprised of individuals from diverse cultures and backgrounds. We are dedicated to scholarship, leadership, and service and to the principles of honesty, fairness, respect, and accountability. Members of this community commit to reflecting upon and upholding these principles in all academic and non-academic endeavors, and to protecting and promoting a culture of integrity and trust." For all graded work, students should pledge that they have neither given nor received any unacknowledged aid.

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Academic Policy & Procedures:

You are responsible for knowing and adhering to academic policy and procedures as published in University Bulletin and Student Handbook. Please note, an incident of behavioral infraction or academic dishonesty (cheating on a test, plagiarizing, etc.) will result in immediate action from me, in consultation with university administration (e.g., Dean of Undergraduate Studies, Student Conduct, Academic Advising). Please visit the Undergraduate Studies website for additional guidance related to academic policy and procedures. Academic integrity is everyone's responsibility.

Academic Disruptive Behavior and Community Standard:

Please avoid all forms of disruptive behavior, including but not limited to: verbal or physical threats, repeated obscenities, unreasonable interference with class discussion, making/receiving personal phone calls, text messages or pages during class, excessive tardiness, leaving and entering class frequently without notice of illness or other extenuating circumstances, and persisting in disruptive personal conversations with other class members. Please turn off phones, pagers, etc. during class unless instructed otherwise. If you choose not to adhere to these standards, I will take action in consultation with university administration (e.g., Dean of Undergraduate Studies, Student Conduct, Academic Advising).

Academic Accommodations:

If you need to request accommodation for a disability, you need a signed accommodation plan from Campus Health Services, and you need to provide a copy of that plan to me. Visit the Office of Student Affairs website for additional information and instruction related to accommodations.

What campus resources can help me during this course?

Academic Advising and Student Support

Please consult with me about appropriate course preparation and readiness strategies, as needed. Consult your academic advisors on course performance (i.e., poor grades) and academic decisions (e.g., course

changes, incompletes, withdrawals) to ensure you stay on track with degree and graduation requirements. In addition to advisors, staff in the Academic Resource Center can provide recommendations on academic success strategies (e.g., tutoring, coaching, student learning preferences). Please visit the Office of Undergraduate Advising website for additional information related to academic advising and student support services.

Writing and Language Studio

For additional help with academic writing—and more generally with language learning—you are welcome to make an appointment with the Writing and Language Studio (WLS). You can register for an account, make an appointment, and learn more about WLS services, policies, and events on the <u>WLS website</u>. You can also find writing and language learning resources on the <u>Writing & Language Studio Sakai site</u>.

IT Support

If you are experiencing technical difficulties, please contact IT:

- China-based faculty/staff/students 400-816-7100, (+86) 0512-3665-7100
- US-based faculty/staff/students (+1) 919-660-1810
- International-based faculty/staff/students can use either telephone option (recommend using tools like Skype calling)
- Live Chat: https://oit.duke.edu/help
- Email: service-desk@dukekunshan.edu.cn

What is the expected course schedule?

Tentative, Subject to Change

Week 1	Parametric Equations
(Mar. 21—	Calculus of Parametric Curves
Mar. 24)	Polar Coordinates
Week 2	• Vectors
(Mar. 28—	• Dot product
Apr. 2)	Cross product
	• Equations of lines and planes
	Vectors functions and space curves
	Derivatives and integrals of vector functions
	Arc lengthArc length function and parametrization with respect to arc length
	• Curvature

Week 3	Motion in space: velocity and acceleration
(Apr. 6—Apr.	Functions of several variables
7)	Limits and continuity
	1 st Order Partial derivatives
Week 4	Higher-order Partial derivatives
(Apr. 11—	Tangent planes and linear approximations
Apr. 14)	The Chain Rule
	Directional derivatives and the gradient vector
	Maximum and minimum values
	Lagrange multipliers
	Midterm: April 13 th and 14 th
Week 5	Double integrals over rectangles
(Apr. 18—	Iterated integrals
Apr. 21)	Double integrals over general regions
	Double integrals in polar coordinates
	• Applications of double integrals (only for normal distributions)
	Triple integrals
	Triple integrals in cylindrical coordinates
	Triple integrals in spherical coordinates
Week 6	Triple integrals in spherical coordinates
(Apr. 25—	• Vector fields
Apr. 28)	Line integrals
	The fundamental theorem for line integrals
	• Green's Theorem
Week 7	Parametric surfaces and their areas
(May 4—May	Surface integrals
7)	Curl and divergence

- Stokes' Theorem
- The Divergence Theorem

Final Exam May 12th, 2022, 16:00—18:00, AB 2107

Course: 7W2-MATH-201-003: Multivariable Calculus

Instructor: Lin Jiu *

1 - Please rate the following state	ments on a scale o	f 5 (strongly a	agree) to 1 (strongly dis	sagree).								
The course learning objectives stated in the syllabus were clear to me.													
Response Option Weight Frequency Percent Percent Responses Means													
Strongly Agree	(5)	12	75.00%				4.75						
Agree	(4)	4	25.00%										
Neutral	(3)	0	0.00%	1									
Disagree	(2)	0	0.00%]									
Strongly Disagree	(1)	0	0.00%]									
				0 25	50	100	Question						
Re	sponse Rate				Mean			STD	Median				
16	3/30 (53.33%)				4.75			0.45	5	.00			

1 - Please rate the following state	ements on a scale o	f 5 (strongly a	agree) to 1 (stron	gly di	sagree).							
The course expectations were cl	The course expectations were clear to me.													
Response Option Weight Frequency Percent Percent Responses Means														
Strongly Agree	(5)	10	62.50%						4.63					
Agree	(4)	6	37.50%					ш						
Neutral	(3)	0	0.00%					ш						
Disagree	(2)	0	0.00%	1				ш						
Strongly Disagree	(1)	0	0.00%	1										
	•			0	25	50	100		Question					
R	tesponse Rate					Mean				STD	Median			
1				4.63				0.50		5.00				

1 - Please rate the following statements on	a scale o	f 5 (strongly a	agree) to 1 (strongly	y dis	agree)						
This course had clear grading criteria.												
Response Option	Weight	Frequency	Percent	Perce	ent F	Respor	ises			Меа	ans	
Strongly Agree	(5)	11	68.75%						4.69			
Agree	(4)	5	31.25%									
Neutral	(3)	0	0.00%	1								
Disagree	(2)	0	0.00%									
Strongly Disagree	(1)	0	0.00%									
	•			0	25	50	100	Q	uestion			
Response Ra	te				ı	Mean				STD	M	edian
16/30 (53.339	6)					4.69				0.48		5.00

his course was well organized.													
Response Option	Weight	Frequency	Percent	Perce	nt Resp	onses			Mea	ns			
Strongly Agree	(5)	11	68.75%				4.69						
Agree	(4)	5	31.25%										
Neutral	(3)	0	0.00%	1									
Disagree	(2)	0	0.00%	1									
Strongly Disagree	(1)	0	0.00%	1									
	•			0 2	5 50	100	Quest	ion					

Course: 7W2-MATH-201-003: Multivariable Calculus

Instructor: Lin Jiu *

1 - Please rate the following staten	nents on a scale o	f 5 (strongly a	agree) to 1 (strongly disa	agree).									
The course workload was appropri	The course workload was appropriate for the credits earned.													
Response Option Weight Frequency Percent Percent Responses Means														
Strongly Agree	(5)	10	62.50%				4.63							
Agree	(4)	6	37.50%											
Neutral	(3)	0	0.00%	1										
Disagree	(2)	0	0.00%	1										
Strongly Disagree	(1)	0	0.00%	1										
				0 25	50 1	00	Question							
Res	ponse Rate			1	Vlean			STD	Me	dian				
16/3	30 (53.33%)				4.63			0.50	5	.00				

