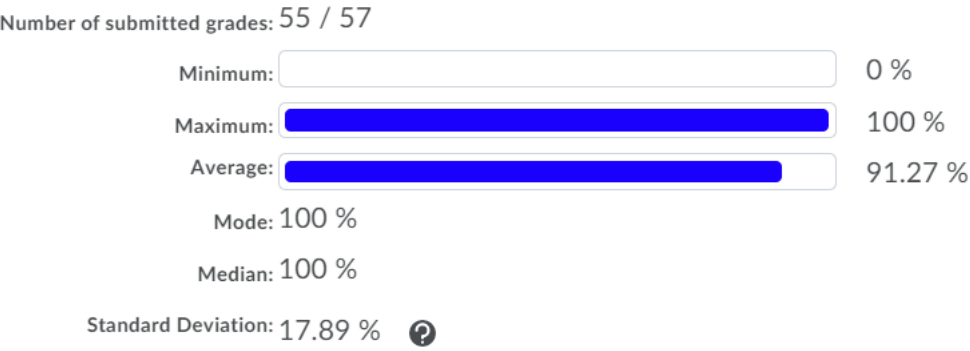
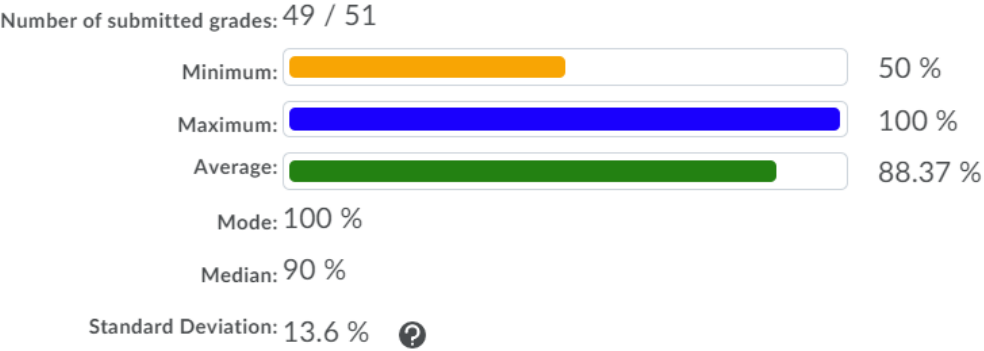
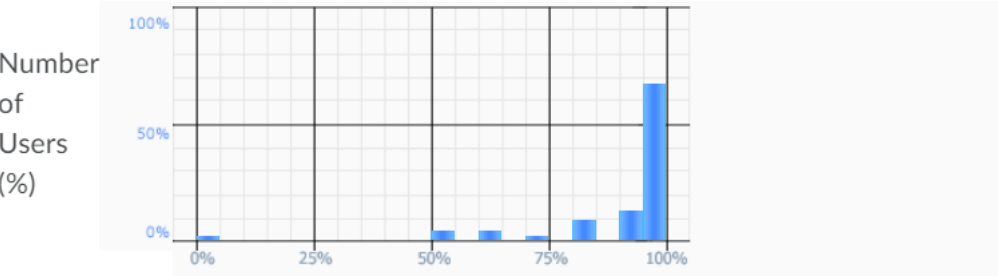


MQ5 (Wed Sep 22) Class Statistics

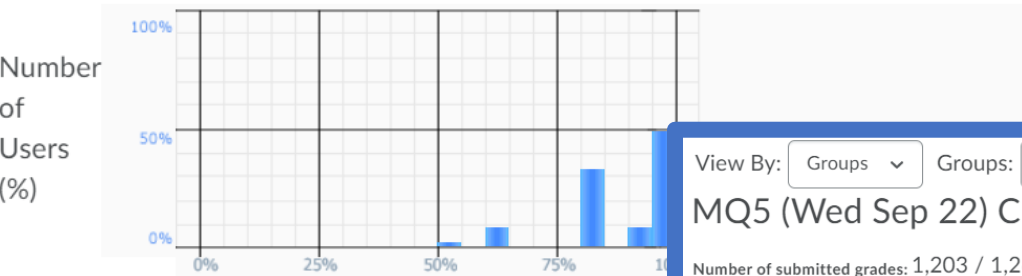
MQ5 (Wed Sep 22) Class Statistics



Grade Distribution



Grade Distribution



View By: Groups Groups: MATH135_1219_LEC Apply

MQ5 (Wed Sep 22) Class Statistics

Number of submitted grades: 1,203 / 1,261

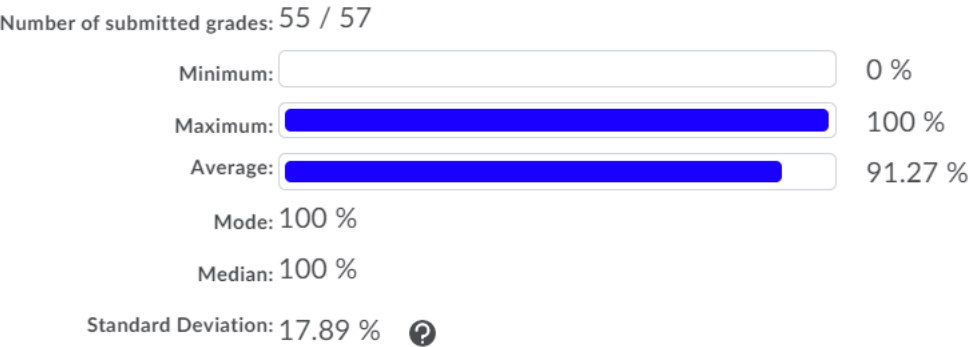
Minimum:		0 %
Maximum:		100 %
Average:		89.96 %
Mode:		100 %
Median:		100 %
Standard Deviation:		14.04 %

