### COURSE ASSESSMENT SUMMARY - SINGLE COURSE

Course:	MATH 023 Differential Equations	Total Enrollment:	27
Section:	01	Eligible to Complete Assessment:	27
Term:	202009 - Fall Term 2020	Completed Assessment:	24
Instructor:	Jan Glaubitz	Did Not Complete Assessment:	3

### Individual Responses Student Background

Year at Dartmouth (24 Responses)	<u>1</u> 4.2%	<u><b>2</b></u> 33.3%	<u>3</u> 45.8%	<u><b>4</b></u> 16.7%	<u>5</u> 0%	<u><b>B.E.</b></u> 0%	Masters0%	<u><b>Ph.D.</b></u> 0%			
Reason(s) for taking course (24 Responses)	Distributive	Major15	Minor <sub>6</sub>	Professor0	Interest6	Masters/PhD		Other1			
	Requirement1					Elective0	Requirement0				
Attendance in this course (23 Responses)	<u>&lt;20%</u> 17.4%	<u><b>20-40%</b></u> 4.3%	<u>40-60%</u> 8.7%	<u>60-80%</u> 8.7%	<u>80-100%</u> 60.9%						
Expected Grade (24 Responses)	<u>A</u> 70.8%	<u><b>B</b></u> 16.7%	<u>C</u> 0%	<u><b>D</b></u> 0%	<u>E</u> 0%	<u>NRO</u> 8.3%	<u>CT</u> 0%	<u>NC</u> 4.2%	<u>LP</u> 0%	<u><b>P</b></u> 0%	<u>HP</u> 0%
Hrs/wk spent on coursework outside class (23 Responses)	<u>&lt;1</u> 4.3%	<u>1-5</u> 21.7%	<u>5-10</u> 34.8%	<u>10-15</u> 26.1%	<u>&gt; 15</u> 13%						

### Individual Responses Course Design and Effectiveness

I think the overall quality of the course was (23 Responses)	Median2 (Very Good)	Mean (Very Good)	Excellent47.8%	<b><u>Very Good</u></b> 30.4%	<u>Good</u> 13%	<u>Fair</u> 4.3%	<b><u>Poor</u></b> 4.3%	<u>N/A</u> 0%		
I learned a lot in the course. (22 Responses)	Median (Strongly Agree)	Mean (Agree)	Strongly Agree 54.5%	<u>Agree</u> 31.8%	<u>Neutral</u> 9.1%	Disagree0%	Strongly Disagree	<u>N/A</u> 0%		
I put a great deal of effort into the course. (23 Responses)	1 (Strongly Agree)	1.7 (Agree)	52.2%	34.8%	8.7%	0%	4.3%	0%		
I was intellectually engaged in the course. (22 Responses)	2 (Agree)	1.9 (Agree)	40.9%	36.4%	18.2%	0%	4.5%	0%		
The objectives of the course were clear to me. (22 Responses)	1 (Strongly Agree)	1.5 (Agree)	54.5%	36.4%	9.1%	0%	0%	0%		
I found the course to be well organized (22 Responses)	1.5 (Agree)	1.8 (Agree)	50%	31.8%	9.1%	9.1%	0%	0%		
The assignments reinforced my understanding of the course material (22 Responses)	1 (Strongly Agree)	1.5 (Agree)	59.1%	36.4%	4.5%	0%	0%	0%		
Comment on the aspects of the course that you think were most effective: (13 Responses)	View Responses									
Comment on 1-3 aspects of the course that could be improved or enhanced: (11 Responses)	View Responses									
How did you contribute to your own learning experience? (11 Responses)	View Responses									
What remote learning experiences worked particularly well for you in this course? In your response, please consider the various aspects of the course including lectures, labs, discussions, drills, and creative works. (11 Responses)	View Responses									
What remote learning experiences did not work well for you in this course? In your response, please consider the various aspects of the course including lectures, labs, discussions, drills, and creative works. (11 Responses)	View Responses									