1 - Please rate the following stat	ements on a scale o	f 5 (strongly a	agree) to 1 (strongly	y dis	agree)								
I understood the language used	understood the language used in the instruction and course materials.													
Response Option Weight Frequency Percent Percent Responses Means														
Strongly Agree	(5)	10	62.50%						4.56					
Agree	(4)	5	31.25%											
Neutral	(3)	1	6.25%											
Disagree	(2)	0	0.00%	1										
Strongly Disagree	(1)	0	0.00%	1										
	•			0	25	50	100	Q	uestion					
F	Response Rate				ı	Mean			STD		M	edian		
		•		4.56	4.56 0.63									

1 - Please rate the following statements	on a scale o	f 5 (strongly	agree) to 1 (trongly di	sagree)							
had as many opportunities as the current situation allowed to interact with my classmates.												
Response Option Weight Frequency Percent Percent Responses Means												
Strongly Agree	(5)	6	37.50%				4.06					
Agree	(4)	6	37.50%									
Neutral	(3)	3	18.75%									
Disagree	(2)	1	6.25%									
Strongly Disagree	(1)	0	0.00%									
				0 25	50	100	Question					
Response	Rate				Mean			STD	Me	edian		
16/30 (53	.33%)				4.06			0.93		1.00		

1 - Please rate the following statemen	- Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).												
I interacted with students from diverse backgrounds during this course.													
Response Option Weight Frequency Percent Percent Responses Means													
Strongly Agree	(5)	6	37.50%					3.94					
Agree	(4)	5	31.25%					3.94					
Neutral	(3)	3	18.75%										
Disagree	(2)	2	12.50%										
Strongly Disagree	(1)	0	0.00%	1									
	•			0	25	50	100	Question					
Response Rate Mean STD Median													
16/30 (53.33%) 3.94 1.06 4.00													

Course: 7W2-MATH-201-003: Multivariable Calculus

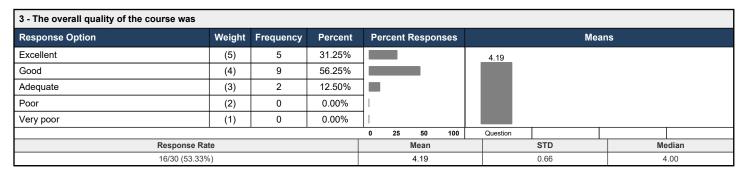
Instructor: Lin Jiu *

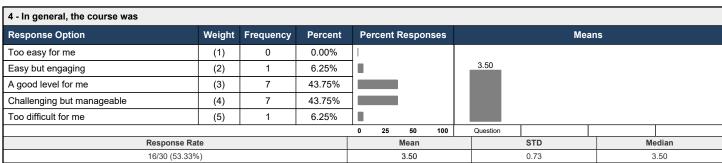
Response Rate: 16/30 (53.33 %)

1 - Please rate the following stateme	1 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).												
The course was intellectually stimu	ating.												
Response Option	Weight	Frequency	Percent	Percent Responses		Me	ans						
Strongly Agree	(5)	8	50.00%		4.3	8							
Agree	(4)	7	43.75%										
Neutral	(3)	0	0.00%]									
Disagree	(2)	1	6.25%										
Strongly Disagree	(1)	0	0.00%]									
				0 25 50 100	Ques	stion							
Resp	onse Rate			Mean		STD	Median						
16/30	(53.33%)			4.38		0.81	4.50						

2 - How many hours per week, on average, did you spend in and out of class for this course (including attending synchronous/live meetings and office hours, as well as working on homework/assignments, course recordings, and course materials)?

					•						
Response Option	Weight	Frequency	Percent	Pe	rcent	Respor	ises		Mea	ins	
4-8 hours	(1)	0	0.00%	1							
8-12 hours	(2)	2	12.50%								
12-16 hours	(3)	6	37.50%					3.81			
16-20 hours	(4)	4	25.00%					3.01			
20-24 hours	(5)	2	12.50%								
24-28 hours	(6)	1	6.25%								
More than 28 hours	(7)	1	6.25%								
				0	25	50	100	Question			
Response Ra	te					Mean			STD	Me	edian
16/30 (53.33%	6)					3.81			1.38	;	3.50

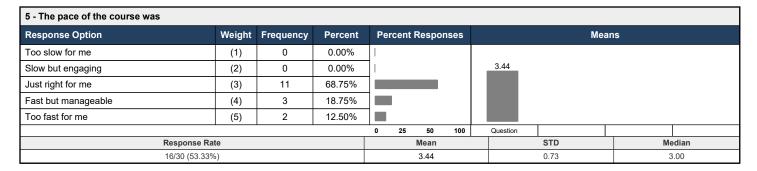




Course: 7W2-MATH-201-003: Multivariable Calculus

Instructor: Lin Jiu *

Response Rate: 16/30 (53.33 %)



6 - Which assignment or activity would you most recommend the instructor to use again when teaching the course in the future and why? Response Rate 4/30 (13.33%)

- webwork homework, lectures using textbook examples
- The quiz every week focus on the material last week. I think it is a good way to have a quick review.
- the mini project is interesting
- The homeworks were a great way to review the contents every week.

7 - Which assignment or activity could be improved and how?

Response Rate

4/30 (13.33%)

- no suggestion
- Sometimes it take a little bit long to code on Mathemetica in class. Professor can leave us an answer and we try ourselves after class.
- When the professor used mathematica to teach the course, we had difficulty catching up with him. I think writing notes by hand is still a more acceptable way for students.
- there was little time to do the midterm considering to the amount of questions

8 - Please use a five-point scale (5="A great	8 - Please use a five-point scale (5="A great deal", 1="Nothing") to indicate how much you learned from this course in general.													
Response Option	Weight	Frequency	Percent	Pe	rcent l	Respo	nses			Mea	ans			
A great deal	(5)	7	43.75%						4.38					
A lot	(4)	8	50.00%											
A moderate amount	(3)	1	6.25%											
A little	(2)	0	0.00%	1										
None at all	(1)	0	0.00%	1										
				0	25	50	100		Question					
Response Ra	te					Mean				STD	Me	edian		
16/30 (53.33%	6)					4.38	, i		•	0.62	4	1.00		

9 - Please rate the following sta	9 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).												
This course helped me gain fac	tual knowledge.												
Response Option	Weight	Frequency	Percent	Percent Responses		Means							
Strongly Agree	(5)	12	75.00%		4.63								
Agree	(4)	2	12.50%										
Neutral	(3)	2	12.50%										
Disagree	(2)	0	0.00%	1									
Strongly Disagree	(1)	0	0.00%]									
Not applicable	(0)	0	0.00%]									
				0 25 50 100	Question								
	Response Rate			Mean	STD	Median							
	16/30 (53.33%)			4.63	0.72	5.00							

Course: 7W2-MATH-201-003: Multivariable Calculus

Instructor: Lin Jiu *

9 - Please rate the following sta	- Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).												
This course helped me unders	tand fundamental con	cepts and pr	nciples.										
Response Option	Weight	Frequency	Percent	Percer	nt Respons	es		Mea	ns				
Strongly Agree	(5)	12	75.00%				4.69						
Agree	(4)	3	18.75%										
Neutral	(3)	1	6.25%										
Disagree	(2)	0	0.00%]									
Strongly Disagree	(1)	0	0.00%]									
Not applicable	(0)	0	0.00%]									
	·			0 25	5 50	100	Question						
	Response Rate				Mean			STD	Me	dian			
	16/30 (53.33%) 4.69 0.60 5.00												

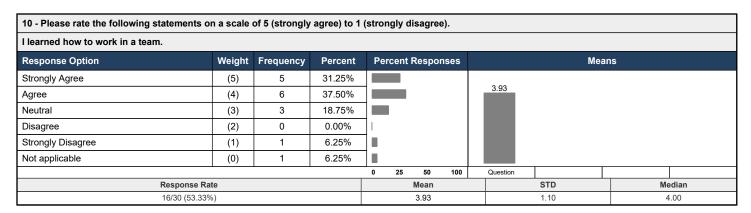
9 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).												
I learned how to integrate knowledge.												
Response Option	Weight	Frequency	Percent	Percent Responses		Mea	ns					
Strongly Agree	(5)	10	62.50%		4.44							
Agree	(4)	5	31.25%									
Neutral	(3)	0	0.00%	1								
Disagree	(2)	0	0.00%	1								
Strongly Disagree	(1)	1	6.25%									
Not applicable	(0)	0	0.00%									
				0 25 50 100	Question							
Respons	e Rate			Mean		STD	Median					
16/30 (53	3.33%)			4.44		1.03	5.00					

