COURSE ASSESSMENT SUMMARY - SINGLE COURSE

Course:MATH 046 Intro to Applied MathSection:01Term:202203 - Spring Term 2022Instructor:Jan Glaubitz

Total Enrollment:16Eligible to Complete Assessment:16Completed Assessment:13Did Not Complete Assessment:3

Individual Responses Student Background

Year at Dartmouth (12 Responses)	<u>1</u> 8.3%	2 33.3%	<u>3</u> 50%	<u>4</u> 8.3%	<u>5</u> 0%	<u>B.E.</u> 0%	Masters0%	Ph.D. 0%			
Reason(s) for taking course (12 Responses)	Distributive Requirement 1	Major ⁹	Minor3	Professor1	Interest5	Masters/PhD Elective()	Masters/PhD Requirement	Other()			
Attendance in this course (13 Responses)	<u>< 20%</u> 0%	20-40% 0%	<u>40-60%</u> 7.7%	<u>60-80%</u> 15.4%	80-100% 76.9%						
Expected Grade (13 Responses)	<u>A</u> 53.8%	<u>B</u> 38.5%	<u>C</u> 7.7%	D 0%	<u>E</u> 0%	<u>NRO</u> 0%	<u>CT</u> 0%	<u>NC</u> 0%	<u>LP</u> 0%	P 0%	<u>HP</u> 0%
Hrs/wk spent on coursework outside class (13 Responses)	< 1 0%	1-5 30.8%	5-10 38.5%	10-15 23.1%	> 15 7.7%						

Individual Responses Course Design and Effectiveness

individual Nesponses Course Design and Enectivene										
I think the overall quality of the course was (13 Responses)	Median2 (Very Good)	Mean 1.8 (Very Good)	Excellent46.2%	Very Good 38.5%	Good 7.7%	<u>Fair</u> 7.7%	<u>Poor</u> 0%	<u>N/A</u> 0%		
<u>I learned a lot in the course.</u> (13 Responses)	Median 1 (Strongly Agree)	Mean 1.5 (Agree)	Strongly Agree 61.5%	<u>Agree</u> 30.8%	Neutral 7.7%	<u>Disagree</u> 0%	Strongly Disagree0%	<u>N/A</u> 0%		
<u>I put a great deal of effort into the course.</u> (13 Responses)	2 (Agree)	1.7 (Agree)	46.2%	38.5%	15.4%	0%	0%	0%		
I was intellectually engaged in the course. (13 Responses)	1 (Strongly Agree)	1.5 (Agree)	61.5%	30.8%	7.7%	0%	0%	0%		
The objectives of the course were clear to me. (13 Responses)	1 (Strongly Agree)	1.5 (Agree)	61.5%	23.1%	15.4%	0%	0%	0%		
I found the course to be well organized (13 Responses)	1 (Strongly Agree)	1.5 (Agree)	61.5%	30.8%	7.7%	0%	0%	0%		
The assignments reinforced my understanding of the course material (13 Responses)	1 (Strongly Agree)	1.5 (Agree)	61.5%	30.8%	7.7%	0%	0%	0%		
Comment on the aspects of the course that you think were most effective: (8 Responses)	<u>View Responses</u>									
Comment on 1-3 aspects of the course that could be improved or enhanced: (8 Responses)	View Responses									
How did you contribute to your own learning experience? (8 Responses)	<u>View Responses</u>									

Individual Responses Faculty (Jan Glaubitz)

individual Responses Faculty (Jan Glaubitz)										
I think the overall effectiveness of the teaching was (12 Responses)	Median 1 (Excellent)	Mean 1.3 (Excellent)	Excellent83.3%	Very Good 8.3%	Good 8.3%	<u>Fair</u> 0%	<u>Poor</u> 0%	<u>N/A</u> 0%		
The professor set high standards (12 Responses)	Median 1 (Strongly Agree)	Mean 1.3 (Strongly Agree)	Strongly Agree 75%	Agree 25%	Neutral _{0%}	Disagree0%	Strongly Disagree	<u>N/A</u> 0%		
The professor explained central concepts clearly (12 Responses)	1 (Strongly Agree)	1.1 (Strongly Agree)	91.7%	8.3%	0%	0%	0%	0%		
The professor challenged me to think critically about the course material (11 Responses)	1 (Strongly Agree)	1.1 (Strongly Agree)	90.9%	9.1%	0%	0%	0%	9.1%		
The professor was available for consultation outside of class (12 Responses)	1 (Strongly Agree)	1.1 (Strongly Agree)	91.7%	8.3%	0%	0%	0%	0%		
Comment on 1-3 things that the professor did well and should continue to do in the future: (9 Responses)	View Responses									
Comment on 1-3 things that the professor should focus on to improve their classroom effectiveness: (6 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: (5 Responses)	View Responses									