### Individual Responses Faculty (Jan Glaubitz)

I think the overall effectiveness of the teaching was (20 Responses)	Median (Excellent)	Mean (Very Good)	Excellent60%	Very Good 20%	<u>Good</u> 20%	<u>Fair</u> 0%	<u><b>Poor</b></u> 0%	<u>N/A</u> 0%		
The professor set high standards (20 Responses)	Median (Strongly Agree)	Mean 1.4 (Strongly Agree)	Strongly Agree65%	<u>Agree</u> 30%	<u>Neutral</u> 5%	Disagree0%	Strongly Disagree0%	<u>N/A</u> 0%		
The professor explained central concepts clearly (20 Responses)	1 (Strongly Agree)	1.5 (Agree)	65%	25%	10%	0%	0%	0%		
The professor challenged me to think critically about the course material (20 Responses)	1 (Strongly Agree)	1.5 (Agree)	60%	30%	10%	0%	0%	0%		
The professor was available for consultation outside of class (20 Responses)	1 (Strongly Agree)	1.4 (Strongly Agree)	65%	30%	5%	0%	0%	0%		
Comment on 1-3 things that the professor did well and should continue to do in the future: (11 Responses)	View Responses									
Comment on 1-3 things that the professor should focus on to improve their classroom effectiveness: (10 Responses)	View Responses									
Add any specific recommendations on how the professor is assessing the course work and giving feedback to students that you believe would be useful: (10 Responses)	View Responses									

#### Individual Responses Student Initiated Questions

Comment on the methods of evaluation chosen by the instructor, e. g. tests, papers and examinations and the workload expected of students: (11 Responses)	View Responses					
Comment on the structure of the class, for example the mix between lecture and discussion: (10 Responses)	<u>View</u> <u>Responses</u>					
How did this course influence your academic experience at Dartmouth? (10 Responses)	<u>View</u> <u>Responses</u>					

## **COURSE ASSESSMENT REPORTS - My Specific Faculty Comments**

MATH 023 Differential Equations **Course:** 

202009 - Fall Term 2020 Term:

**Instructor: Jan Glaubitz** 

**Question:** Comment on 1-3 things that the professor did well and should continue to do in the future:

- Allowing students to ask questions and meet with him outside of class. 1
- His lectures were amazing. I learned a ton! 2
- I like that he tried to make himself extra relatable and funny with the students (even if it did not always work). I found it really endearing 3 and nice that he made that extra attempt, when a lot of other professors do not try.
- 4 I like that they posted lecture slides and posted exactly what part of the textbook they were teaching, as well as having review sessions before exams. I also appreciated their homework grading policy.
- I liked the breakout rooms that the professor did during class. I also thought that his lectures were very well-organized and the slides 5 were very easy to follow along to.
- Prof Glaubitz explains the concepts of the class very well and was a good lecturer in my opinion. 6
- The group presentations were helpful to understand the topics. 7
- The professor was really good at summarizing and reinforcing concepts at the end of the lecture. The professor was also really friendly 8 and personable during lectures and helped retain student attention by telling jokes.
- Very approachable and willing to help. His group assignment meetings were always helpful. 9
- Very good pacing, clearly cares a lot about making sure students understand. I really appreciated that. 10
- breakout rooms and bringing optomism 11

Terr	urse: m: ructor	MATH 023 Differential Equations 202009 - Fall Term 2020 Jan Glaubitz	Question:	Comment on 1-3 things that the professor should focus on to improve their classroom effectiveness:
1	In the	e remote format it was difficu	It to absorb	o all of the writing on a slide before it switched.
2	It cou	uld be more helpful if the lect	ure slides w	vere more comprehensible and included any drawings made during the lecutre.
3	N/A			
4	None	9		
5	None	e, Professor Glaubitz is amaz	ing!	
6		aps the professor could uploating from the screen.	ad an annot	tated version of the slides after class for students since it's easy to make mistakes while
7	Provi	ide students with the resourc	es to tec=a	ach themselves the linear algebra concepts needed for the class, at the very least.
8		oreakout sessions were a little ong or far too short.	e oddly time	ed. It didn't feel like they were very purposeful and the time allotted to them was either way
9	more	e office hours understanding		
10	n/a			
Cou Terr	ırse: m:	MATH 023 Differential Equations 202009 - Fall Term 2020 <b>Jan Glaubitz</b>	Α	Add any specific recommendations on how the professor is assessing the course work and giving

Question: Add any specific recommendations on how the professor is assessing the course work and giving feedback to students that you believe would be useful:

1 I don't really have any suggestions. The answer keys are detailed enough as is, so the feedback combined with that was very clear.

2 I think maybe greater feedback on the group work would be nice. 10 minutes is not really enough. Maybe in the future, the professor could spend more time and kind of give written feedback about the entire hting.