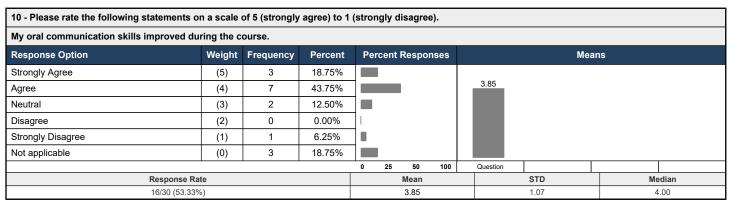
9 - Please rate the following statements	9 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).												
I learned about methods of inquiry durin	g this cours	se.											
Response Option	Weight	Frequency	Percent	Percent Responses		Mea	ans						
Strongly Agree	(5)	10	62.50%		4.60	1							
Agree	(4)	4	25.00%										
Neutral	(3)	1	6.25%										
Disagree	(2)	0	0.00%]									
Strongly Disagree	(1)	0	0.00%]									
Not applicable	(0)	1	6.25%										
				0 25 50 100	Question								
Response	Rate			Mean		STD	Median						
16/30 (53.3	16/30 (53.33%) 4.60 0.63 5.00												

9 - Please rate the following state	9 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).											
l learned how to analyze and evaluate ideas and arguments.												
Response Option	Weight	Frequency	Percent	Per	rcent l	Respon	ses			Mea	ins	
Strongly Agree	(5)	9	56.25%					4.5	57			
Agree	(4)	4	25.00%									
Neutral	(3)	1	6.25%									
Disagree	(2)	0	0.00%	1								
Strongly Disagree	(1)	0	0.00%	1								
Not applicable	(0)	2	12.50%									
	•			0	25	50	100	Que	stion			
R	esponse Rate					Mean				STD	М	edian
1	6/30 (53.33%)					4.57				0.65		5.00

Course: 7W2-MATH-201-003: Multivariable Calculus

Instructor: Lin Jiu *



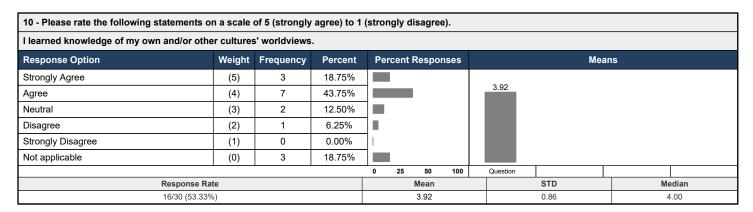


10 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).														
My writing skills improved during the	My writing skills improved during the course.													
Response Option	Weight	Frequency	Percent	Percent Responses		Me	ans							
Strongly Agree	(5)	3	18.75%											
Agree	(4)	5	31.25%		3.69									
Neutral	(3)	4	25.00%											
Disagree	(2)	0	0.00%]										
Strongly Disagree	(1)	1	6.25%											
Not applicable	(0)	3	18.75%											
	•			0 25 50 100	Question									
Respons	e Rate			Mean		STD	Median							
16/30 (5	16/30 (53.33%) 3.69 1.11 4.00													

learned how to generate my own ideas that reflect how I think about the world.												
Response Option	Weight	Frequency	Percent	Per	cent R	Respons	es		Mea	ns		
Strongly Agree	(5)	5	31.25%					4.07				
Agree	(4)	7	43.75%					4.07				
Neutral	(3)	1	6.25%									
Disagree	(2)	0	0.00%	1								
Strongly Disagree	(1)	1	6.25%									
Not applicable	(0)	2	12.50%									
	•			0	25	50	100	Question				

Course: 7W2-MATH-201-003: Multivariable Calculus

Instructor: Lin Jiu *



11 - Please rate the following st	11 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).													
I learned some things in the co	learned some things in the course that are applicable to other courses.													
Response Option	Weight	Frequency	Percent	Percent Responses		Mea	ns							
Strongly Agree	(5)	11	68.75%		4.63									
Agree	(4)	4	25.00%											
Neutral	(3)	1	6.25%											
Disagree	(2)	0	0.00%	I										
Strongly Disagree	(1)	0	0.00%	I										
Not applicable	(0)	0	0.00%											
	•			0 25 50 100	Question									
	Response Rate Mean STD Median													
	16/30 (53.33%) 4.63 0.62 5.00													

11 - Please rate the following statements	on a scale	of 5 (strongly	agree) to 1	(strongly disagree).							
I learned how to apply what I learned to re	I learned how to apply what I learned to real-life situations or problems.										
Response Option	Weight	Frequency	Percent	Percent Responses		Mea	ans				
Strongly Agree	(5)	9	56.25%		4.25						
Agree	(4)	4	25.00%								
Neutral	(3)	2	12.50%								
Disagree	(2)	0	0.00%	I							
Strongly Disagree	(1)	1	6.25%								
Not applicable	(0)	0	0.00%	I							
				0 25 50 100	Question						
Response F	late	•		Mean		STD	Median				
16/30 (53.3	3%)			4.25		1.13	5.00				

11 - Please rate the following s	tatements on a scale	of 5 (strongly	agree) to 1	(strongly	disagree).				
I learned some things in the course that are applicable to my life and/or my future career.										
Response Option	Weight	Frequency	Percent	Percer	nt Respon	ses	Means			
Strongly Agree	(5)	10	62.50%				4.38			
Agree	(4)	4	25.00%							
Neutral	(3)	1	6.25%							
Disagree	(2)	0	0.00%	1						
Strongly Disagree	(1)	1	6.25%							
Not applicable	(0)	0	0.00%	1						
	•			0 25	50	100	Question			
	Response Rate			Mean				STD	Median	
	16/30 (53.33%)				4.38			1.09	5.00	

Course: 7W2-MATH-201-003: Multivariable Calculus

Instructor: Lin Jiu *

12 - Please provide additional comme	ents about the course if not covered by the previous questions.								
Response Rate 1/30 (3.33%)									
good continuation of math101/105 and built	on those foundations; having taken math202 was very helpful for math201								

13 - This question is about Prof. Lin	3 - This question is about Prof. Lin JiuPlease rate the following statements about Prof. Lin Jiu on a scale of 5 (strongly agree) to 1 (strongly disagree)										
Ideas and concepts were explained	by the instructor	r clearly.									
Response Option	Weight	Frequency	Percent	Percent Responses Means							
Strongly Agree	(5)	13	81.25%		4.75						
Agree	(4)	2	12.50%		_						
Neutral	(3)	1	6.25%								
Disagree	(2)	0	0.00%	I							
Strongly Disagree	(1)	0	0.00%	I							
				0 25 50 100	Question						
Resp	onse Rate	·	_	Mean	STD	Median					
16/30) (53.33%)			4.75	0.58	5.00					

was encouraged to participate in course discussions and activities.										
Response Option	Weight	Weight Frequency Percent Percent Responses Means							ıns	
Strongly Agree	(5)	10	62.50%				4.38			
Agree	(4)	2	12.50%							
Neutral	(3)	4	25.00%							
Disagree	(2)	0	0.00%	1						
Strongly Disagree	(1)	0	0.00%	1						
	•			0 25	50	100	Question			