Individual Responses Student Initiated Questions

Comment on the methods of evaluation chosen by the instructor, e.	<u>View</u>				
g. tests, papers and examinations and the workload expected of	Responses				
students: (6 Responses)					
Comment on the structure of the class, for example the mix between	View				
lecture and discussion: (6 Responses)	Responses				
How did this course influence your academic experience at	View				
Dartmouth? (6 Responses)	Responses				

Faculty Specific Comments - ONLY 8/4/22, 2:50 PM

COURSE ASSESSMENT REPORTS - My Specific Faculty Comments

MATH 046 Intro to Applied Course:

Math

Term: 202203 - Spring Term 2022

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

- Explains concepts very clearly - Class was organized well - Engaged students in lecture by asking questions / encouraging questions

2 Great lectures. Small breaks were good.

I thought prof Glaubitz was an excellent professor. Very clear and articulate lecturer

Professor is accessible and open to questions after class/during office hours Helpful input on homework and concepts beyond the curriculum.

5 The professor had good office hours and lectures

They explained the motivation, proofs, applications and guided problems for each topic which was very helpful for understanding some of the central concepts that seemed more abstract

7 Was super friendly and easy to talk to, very knowledgeable about the material and presents it in a way that makes it understandable for everyone, lots of breaks which are essential for a 3B

8 clear and good lectures

lectures were well organized and material was clearly explained

MATH 046 Intro to Applied

Course: Math

202203 - Spring Term Term:

2022

Question: Comment on 1-3 things that the professor should focus on to improve their classroom effectiveness: Jan Glaubitz Instructor:

Cut down on lecture notes on boards, leave out full sentences, to make more time for more material. Go into greater depth on perturbation, calc of variations and lagrangians (like lagrangian mechanics in physics, least action, etc.) and more on fourier series/transforms. I enjoyed the lecture on the heat equation, and it would be nice to have more applications like that. Also, include sturm-liouville problems if at all possible.

2 NA

Nothing I can think of

Nothing, classroom effectiveness was great

maybe ask more questions to students? Prof did this but doing so more frequently could help students stay engaged especially since class is so long

6 none

MATH 046 Intro to Course:

Applied Math

202203 - Spring Term

Term: 2022

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

Coursework feedback was great and so was grading

Fair assessments. I would personally prefer harder, take-home /open-note exams rather than short timed ones.

Faculty Specific Comments - ONLY 8/4/22, 2:50 PM

3 I think the weighting for grading is too focused on exams. 70% is very high for 2 exams; if you are having a bad day on the day of an exam then that would drop your final grade significantly, even if you know the material well. The difficulty of the exams was appropriate.

- 4 More details on where we went wrong on the homeworks e.g point adjustments on gradescope
- 5 Very fair grading

Non-Faculty Comments 8/4/22, 2:53 PM

COURSE ASSESSMENT REPORTS - Non-Faculty Specific Comments

Course: MATH 046 Intro to Applied Math 202203 - Spring Term 2022

Instructor: Jan Glaubitz

Course Design and Effectiveness

Comment on the aspects of the

Question: course

that you think were most effective:

Question Section

- 1 Lectures matched closely to lecture notes Weekly psets with 2 midterms was manageable
- 2 Everything but functional analysis
- 3 HW review sessions were great
- 4 I think the group homework assignments helped us understand the course material together and made more sense of what the prof would teach
- 5 Lectures, the availability of online notes, homework problems
- 6 Some interesting material was covered, lectures are clear, professor is very nice and accessible.
- 7 good professor and class structure
- homeworks reinforced class material, group problem sets were nice (I had a good group, but this could easily be a negative aspect of the course; it really depends on who your groupmates are).

Course: MATH 046 Intro to Applied Math Term: 202203 - Spring Term 2022

Instructor: Jan Glaubitz

Question

Section

Course Design and Effectiveness

Comment on 1-3 aspects of the course

Question: that could

be improved or

- enhanced:
- 1 Psets didn't always reflect what we learned in class / what type of problems would be covered on exams
- 2 | 2 hours is a long time for a math lecture (at least for me). I did appreciate the short breaks to clean the blackboard, but after a certain time of doing math my brain gets fuzzy and it's a lot harder to learn
- 3 Have students fill out an evaluation on their group members for the HW
- 4 I do not like group problem sets as oftentimes there are a few people in each group that do not contribute, and I think the course would be better without groups. I also think a final group project would be a fun replacement of the final exam.
- More time on the exams because I feel like we had to write a lot to answer questions and it was hard to go through my work knowing that I had other questions that were just as time consuming left
- 6 No functional analysis unit and a greater emphasis on Fourier series

Non-Faculty Comments 8/4/22, 2:53 PM

7 Too slow pacing, not enough material covered and at too shallow depth. Also, not very many examples/ homework exercises of applications to science/physics.