3 N/A

**Instructor:** 

4 None!

5 None.

6 Not much. Although one could argue that webwork does not give much space for instructor feedback.

7 The tests were very fair

8 less lecturing

9 n/a

# **COURSE ASSESSMENT REPORTS - Non-Faculty Specific Comments**

MATH 023 Differential Equations **Course:** 202009 - Fall Term 2020 Term: **Instructor:** Jan Glaubitz

**Course Design and Effectiveness** 

Question Section

Comment on the aspects of the Question: course that you think were most effective:

1	Excellent feedback to group assignments
2	Group work was very effective. The problems presented there were more theoretical, difficult, and interesting than the webwork, which was really boring and annoying honestly.
3	Homework and lectures were helpful.
4	I thought that having some of the class time be used for discussions to ask questions really increased the amount instructor access and was really effective.
5	Professor Glaubitz was very helpful and understanding in making this online experience work well. I enjoyed his lectures and discussion section very much
6	The group assignments helped a lot, as I got to ask other students for clarification on problems or lessons I didn't understand.
7	The homework assignments were helpful in reinforcing material. Also, the group projects were nice to have to write up problems.
8	The lectures. Professor Glaubitz is an amazing lecturer.
9	The sequence in which the course is taught is very intuitive, which has not been the case in other math courses. The pacing was also good. The assignments were very relevant to what we had done in class. I felt like they were effective preparation for tests.
10	There were plenty of opportunities to get help during office hours/TA hours which I really appreciated. I also liked how we could go to class lectures live or just watch them asynchronously depending on what worked best for our schedule.
11	Webworks were very useful
12	good course especially for math
13	office hours and breakout rooms
Tern	Irse: MATH 023 Differential Equations n: 202009 - Fall Term 2020 ructor: Jan Glaubitz Course Design and Effectiveness Comment on 1-3 aspects of the

Question **Section** 

aspects of the Question: course that could be improved or enhanced:

for you in this

consider the

Question: response, please

course? In your

various aspects

1 I did not like the way that the course was organized with a different format of class each day and a different meeting time.

-	T did not into the way that the boarde was organized with a different format of blace baoff day and a different moeting	
2	I think they could help a bit more with students who have never taken linear algebra. Linear algebra is not a pre-requisite but they seem to assume you've already taken it and simply say "open a book and teach yourself" if you don't know a bit unfair, and if they will continue this, then they should make linear algebra a pre-requisite for the course.	
3	None	
4	One aspect that could be improved upon is that sometimes I felt that the Webwork questions referenced concepts s necessarily know, and I had to research those concepts myself. Perhaps a review of the Webwork questions before be helpful.	Ŭ
5	Tests are slightly too difficult to complete in 2-3 hours	
6	The class required minimal investment because all of the material could be learned asynchronously.	
7	The lectures are not well paced. I think the professors are brilliant, but especially with the online format, they could in communication to the students. I'm a visual learner and I get super overloaded and confused with information when slide already full of equations; I want to see them worked out by hand on a clean whiteboard or slide with only 1-2 er and the rest left blank to whiteboarding. The exams focused too much on rote algebra in my opinion. I feel like I was my high school math skills rather than my actual understanding of differential equations.	they show me a quations at the top
8	The structure of lectures was a little confusing at first and did disadvantage students who happened to have a class the other section. There were certain areas of the class which were assumed knowledge (some linear algebra beyon fractions, and complex numbers). They aren't difficult topics but are not covered in pre-requisite classes or non-US curricula, so some resources to help learn about them would be useful. The past exams weren't correctly labelled ar had answer keys, making them difficult to study from.	d Math 13, partial high school
9	less lecture based	
10	n/a	
Terr Inst Que	tructor: Jan Glaubitz Course Design and Effectiveness estion	How did you contribute to <b>ion:</b> your own learning experience?
1	I attended group meetings with my study group and did textbook and webwork problems and read the textbook,	
2	I contributed to my own learning experience by looking up videos of concepts to reinforce my understanding of ther	n.
3	I just studied as usual outside of class.	
4	I made sure to go through all of the material and attempt to figure out any problems I did not understand the first tim them	e I went through
5	I re-studied the problem sets in preparation for exams, attended lecture, and engaged in the group problems.	

6	I went to TA hours when I couldn't figure out the homework on my own, or when I wanted a deeper understanding of the course material.					
7	I went to office hours and watched the lectures.					
8	Reading textbook outside class					
9	Used the textbook and online resources to supplement lectures when I was not fully understanding concepts.					
10	Watched online videos					
11	office hours					
Terr	Irse: MATH 023 Differential Equations n: 202009 - Fall Term 2020 ructor: Jan Glaubitz Course Design and Effectiveness What remote learning experiences worked particularly well					

Question **Section** 

		of the course including lectures, labs, discussions, drills, and creative works.
1	Group assignments	
2	Group assignments! Very fun, made new friends, helped me learn a lot	
3	Group work was fun although it was a little difficult to get started with people initially.	
4	Having the slides available on canvas was really useful. The zoom meetings to go over group problems were also pretty	effective.
5	I liked the group assignments and the fact that lectures were recorded and slides were posted. It really allowed me to g review lessons with a lot of ease that I was not afforded before we started virtual classes.	o back and
6	I liked the zoom lectures because they were convenient and I could learn whenever was most convenient	
7	The group assignments were a helpful way to meet with people to discuss class outside of class.	
8	The live lectures were amazing	

9 The remote testing worked out really well for me since I was able to take the test whenever my schedule allowed for it.