Weight Frequency Percent Percent Responses Means (5) 11 68.75% 4.63 (4) 4 25.00% 4.63 (3) 1 6.25% 4.63 (2) 0 0.00% 4.63 (1) 0 0.00% 4.63 (2) 0 0.00% 4.63 (2) 0 0.00% 4.63 (2) 0 0.00% 4.63 (3) 0 0.00% 4.63 (4) 0.00% 4.63 (5) 0.00% 4.63 (6) 0.00% 4.63 (7) 0.00% 4.63 (8) 0.00% 4.63 (9) 0.00% 4.63 (1) 0 0.00% (1) 0 0.00% (2) 0 0.00% (3) 0 0.00% (4) 0 0.00% (5)	The class atmosphere was comfortable and my contribution was respected.											
(4) 4 25.00% (3) 1 6.25% (2) 0 0.00% (1) 0 0.00% 0 25 50 100 Question	Response Option	Weight	Frequency	Percent	Perc	cent F	Respor	nses		Mea	ins	
(3) 1 6.25% (2) 0 0.00% (1) 0 0.00% 0 25 50 100 Question	Strongly Agree	(5)	11	68.75%					4.63			
(2) 0 0.00% (1) 0 0.00% (2) 50 100 Question (2) Question	Agree	(4)	4	25.00%								
(1) 0 0.00% 0 25 50 100 Question	Neutral	(3)	1	6.25%								
0 25 50 100 Question	Disagree	(2)	0	0.00%	1							
	Strongly Disagree	(1)	0	0.00%	1							
Designed Date May CTD Median		<u>'</u>			0	25	50	100	Question			
Response Rate Mean STD		Response Rate	0	0.00%	0		50 Mean	100	Question	STD		Me

Course: 7W2-MATH-201-003: Multivariable Calculus

16/30 (53.33%)

Instructor: Lin Jiu *

Response Rate: 16/30 (53.33 %)

13 - This question is about Prof. Lin JiuPlease rate the following statements about Prof. Lin Jiu on a scale of 5 (strongly agree) to 1 (strongly disagree). -I received helpful and timely feedback from the instructor on my coursework as much as the current situation allowed. **Response Option** Weight Frequency Percent **Percent Responses** Means Strongly Agree 13 81.25% (5)2 (4) 12.50% Agree Neutral (3)1 6.25% 0 0.00% Disagree (2)Strongly Disagree (1) 0 0.00% 50 100 25 Question STD Response Rate Mean Median

4.75

13 - This question is about Prof. Lin JiuPlease rate the following statements about Prof. Lin Jiu on a scale of 5 (strongly agree) to 1 (strongly disagree). I had the opportunity to get help from the instructor outside of the normal class time online and/or via email as much as the current situation allowed. **Response Option Percent Responses** Weight Frequency Percent Means 81.25% Strongly Agree (5) 13 Agree (4)2 12.50% Neutral (3)0 0.00% Disagree (2)1 6.25% Strongly Disagree (1) 0 0.00% 100 Question 0 25 50 Response Rate Mean STD Median 16/30 (53.33%) 4.69 0.79 5.00

14 - This question is about Prof. Lin JiuAny other comments or suggestions for Prof. Lin Jiu? Response Rate 7/30 (23.33%)

- clear marking scheme and very understanding of students' situations, was very helpful in explaining questions
- I am really grateful for so many office hours provided. It helps me a lot especially we take all the courses online this session.
- · Nice professor, being earnest and kind
- \bullet He is so niceeeeee! He really takes his students into consideration.
- He is sooooooo nice! Difficult definitions and theorems became much more acceptable after his explanations. He also cares about students' feelings and emotions. I really really really want to take his courses again in the future.
- Be more kind please.
- · Great Professor, always available

15 - About Online LearningPlease provide comments and/or suggestions on any aspects of your online learning experience this term. Response Rate 3/30 (10%)

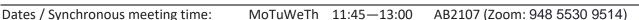
- since my peers in China/on DKU campus also experienced lockdown and quarantine, instructors were more understanding towards issues specific to remote learning, which was beneficial for me as an international student
- Sometimes because the white space is limited, the time is not always enough to take notes.
- Professor Lin did a great job despite the situation

5.00

MATH 105 SECTION 4

Calculus

Fall 2022, Session 2



Recitation: TuTh 7:15—8:15 IB 1046/1047

Academic credit: 4

Hybrid course format: video, lecture, recitation

ZOOM PASSCODE: MATH105

Instructor's information

Dr. Lin Jiu Lecturer of Mathematics, Duke Kunshan University

Assistant Professor of the Practice, Duke University

Email: lin.jiu@dukekunshan.edu.cn

Office: CC2057

Office Hours: Mon 20:00—21:00 Zoom Only (93594377559)

Wed 10:00—11:00 Office Only

or by appointment

Teaching Assistants

Recitation: Tuesday and Thursdays, 7:15—8:15, IB1046/1047

Heng Yue heng.yue@dukekunshan.edu.cn Fridays: 13:30---14:30 Zoom 9845325312, IB 1052

Lunji Zhu Lunji zhu@dukekunshan.edu.cn Monday 7:30---8:30am Zoom: 917 8155 3376, IB 1052

Yidan Mao yidan.mao@dukekunshan.edu.cn Monday 13:30---14:30 Zoom: 808 830 1974, IB 1052

Shuhan Li shuhan.li371@dukekunshan.edu.cn Thursday 19:00---20:00 Zoom: 984 5325312, IB 1052

Test Grading

Xintang Wang Xintang.wang@dukekunshan.edu.cn

Course Outline

We will cover most of the following materials from the textbook (*Tentatively, may up to some perturbation*).

Week 1	• Syllabus
(Oct. 2428)	• Limits (1.2.2, 1.2.3).
	• Continuity (1.2.4).

Week 2	• Derivatives and Differentiation Rules (1.3.1 - 1.3.4, including essential formulas from 1.3.5 and 1.3.9).
(Oct. 31— Nov. 4)	• Chain Rule (1.3.6).
	• Derivatives of Inverse Functions (1.3.7).
	• Implicit Differentiation (1.3.8).
	• Related Rates (1.4.1).
	• Linear Approximations (1.4.2).
Week 3	Maxima and Minima (1.4.3).
(Nov. 711)	• Mean Value Theorem (1.4.4).
	• Derivatives and the Shape of a Graph (1.4.5).
	• Asymptotes (1.4.6).
	• Optimization (1.4.7)
	Midterm I, Nov. 10 th 11:45—13:00 (Coverage: First TWO Weeks, AB 2107/1079)
Week 4	• L'Hospital's Rule (1.4.8).
(Nov. 1418)	• Antiderivatives (1.4.10).
	• Integration includes the Fundamental Theorem of Calculus (1.5.3) and the Net Change Theorem (1.5.4).
	• Integrals Involving Exponential and Logarithmic Function (1.5.6).
	• Integrals Resulting in Inverse Trigonometric Functions (1.5.7).
Week 5	• Substitution (1.5.5).
(Nov. 2125)	• Integration By Parts (2.3.1).
	• Trigonometric Integrals (2.3.2).
	• Trigonometric Substitution (2.3.3).
Week 6	• Partial Fractions (2.3.4).
(Nov. 28—	• Other Strategies (2.3.5)
Dec. 2)	• Improper Integrals (2.3.7).
	Midterm II , Dec. 1 st 11:45—13:00 (Coverage: WEEK 3-5, AB 2107/1079)
Week 7	Differential Equations (2.4.1, 2.4.2)

(De	c.	5-	_9

- Solving differential equations (2.4.3—2.4.5)
- Parametric equations and parametric curves (2.7.1—2.7.2)
- Review (if time permits)

Final Exam December 14th, Wednesday, 15:30—18:30, AB 1079 & AB1087

References for this Course

Calculus, Volume I, by OpenSTAX. https://openstax.org/details/books/calculus-volume-1

Calculus, Volume II, by OpenSTAX. https://openstax.org/details/books/calculus-volume-2

Grading Policy

- Midterm I: Thur. Nov. 10, 11:45—13:00 (during lecture time) (13%+0.5% (formula sheet))
- Midterm II: Thur. Dec. 1, 11:45—13:00 (during lecture time) (13%+0.5% (formula sheet))
- Final: Dec. 12th (40%+1%(formula sheets))
- Homework: Weekly, WeBWork (4%*6=24%)
- Quiz: Weekly, during Thursday's lecture (8%)

```
A+= 98% - 100% A = 93% - 97.99%; A- = 90% - 92.99%; B+ = 87% - 89.99%; B = 83% - 86.99%; B- = 80% - 82.99%; C+ = 77% - 79.99%; C = 73% - 76.99%; C- = 70% - 72.99%; D+ = 67% - 69.99%; D = 63% - 66.99%; D- = 60% - 62.99% F = 59.99% and below
```

As you can see, the final percentage will be rounded DOWN to the closest integer.