8 not a lot of it builds on itself, very separate units

Course: MATH 046 Intro to Applied Math Term: 202203 - Spring Term 2022

Instructor: Jan Glaubitz

Course Design and Effectiveness

Question Section How did you contribute

to your own learning experience?

1 - Attended class, completed psets, engaged with classmates

2 Almost always attended HW review sessions.

3 I read other lecture notes for certain topics from other universities

4 I studied and did the homework problems

5 I worked with my group to complete and understand the homeworks, I studied for exams

6 Read script and textbook, collaborated with friends on homework.

7 Read the textbook and did the problem sets for my group like 50% of the time

8 study

Student Specific Comments - ONLY 8/4/22, 2:51 PM

COURSE ASSESSMENT REPORTS - Student Initiated Comments

MATH 046 Intro to Course: **Applied Math**

202203 - Spring Term

Term: 2022

Comment on the methods of evaluation chosen by the instructor, e.g. tests, papers Jan Glaubitz Instructor: and examinations and the workload expected of students:

1 Fair workload. Very manageable.

2 Tests were very very fair!!

- 3 The test were the same format as the homeworks but more challenging and shorter than what I think they should have been The group homeworks were fine and kind of challenging too especially when doing proofs or there was not a direct connection to what we covered in class Be prepared to solve longer questions, remember your integration (integration by parts especially), taylor series and be interested and participate so that you do not have to pull allnighters
- 4 Two tests, a midterm and a final, which are 30% and 40% of the grade respectively. Group problem sets and one homework question presentation
- 5 Very standard (2 exams, weekly psets, participation grade)
- Workload was quite fair, and tests were very reasonable in difficulty. However, the grading was weighted 70% exams, which I feel is too high. The students who do best in this class are the ones who are good at taking tests.

MATH 046 Intro to Applied Course:

Math

202203 - Spring Term 2022 Term:

Instructor: Jan Glaubitz Comment on the structure of the class, for example the mix between lecture Question: and discussion:

- All lecture, worked well
- 2 I did not feel the homework discussion to be very helpful to me, since the solutions were available online, but that is my personal view.
- 3 It was two lectures and a homework discussion each week which was good for getting the knowledge and central concepts then seeing different ways of solving a problem and learning something new
- 4 Lecture being twice a week for two hours was great, and the homework discussions were nice
- 5 Mostly lecture
- 6 Mostly lecture to learn material, which makes sense given the subject. Weekly discussions in which students present solutions to the past week's hw problems. This was a good balance

Course: MATH 046 Intro to Applied Math 202203 - Spring Term 2022 Term:

Instructor: Jan Glaubitz Question: How did this course influence your academic experience at Dartmouth?

- 1 I am interested in going further in applied mathematics for engineering/physics.
- 2 I took this class for my minor and it was a good way to tick off a requirement
- 3 I will take more applied math classes
- It was challenging and fulfilling which makes me feel like it enhanced my academic experience and I appreciate that
- It was good!
- Made me more interested in Applied Math and less scared of higher math

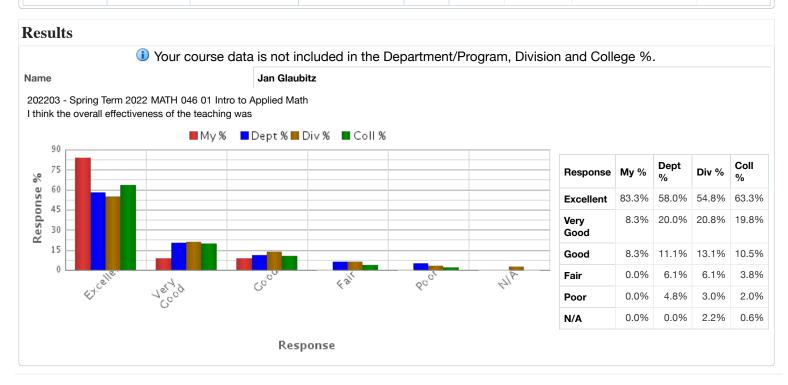
Institutional Reporting and Analysis (IRA) Dartmouth College Course Comparison Report

8/18/2022 12:57:06 PM

This report compares course responses to the department/program, division and college responses.