10	The wide availability of times for office hours and teaching schedule worked really well in this remote environment.	
11	breakout rooms	
Terr Inst	structor: Jan Glaubitz Course Design and Effectiveness What learn expe not w you i course respon totion Question Vario of the inclue lectu discu	eriences did work well for in this se? In your onse, please sider the ous aspects e course
1	n/a	tive works.
2	2 Going to TA tutorials became impossible. It was very difficult to show my work to the TA and ask them questions while on the as several other people and ended up making the experience counterproductive.	e same call
3	B Honestly, I can't really think of any remote learning experiences that did not work out well for me. The class seems to work be remote format.	etter in a
4	I would encourage actual submitted written homework assignments instead of WebWork just because WebWork allows multipyou do not need to put as much effort into it.	iple tries so
5	5 Lecturees but I already talked about that	
6	S N/A	
7	None	
8	3 Sometimes lectures would include breakout rooms but since some students had to watch the recorded versions, this was pro- little odd for them.	obably a
9	The different meeting times made it very difficult to keep track of the class and made it harder for me to organize myself during duration of the course.	ng the
10	lectures	
11	non stop lectures	

### **COURSE ASSESSMENT REPORTS - Student Initiated Comments**

Tern		
Inst	ructor: Jan Glaubitz	Question: Comment on the methods of evaluation chosen by the workload expected of students:
1	I looked back at past exams and s	trongly believe that the current exams given were much hard
2	Tests were slightly difficult, but HW	/ was very reasonable.
3	The majority of the grade was base	ed on the three tests. The rest was accounted for by the web
4	The tests seemed fair. I appreciate	d the increasing weight of the later assessments.
5	The tests were very fair	
6	The volume of homework was very winded. The second and third example	v appropriate for the class. The first exam was took too long - m were better.
7	They were good.	
8	Typical math course method besid	es the group assignments which were useful
9	Webwork and suggested problems	s were effective and helped to study for tests.
10	tets and problem sets	
11	workload is pretty light. I would ho group time.	pe that webwork problems are changed a bit to be a little eas
Tern	rse: MATH 023 Differential Equation n: 202009 - Fall Term 2020 ructor: Jan Glaubitz	s Question: Comment on the structure of the class, for example the
1	A lot of the class was lecture, but s	some time was dedicated to the group problem sets, which w
2	Good mix	
3	Good.	
4	It was mostly lecture, but I thought	t that was appropriate.
5	Live lectures were inaccessible to	me due to timing, but from the recordings I could tell that the
6	Mostly lectures and some breakou	t rooms. I loved the class structure
7	The class was mostly lecture.	
8	The course was lecture based and	it was effective.
9	There was enough opportunity for	discussion for those who wanted it.
10	lecture	
Tern	rse: MATH 023 Differential Equation n: 202009 - Fall Term 2020 ructor: Jan Glaubitz	s Question: How did this course influence your academic experience
1	Good	
2	Good!	
3	I enjoyed the course.	
4	I liked the course and its application	ons to the real world.
5	I'm glad that the last math course	that I take was better than the previous ones!
6	It helped me learn about Differentia	al Equations.
7	Not in a particularly strong way. It j harms poor fgli students.	ust solidified my belief that professors here expect you to ha
8	Not sure. It was frankly kind of bor	ing and not a great show in my opinion for applied math, but
9	This course enabled me to underst	tand concepts better in classes that made heavy use of differ
10	major	

instructor, e.g. tests, papers and examinations and the

ler and included applications that I did not see in lectures or the textbook.

homework and the group homework. The workload was not too bad.

- it wasn't too difficult, but some of the questions were just very long-

sier on the algebra, and maybe more theoretical questions devoted to

mix between lecture and discussion:

was helpful in ensuring we could discuss unclear concepts.

class was more lecture than discussion, being a math class.

ce at Dartmouth?

we an unfair amount of background knowledge which disproportionately

the content is interesting and I feel like I understand the world better. rential equations, like physics.