Remarks:

In case of documented illness or family emergency or documented University sponsored trips, you may miss the midterm, but the supporting documentation must be submitted to the instructor in advance. With the document, your missing midterm score can be counted as the same as your final. Do remember: let me know **BEFORE** the exam. An unexcused absence from any exam will be counted as a zero.

Homework

Weekly homework will be assigned each Thursday and will be due on the following Thursday's lecture, except for the last week. We will use the new WeBWork system for homework assignments. No late homework will be accepted. Each homework problem set is worth 4% and the LOWEST one will be dropped.

Homework	Latest Release Date & Time(+8,	Due Date & Time (+8)
Assignment	Tentative)	
HW1	Thursday, Oct. 29, 2022, <u>Before</u> 23:59	Saturday, Nov. 5, 2022, 23:59
HW2	Thursday, Nov. 3, 2022, <u>Before</u> 23:59	Saturday, Nov. 12, 2022, 23:59
HW3	Wednesday, Nov. 9, 2021, <u>Before</u> 23:59	Saturday, Nov. 19, 2022, 23:59
HW4	Thursday, Nov. 17, 2022, <u>Before</u> 23:59	Saturday, Nov. 26, 2022, 23:59
HW5	Thursday, Nov. 24, 2022, <u>Before</u> 23:59	Saturday, Dec. 2, 2022, 23:59
HW6	Wednesday, Nov. 30, 2022, <u>Before</u> 23:59	Saturday, Dec. 10, 2021, 23:59
HW7	Wednesday, Dec. 8, 2021, <u>Before</u> 23:59	Monday, Dec. 12, 2021, 23:59

Quiz

Weekly quiz will be assigned each week during **Thursday's lectures**, except for the weeks of Midterm tests. Each quiz will be counted 2%. <u>The lowest will be dropped</u>. Annoucements will be made to explain the coverage of each quiz.

Midterm and Final Exam

For each of the midterms, you are allowed to bring ONE A4 size formula sheet (double sided) and for the final exam, you are allowed to bring TWO pieces; When turning in your answer sheets, **formula sheet(s)** should also be included and each piece will be given 0.5%.

Academic Integrity:

This is very important!

Any misconduct behavior on homework, including but not limited to copying another student's homework paper, copying a solution found in another book or notes or website will, at minimum, result in a zero on that assignment and may result in a failing grade for the course. The incident will be reported to the Dean of Students.

The penalty on misconduct behavior on exam will be much more severe.

Academic Policy & Procedures:

You are responsible for knowing and adhering to academic policy and procedures as published in University Bulletin and Student Handbook. Please note, an incident of behavioral infraction or academic dishonesty (cheating on a test, plagiarizing, etc.) will result in immediate action from me, in consultation with university administration (e.g., Dean of Undergraduate Studies, Student Conduct, Academic

Advising). Please visit the Undergraduate Studies website for additional guidance related to academic policy and procedures. Academic integrity is everyone's responsibility.

Academic Disruptive Behavior and Community Standard:

Please avoid all forms of disruptive behavior, including but not limited to: verbal or physical threats, repeated obscenities, unreasonable interference with class discussion, making/receiving personal phone calls, text messages or pages during class, excessive tardiness, leaving and entering class frequently without notice of illness or other extenuating circumstances, and persisting in disruptive personal conversations with other class members. Please turn off phones, pagers, etc. during class unless instructed otherwiself you choose not to adhere to these standards, I will take action in consultation with university administration (e.g., Dean of Undergraduate Studies, Student Conduct, Academic Advising).

Academic Accommodations:

If you need to request accommodation for a disability, you need a signed accommodation plan from Campus Health Services, and you need to provide a copy of that plan to me. Visit the Office of Student Affairs website for additional information and instruction related to accommodations.

Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *

1 - Please rate the following states	nents on a scale o	f 5 (strongly a	agree) to 1 (strongly disagree).							
The course learning objectives sta	The course learning objectives stated in the syllabus were clear to me.										
Response Option	esponse Option Weight Frequency Percent					Percent Responses					
Strongly Agree	(5)	37	80.43%			4.72					
Agree	(4)	7	15.22%								
Neutral	(3)	1	2.17%	I							
Disagree	(2)	0	0.00%	1							
Strongly Disagree	(1)	1	2.17%	I							
	<u> </u>					Question					
Re	sponse Rate			Mean		STD		Median			
46.	(60 (76.67%)			4.72			0.72	5.00			

1 - Please rate the following state	- Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).											
The course expectations were clear to me.												
Response Option	Weight	Frequency	Percent	Pe	rcent	Respo	nses			Mea	ans	
Strongly Agree	(5)	34	72.34%						4.60			
Agree	(4)	10	21.28%									
Neutral	(3)	1	2.13%	ı								
Disagree	(2)	1	2.13%	ı								
Strongly Disagree	(1)	1	2.13%	I								
	•			0	25	50	100		Question			
R	esponse Rate			Mean						STD	Median	
4	7/60 (78.33%)			4.60						0.83	5.00	

1 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).													
This course had clear grading criteria.													
Response Option	Weight	Frequency	Percent	Pe	rcent	Respo	nses			Mea	ins		
Strongly Agree	(5)	40	85.11%						4.77				
Agree	(4)	5	10.64%					ш					
Neutral	(3)	1	2.13%	ı				ш					
Disagree	(2)	0	0.00%					ш					
Strongly Disagree	(1)	1	2.13%	I									
				0	25	50	100		Question				
Response Ra	ite					Mean				STD	M	edian	
47/60 (78.339	47/60 (78.33%) 4.77 0.70 5.00												

1 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).															
his course was well organized.															
Response Option	Response Option Weight Frequency Percent Percent Responses Means														
strongly Agree (5) 38 80.85% 4.62															
Agree (4) 5 10.64%															
Neutral	(3)	1	2.13%	ı				ш							
Disagree	(2)	1	2.13%	ı				ш							
Strongly Disagree	(1)	2	4.26%												
0 25 50 100 Question															
Response	Rate					Mean				STD	M	edian			
47/60 (78.33%) 4.62 0.97 5.00															

Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *

1 - Please rate the following statem	1 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).														
The course workload was appropria	The course workload was appropriate for the credits earned.														
Response Option	Weight	Frequency	Percent	Perc	cent l	Respon	ises		Mea	ns					
Strongly Agree (5) 35 74.47% 4.51															
Agree	Agree (4) 6 12.77%														
Neutral	(3)	3	6.38%												
Disagree	(2)	1	2.13%	1											
Strongly Disagree	(1)	2	4.26%												
0 25 50 100 Question															
Resp	onse Rate					Mean			STD	Me	edian				
47/60 (78.33%) 4.51 1.02 5.00										5.00					

1 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).															
I understood the language used	understood the language used in the instruction and course materials.														
Response Option	Weight	Frequency	Percent	Per	cent F	Respo	nses			Mea	ıns				
Strongly Agree (5) 33 70.21%															
Agree	Agree (4) 11 23.40%														
Neutral	(3)	2	4.26%	ı				ш							
Disagree	(2)	0	0.00%	1				ш							
Strongly Disagree	(1)	1	2.13%	ı											
	0 25 50 100 Question														
F	Response Rate					Mean				STD	Me	edian			
47/60 (78.33%) 4.60 0.77 5.00															