Term 202203 - Spring Term 2022 Subject MATH-Mathematics Course 046-Intro to Applied Math Section 01 Question I think the overall effectiveness of the teaching was

Course Details The following report will only include courses that have five or more students enrolled. Total **Completed Course Did Not** Department Subject Term Course Section Instructor Enrollment Assessment Complete 16 13 3 MATH-01 MATH-202203 - Spring Term 046-Intro to Applied Jan **Mathematics Mathematics** 2022 Glaubitz



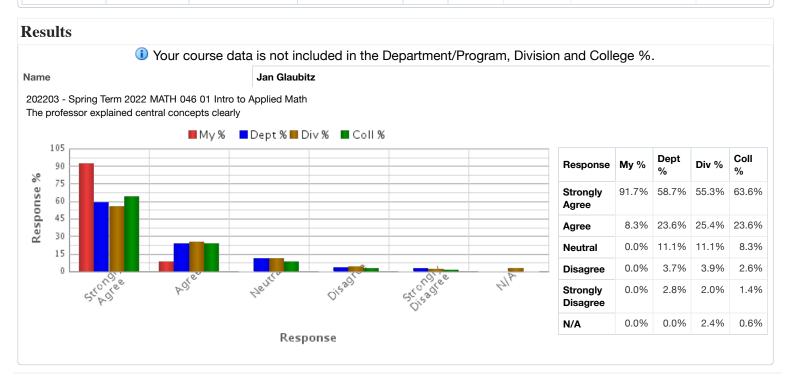
Institutional Reporting and Analysis (IRA) Dartmouth College Course Comparison Report

8/18/2022 12:57:58 PM

This report compares course responses to the department/program, division and college responses.

Term 202203 - Spring Term 2022 Subject MATH-Mathematics Course 046-Intro to Applied Math Section 01 Question The professor explained central concepts clearly

Course Details The following report will only include courses that have five or more students enrolled. Total **Completed Course Did Not** Department Subject Term Course Section Instructor Enrollment Assessment Complete 16 13 3 MATH-01 MATH-202203 - Spring Term 046-Intro to Applied Jan **Mathematics Mathematics** 2022 Math Glaubitz



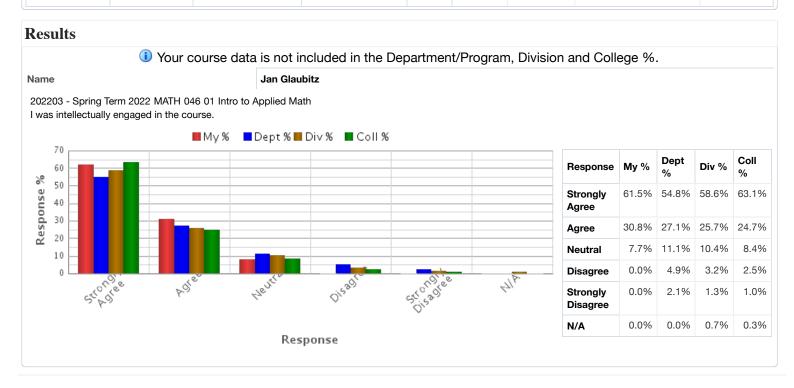
Institutional Reporting and Analysis (IRA) Dartmouth College Course Comparison Report

8/18/2022 12:55:06 PM

This report compares course responses to the department/program, division and college responses.

Term 202203 - Spring Term 2022 Subject MATH-Mathematics Course 046-Intro to Applied Math Section 01 Question I was intellectually engaged in the course.

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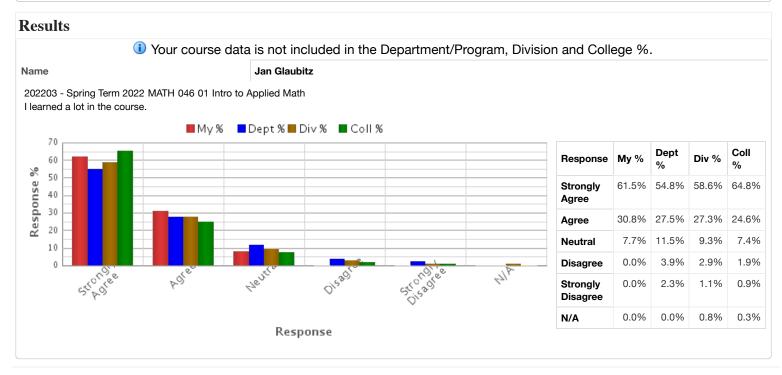
Institutional Reporting and Analysis (IRA) Dartmouth College Course Comparison Report

8/18/2022 12:54:22 PM

This report compares course responses to the department/program, division and college responses.