1 - Please rate the following state	ements on a scale o	f 5 (strongly a	agree) to 1 (stron	gly dis	sagree)								
had as many opportunities as the current situation allowed to interact with my classmates.														
Response Option	Response Option Weight Frequency Percent Percent Responses Means													
Strongly Agree (5) 28 59.57% 4.04														
Agree	(4)	6	12.77%											
Neutral	(3)	4	8.51%											
Disagree	(2)	5	10.64%											
Strongly Disagree	(1)	4	8.51%											
0 25 50 100 Question														
R	esponse Rate					Mean				STD	Me	edian		
4	7/60 (78.33%)					4.04				1.38		5.00		

1 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).														
interacted with students from diverse backgrounds during this course.														
Response Option Weight Frequency Percent Percent Responses Means														
trongly Agree (5) 26 55.32% 3,98														
Agree														
Neutral	(3)	3	6.38%											
Disagree	(2)	3	6.38%											
Strongly Disagree	(1)	6	12.77%											
0 25 50 100 Question														
Re	sponse Rate					Mean			STD	Me	edian			
47	47/60 (78.33%) 3.98 1.44 5.00													

Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *

Response Rate: 47/60 (78.33 %)

1 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).																
The course was intellectually st	imulating.															
Response Option	Weight	Frequency	Percent	Percent Responses	Mea	ns										
Strongly Agree	(5)	35	76.09%		4.61											
Agree	(4)	7	15.22%													
Neutral	(3)	2	4.35%	ı												
Disagree	(2)	1	2.17%	I												
Strongly Disagree	(1)	1	2.17%	I												
				0 25 50 100	Question											
	Response Rate			Mean	STD	Median										
	46/60 (76.67%)			4.61	0.86	46/60 (76.67%) 4.61 0.86 5.00										

2 - How many hours per week, on average, did you spend in and out of class for this course (including attending synchronous/live meetings and office hours, as well as working on homework/assignments, course recordings, and course materials)? **Percent Responses** Means **Response Option** Weight Frequency Percent 4-8 hours (1) 5 10.64% 8-12 hours (2) 7 14.89% 12 12-16 hours (3) 25.53% 3.64 16-20 hours 12 25.53%

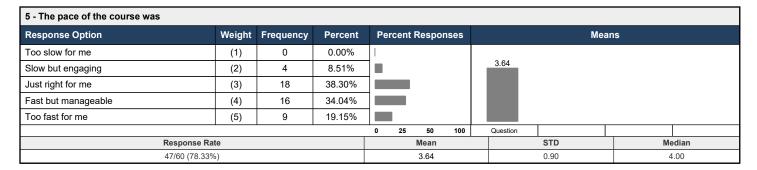
(4) 20-24 hours (5) 3 6.38% 24-28 hours (6) 3 6.38% More than 28 hours (7) 5 10.64% 25 50 100 Question Response Rate Mean STD Median 47/60 (78.33%) 3.64 1.74 3.00

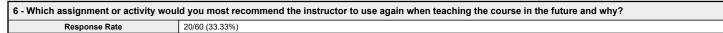
3 - The overall quality of the course was								
Response Option	Weight	Frequency	Percent	Percent Re	sponses		Mea	ns
Excellent	(5)	31	65.96%			4.49		
Good	(4)	11	23.40%					
Adequate	(3)	3	6.38%					
Poor	(2)	1	2.13%	1				
Very poor	(1)	1	2.13%	1				
				0 25	50 100	Question		
Response Ra	te			Me	ean		STD	Median
47/60 (78.33%	(ó)			4.4	.49		0.88	5.00

4 - In general, the course was											
Response Option	Weight	Frequency	Percent	Pe	rcent	Respo	nses		Me	ans	
Too easy for me	(1)	0	0.00%	1							
Easy but engaging	(2)	4	8.51%					3.57			
A good level for me	(3)	19	40.43%								
Challenging but manageable	(4)	17	36.17%								
Too difficult for me	(5)	7	14.89%								
	•			0	25	50	100	Question			
Response	Rate					Mean			STD	Me	edian
47/60 (78.33%)						3.57			0.85	4	4.00

Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *





- Choosing the week 7 teaching materials by ourselves.
- · discussion group is most attractive thing
- · No. thanks
- Regular Homework. The quantity is suitable and quality is high and is really helpful to understanding the knowledges
- week7
- let students to vote for the contents of Week7
- I like the assignments on Webork, because I can have enough practice after classes. I like doing math homework.
- · Weekly quizzes
- The homeworks, very useful and good exercises.
- The quiz is practical for understanding key concepts.
- All the assignments are well set. I highly recommend professor to just keep what he is doing now.
- Combine the online quiz and handwriting test.
- The homework assignments, although long, were useful to practice the different methods. Made it easier to know how to approach a problem during an exam.
- I really like the two scavenger hunts. I think they are really interesting, I was given the chance to take a closer look at DKU and I've noticed some things that I never paid attention to before.
- · Assignment on trignometric substitution. It is a good exercise of both integration by parts and trignometric identities.
- I believe the course should be deeply restructured, so I would say re-analyzing all the assignments and activities (and also their weight for the grade) would be the most ideal thing. That being said, I appreciate that at least we have 3 chances to perform well in an exam setting, as we have 3 exams (2 midterms and a final)
- $\bullet \, \mathsf{BE} \, \mathsf{A} \, \mathsf{GOOD} \, \mathsf{PERSON} \, \mathsf{WITHOUT} \, \mathsf{DOING} \, \mathsf{BAD} \, \mathsf{THINGS} \, \mathsf{AND} \, \mathsf{TALKING} \, \mathsf{TO} \, \mathsf{STUDENTS} \, \mathsf{LIKE} \, \mathsf{YOU} \, \mathsf{PREVIOUSLY} \, \mathsf{DO} \, \mathsf{DOING} \,$
- Quizzes on thursdays. It helps me review the class content last week very well.
- Giving more examples of the materials
- Mini quiz

Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *

Response Rate: 47/60 (78.33 %)

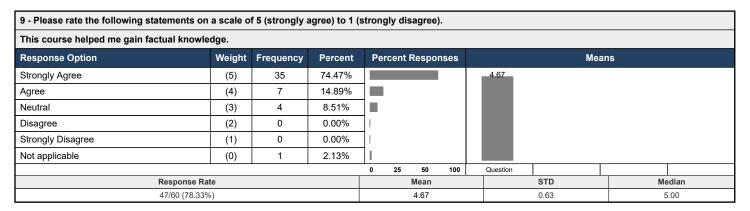
7 - Which assignment or activity could be improved and how?

Response Rate

21/60 (35%)

- Maybe leave one hard problem for each class. We can work it out together in a group.
- the examination can add difficulty
- I think the recitation could be used to talk about some challenging problems in homework, we can learn a lot from those problems even if we figure it out at the first time.
- some solutions of problems of the assignment are not mentioned in class
- no
- · Nothing.
- If the quizzes were harder, then there wouldn't be such a difference in the level of difficulty between the quizzes and the exams.
- The midterms, more time should be given or less exercises. I didn't have time to finish them.
- Sometimes the assignments are weird due to the random number produced by the website. And some tasks are tricky that do not help to understand the content.
- From my perspective, I do think almost everything is perfect. If there is one thing that need to be improved, it should be the teaching assistants.
- · The recitation could cover some homework problems.
- The Midterms were quite long, but it is expected for a course of this level.
- I think they are all great. Maybe if some assignments are given more time to prepare would be even nicer.
- · Assignment on linear approximation, some questions ate vague.
- Same answer as above. Additionally, some activities beyond just exams or quizzes would be deeply appreciated.
- attitude
- maybe professor or recitation course can provided some time to solve the homework problems.
- · Maybe answers for homeworks should be visible as soon as our attempts go to zero.
- Some steps are skipped when solving the problems so I wish you can solve them slowly with more explanation
- Homework questions are too much. It could be more effective if the questions are 20-30.
- · less homework on webwork