Term 202203 - Spring Term 2022 Subject MATH-Mathematics Course 046-Intro to Applied Math Section 01 Question I learned a lot in the course.

Course Details The following report will only include courses that have five or more students enrolled. Total **Completed Course Did Not** Department Subject Term Course Section Instructor Enrollment Assessment Complete MATH-16 13 3 MATH-01 202203 - Spring Term 046-Intro to Applied Jan **Mathematics Mathematics** 2022 Glaubitz



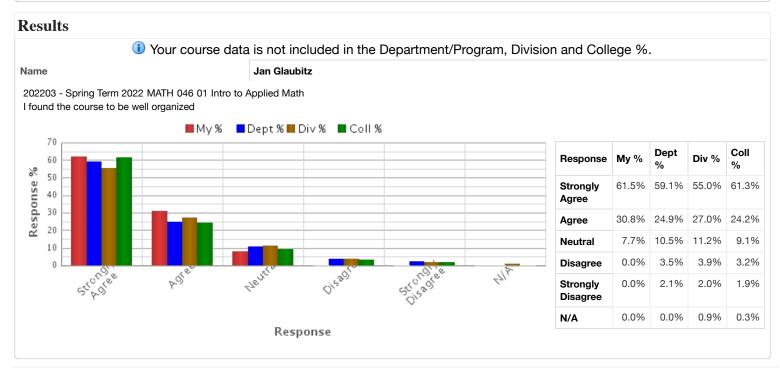
Institutional Reporting and Analysis (IRA) Dartmouth College Course Comparison Report

8/18/2022 12:56:14 PM

This report compares course responses to the department/program, division and college responses.

Term 202203 - Spring Term 2022 Subject MATH-Mathematics Course 046-Intro to Applied Math Section 01 Question I found the course to be well organized

Course Details The following report will only include courses that have five or more students enrolled. **Completed Course Did Not Total** Department Subject Term Course Section Instructor **Enrollment** Assessment Complete MATH-16 13 3 MATH-202203 - Spring Term 046-Intro to Applied 01 Jan **Mathematics Mathematics** 2022 Math Glaubitz



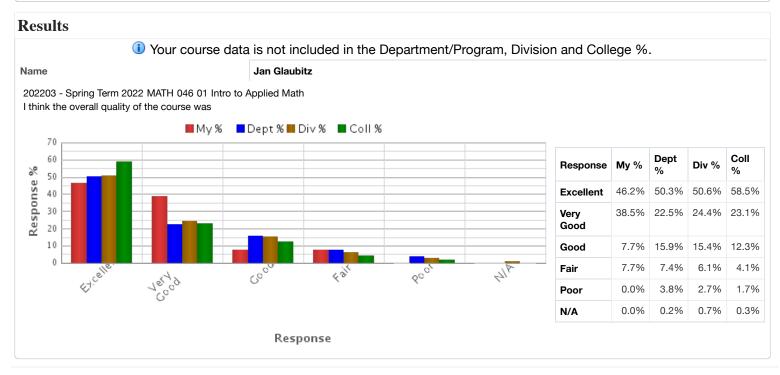
Institutional Reporting and Analysis (IRA) Dartmouth College Course Comparison Report

8/18/2022 12:53:11 PM

This report compares course responses to the department/program, division and college responses.

Term 202203 - Spring Term 2022 Subject MATH-Mathematics Course 046-Intro to Applied Math Section 01 Question I think the overall quality of the course was

Course Details The following report will only include courses that have five or more students enrolled. Total **Completed Course Did Not** Department Subject Term Course Section Instructor Enrollment Assessment Complete MATH-16 13 3 MATH-202203 - Spring Term 046-Intro to Applied 01 Jan **Mathematics Mathematics** 2022 Math Glaubitz



Institutional Reporting and Analysis (IRA) Dartmouth College Course Comparison Report

8/18/2022 12:58:44 PM

This report compares course responses to the department/program, division and college responses.

Term 202203 - Spring Term Subject MATH-2022 Mathematics Course 046-Intro to Applied Section 01 Question The professor challenged me to think critically about the Math course material

Course Details The following report will only include courses that have five or more students enrolled. Total **Completed Course Did Not** Department Subject Term Course Section Instructor **Enrollment** Assessment Complete 3 16 13 MATH-MATH-202203 - Spring Term 046-Intro to Applied 01 Jan Glaubitz **Mathematics Mathematics** 2022 Math