8 - Please use a five-point scale (5="A gr	eat deal", 1	="Nothing") t	o indicate h	ow mu	ch yo	u learı	ned fro	om this course	in general.		
Response Option	Weight	Frequency	Percent	Per	cent F	Responses Means					
A great deal	(5)	28	59.57%					4.34			
A lot	(4)	10	21.28%		l						
A moderate amount	(3)	7	14.89%								
A little	(2)	1	2.13%	1							
None at all	(1)	1	2.13%	ı							
				0	25	50	100	Question			
Response Rate						Mean			STD	Me	edian
47/60 (78.33%)						4.34			0.96		5.00



Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *

9 - Please rate the following st	9 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).													
This course helped me unders	his course helped me understand fundamental concepts and principles.													
Response Option	Weight	Frequency	Percent	Percent Responses		Mea	ns							
Strongly Agree	(5)	32	69.57%		4.58									
Agree	(4)	9	19.57%											
Neutral	(3)	3	6.52%											
Disagree	(2)	0	0.00%	1										
Strongly Disagree	(1)	1	2.17%	I										
Not applicable	(0)	1	2.17%	I										
0 25 50 100 Question														
	Response Rate			Mean		STD	Median							
	46/60 (76.67%)			4.58		0.81	5.00							

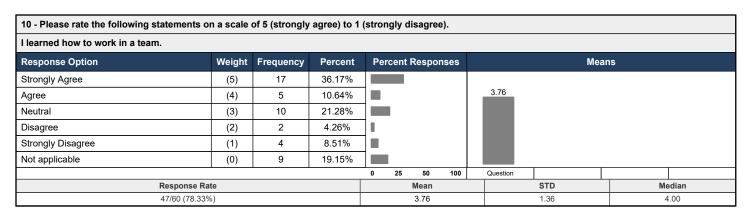
9 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).												
I learned how to integrate knowledg	e.											
Response Option	Weight	Frequency	Percent	Percent Responses		Mea	ns					
Strongly Agree	(5)	29	64.44%		4.51							
Agree	(4)	9	20.00%									
Neutral	(3)	3	6.67%									
Disagree	(2)	2	4.44%	1								
Strongly Disagree	(1)	0	0.00%	1								
Not applicable	(0)	2	4.44%	1								
	•			0 25 50 100	Question							
Resp	onse Rate			Mean		STD	Median					
45/60	(75.00%)			4.51		0.83	5.00					

9 - Please rate the following staten	9 - Please rate the following statements on a scale of 5 (strongly agree) to 1 (strongly disagree).											
I learned about methods of inquiry	during this cours	e.										
Response Option	Weight	Frequency	Percent	Percent Responses			Mea	ins				
Strongly Agree	(5)	28	60.87%			4.47						
Agree	(4)	9	19.57%									
Neutral	(3)	4	8.70%									
Disagree	(2)	2	4.35%	ı								
Strongly Disagree	(1)	0	0.00%	1								
Not applicable	(0)	3	6.52%									
	•			0 25 50 100		Question						
Res	ponse Rate			Mean	STD			Median				
46/60 (76.67%) 4.47 0.85 5.00												

9 - Please rate the following sta	atements on a scale o	f 5 (strongly a	agree) to 1 (strongly d	isagree).						
I learned how to analyze and ev	valuate ideas and arg	uments.									
Response Option	Weight	Frequency	Percent	Percen	t Respons	es		Mea	ns		
Strongly Agree	(5)	25	54.35%				4.33				
Agree	(4)	9	19.57%								
Neutral	(3)	6	13.04%								
Disagree	(2)	1	2.17%	ı							
Strongly Disagree	(1)	1	2.17%	ı							
Not applicable	(0)	4	8.70%								
	•			0 25	50	100	Question				
Response Rate Mean STD Median											
46/60 (76.67%) 4.33 0.98 5.00											

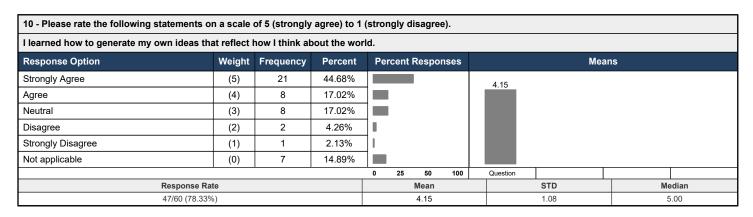
Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *



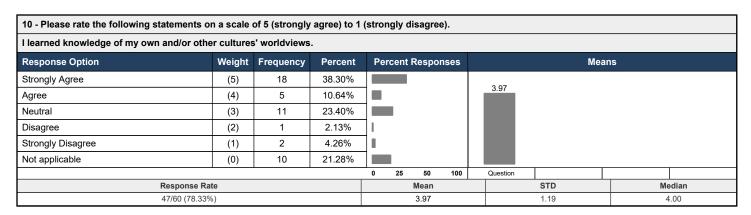
10 - Please rate the following s	tatements on a scale	of 5 (strongly	agree) to 1	(strongly disagree).							
My oral communication skills i	mproved during the c	ourse.									
Response Option	Weight	Frequency	Percent	Percent Responses		Mea	ns				
Strongly Agree	(5)	15	31.91%								
Agree	(4)	5	10.64%		3.63						
Neutral	(3)	11	23.40%								
Disagree	(2)	3	6.38%								
Strongly Disagree	(1)	4	8.51%								
Not applicable	(0)	9	19.15%								
	·			0 25 50 100	Question						
	Response Rate			Mean		STD	Median				
47/60 (78.33%) 3.63 1.36 4.00											

My writing skills improved duri	ng the course.										
Response Option	Weight	Frequency	Percent	Per	cent l	Respon	ises		Mea	ans	
Strongly Agree	(5)	16	34.78%								
Agree	(4)	6	13.04%					3.83			
Neutral	(3)	9	19.57%		l						
Disagree	(2)	2	4.35%								
Strongly Disagree	(1)	3	6.52%								
Not applicable	(0)	10	21.74%								
	<u>.</u>			0	25	50	100	Question			



Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *



11 - Please rate the following s	statements on a scale	of 5 (strongly	agree) to 1	(strongly disagree).									
I learned some things in the co	learned some things in the course that are applicable to other courses.												
Response Option	Weight	Frequency	Percent	Percent Responses		Mea	ns						
Strongly Agree	(5)	30	63.83%		4.54								
Agree	(4)	11	23.40%										
Neutral	(3)	5	10.64%										
Disagree	(2)	0	0.00%	1									
Strongly Disagree	(1)	0	0.00%	1									
Not applicable	(0)	1	2.13%	I									
				0 25 50 100	Question								
	Response Rate			Mean		STD	Median						
	47/60 (78.33%)			4.54		0.69	5.00						

11 - Please rate the following statements	on a scale	of 5 (strongly	agree) to 1	(strongly disagree).							
I learned how to apply what I learned to re	al-life situ	ations or prol	olems.								
Response Option	Weight	Frequency	Percent	Percent Responses			Mea	ins			
Strongly Agree	(5)	26	55.32%			4.29					
Agree	(4)	10	21.28%								
Neutral	(3)	5	10.64%								
Disagree	(2)	4	8.51%								
Strongly Disagree	(1)	0	0.00%]							
Not applicable	(0)	2	4.26%	I							
				0 25 50 100	Q	uestion					
Response F	ate			Mean			STD	Me	edian		
47/60 (78.33%) 4.29 0.99 5.00											

11 - Please rate the following s	tatements on a scale	of 5 (strongly	agree) to 1	(strongly	disagree).						
I learned some things in the co	urse that are applicat	ole to my life a	and/or my fu	ture care	er.						
Response Option	Weight	Frequency	Percent	Percen	Respons	es		Mea	ns		
Strongly Agree	(5)	28	60.87%				4.49				
Agree	(4)	12	26.09%								
Neutral	(3)	4	8.70%								
Disagree	(2)	1	2.17%	I							
Strongly Disagree	(1)	0	0.00%	1							
Not applicable	(0)	1	2.17%	I							
				0 25	50	100	Question				
Response Rate Mean STD Median											
46/60 (76.67%) 4.49 0.76 5.00											

Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *

Response Rate: 47/60 (78.33 %)

12 - Please provide additional comments about the course if not covered by the previous questions.

Response Rate 10/60 (16.67%)

- Prof. Lin Jiu is really nice!!!
- nothing
- The content may add more things linked to the Math20x, It is too simple to help the future class
- NO, Thanks
- no
- · Nothing yet, I have to say I really like doing math homework on Webork, because I like practicing after classes.
- I was kind of pushed out of my comfort zone in this course. I knew little about media art, photoshop, and premiere pro before. I learned a lot in this course, and I like all the materials in class.
- The course is absurdly fast-paced. The best way to portray this: The calculus introductory course at Harvard (Math1A) covers less than half of the material we cover in this course in a whole semester, instead of just 7 weeks. There are obviously good things in everything, but I can't deny that I feel this course is the worst and most difficult course I have taken at DKU. I felt this course was more about rushing to cover a lot of material in the least time possible rather than carring for how deeply the students understand the material: it heavily prioritized quantity over quality. For example, even though the professor mentioned that topics such as optimization were important and relevant to what we were studying, he simply couldn't teach us that topic in detail just cause we didn't have time. A similar thing happened for the last week, in which he had to make a poll so students choice which application of integrations we would cover, cause it is clearly impossible to cover all the relevant applications in 7 weeks, even though all of them might be relevant and important for other courses. As I said, unfortunately, this is by far the worst course I have taken here given its structure.
- nothing
- It was too hard for me. I did not expect it to be that hard because when I apply for MATH 101, the decider said that it would be just okay. But, I think I should have enrolled in MATH101.

13 - This question is about Prof. Lin JiuPlease rate the following statements about Prof. Lin Jiu on a scale of 5 (strongly agree) to 1 (strongly disagree). -

Ideas and concepts were explained by the instructor clearly.

Response Option	Weight	Frequency	Percent	Per	cent l	Respo	nses			Mea	ans	
Strongly Agree	(5)	31	65.96%					4	.53			
Agree	(4)	12	25.53%									
Neutral	(3)	3	6.38%									
Disagree	(2)	0	0.00%									
Strongly Disagree	(1)	1	2.13%	1								
				0	25	50	100	Qu	estion			
Response Ra	te					Mean				STD	Me	edian
47/60 (78.33%	6)					4.53				0.80	Ę	5.00

13 - This question is about Prof. Lin JiuPlease rate the following statements about Prof. Lin Jiu on a scale of 5 (strongly agree) to 1 (strongly disagree). -

I was encouraged to participate in course discussions and activities.

· · · · · · · · · · · · · · · · · · ·																	
Response Option	Weight	Frequency	Percent	Percent Res	sponses		Mea	ns									
Strongly Agree	(5)	28	59.57%			4.15											
Agree	(4)	8	17.02%														
Neutral	(3)	5	10.64%														
Disagree	(2)	2	4.26%	ı													
Strongly Disagree	(1)	4	8.51%														
				0 25	50 100	Question											
Response	Rate			Me	an		STD	Median									
47/60 (78	33%)			4.1	15		1.29	5.00									

Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *

13 - This question is about Pro	f. Lin JiuPlease rate t	he following s	statements a	about Prof. Lin Jiu on a	scal	e of 5 (stro	ngly agree) to 1 (strongly disagree)					
he class atmosphere was comfortable and my contribution was respected.													
Response Option Weight Frequency Percent Percent Responses Means													
Strongly Agree	(5)	33	70.21%			4.53							
Agree	(4)	9	19.15%										
Neutral	(3)	3	6.38%										
Disagree	(2)	1	2.13%	ı									
Strongly Disagree	(1)	1	2.13%	ı									
	·			0 25 50 100		Question							
	Response Rate			Mean			STD	Median					
47/60 (78.33%) 4.53 0.88 5.0													

13 - This question is about Prof. Lin Jiu	ıPlease rate t	ne following s	statements a	bout	Prof.	Lin Ji	ı on a	scale	of 5 (stro	ngly agree) to 1	(strongly disag	jree)
I received helpful and timely feedback	from the instr	uctor on my	coursework	as m	uch a	s the c	urrent	t situa	ation allow	red.		
Response Option	Weight	Frequency	Percent	Pe	rcent	Respo	nses			Mea	ıns	
Strongly Agree	(5)	32	68.09%						4.49			
Agree	(4)	11	23.40%					ш				
Neutral	(3)	1	2.13%	ı				ш				
Disagree	(2)	1	2.13%	ı				ш				
Strongly Disagree	(1)	2	4.26%									
		0	25	50	100		Question					
Response Rate Mean STD Median												
47/60 (78	3.33%)			4.49 0.98 5.00						5.00		

13 - This question is about Prof. L	in JiuPlease rate tl	ne following s	statements a	bout Prof.	Lin Jiu on a	scale	of 5 (stro	ngly agree) to 1 (strongly disag	ree)	
I had the opportunity to get help for	om the instructor	outside of the	e normal cla	ss time onl	ine and/or v	ia ema	il as muc	h as the current	situation allow	red.	
Response Option	Weight	Frequency	Percent	Percent I	Responses			Mea	ns		
Strongly Agree	(5)	31	65.96%				4.53				
Agree	(4)	12	25.53%								
Neutral	(3)	3	6.38%								
Disagree	(2)	0	0.00%]							
Strongly Disagree	(1)	1	2.13%	1							
	•			0 25	50 100	Q	uestion				
Res	sponse Rate				Mean			STD	Me	edian	
47/60 (78.33%) 4.53 0.80 5.00											

Course: 7W2-MATH-105-004: Calculus

Instructor: Lin Jiu *

Response Rate: 47/60 (78.33 %)

14 - This question is about Prof. Lin JiuAny other comments or suggestions for Prof. Lin Jiu? -

Response Rate

12/60 (20%)

- I think Prof. Lin Jiu can just follow his own teaching pace and material if possible.
- please be patient with students
- Please use more complex examples in week 1-5.
- Excellen
- Professor is really patient and helpful. I enjoyed the class very much.
- He is a very good professor. Since I want to major in applied math, I hope I can take his course again in the future.
- The insturctions is always clear, and thanks for the notes professor has provided, it helps a lot for reviewing.
- Professor Jiu is the most helpful and impressive instructor I have met in DKU since I came this fall. He has extremely great teaching styles, and he is eager to take student questions. Professor Jiu has excellent explanation of many abstract concepts. To be honest, I truly enjoyed taking this course with professor Jiu.
- Prof. Lin Jiu was always very attentive and flexible to students' requests. As a remote student, Prof. Lin Jiu responded to emails promptly and made sure to solve any issue regarding audio or time zone accordingly.
- Nice professor. My complaints about the class exclusively corresponds to the class and its structure, not to the professor. He was accommodating when I transitioned from hybrid learning to in person learning, especially before I got released from quarantine. The only thing I wish is that he would be more understanding after I got released from quarantine, as I was still running errands related to my arrival to China, even though I was already done with quarantine.
- BE A GOOD PERSON WITHOUT DOING BAD THINGS AND TALKING TO STUDENTS LIKE YOU PREVIOUSLY DO. Very bad attitude towards students and the lectures are not understandable. PLEASE BE A GOOD PERSON AND DON'T BULLY ALL STUDENTS JUST BECAUSE THEY DON'T HAVE ANY POWER COMPARED TO YOU.
- · He is a good lecturer.

15 - About Online LearningPlease provide comments and/or suggestions on any aspects of your online learning experience this term.

Response Rate 9/60 (15%)

- nothing
- The zoom password could be set as a calculus problem's answer, it is a good way to practice
- no
- I haven't taken online course during this session.
- The course is hard but taking it online makes it even harder. There are no opportunities to engage with the class or peers and makes concentrating even harder.
- I attended all the classes in person
- · As in several courses, remote students are usually overlooked, but I understand it is sometimes difficult for professor to be aware of students' questions on campus and online during the lectures.
- Prof Lin Jiu cares a lot about remote students which made it easier to follow the course. Very good experience!
- I don't know why online learning because of sickness will be judged as a bad attitude, even when I go to the clinic and submit the certificate.