Grade Distribution

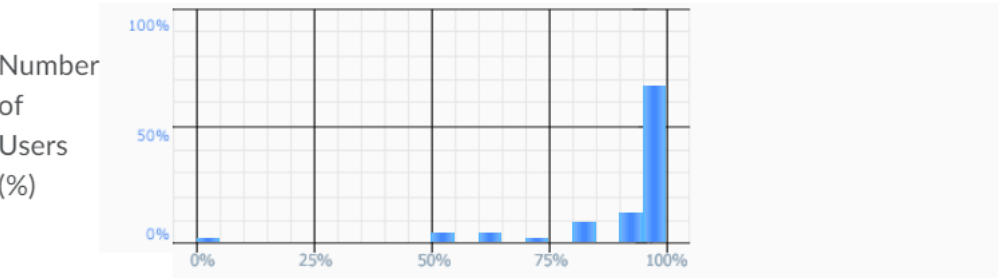
Number of Users (%)

- Friday 24 September:
 - Mobius Quiz 6
- Sunday 26 September:
 - Complete reading up to the end of Section 0.3 (Polynomials)
- Monday 27 September:
 - Mobius Quiz 7
- Tuesday 28 September:
 - **Look at your WA02 results thoroughly! Where did you lose marks?**
- Tuesday 28 September:
 - Complete reading from Chapter 3.6 up to 4.4 of the course notes. **Pages 55-75.**
- Wednesday 29 September:
 - **Complete Written Assignment 3: WA3**
- Wednesday 29 September:
 - Mobius Quiz 8
- Thursday 30 September:
 - WA03 solutions will be posted, hopefully before 12pm: **Check the solutions in detail!**

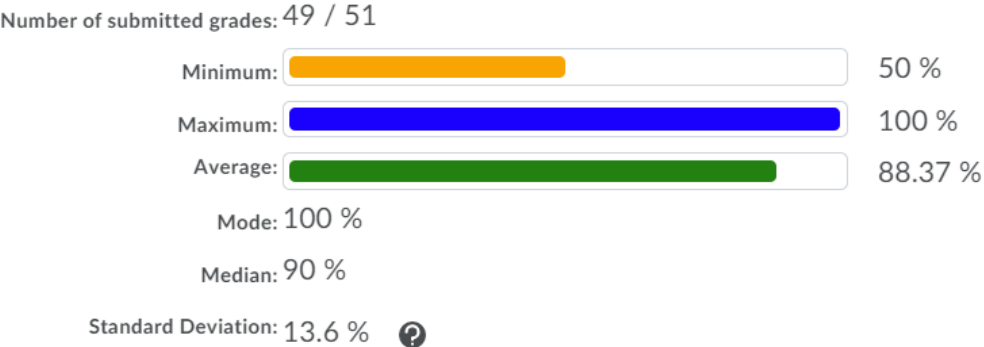
MQ5 (Wed Sep 22) Class Statistics



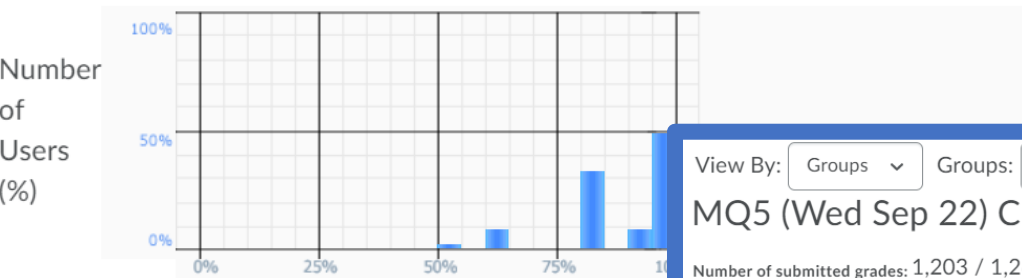
Grade Distribution



MQ5 (Wed Sep 22) Class Statistics



Grade Distribution



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MQ5 (Wed Sep 22) Class Statistics

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Average:		89.96 %
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Median:		100 %
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Grade Distribution

Number of Users (%)

Mobius quizzes are open book!

Don't be afraid to get help on written assignments either!

Someone put $(|x| + 1)^0 < y$, when the answer was $x \leq y$

Wouldn't have happened if you saw what others were asking at tutorial centre, office hours, Piazza, etc.

If you had to do everything *entirely* by yourself, then why do we offer all these resources?

If you're not using these resources in order to challenge yourself, then why not learn the whole course by yourself?

Office Hours: Monday/Wednesday 5-6pm in MC 4059

MATH 135: Lecture 8

Dr. Nike Dattani

24 September 2021

Before coming to UW....

- How many of you have been in a math class with < 15 students?
< 20 students?
< 30 students?
< 40 students?
40 or more?
- Now look around you, and this is half the usual MATH 135 size (COVID).
- Now imagine what the next stage will be like: law school, med school? PhD?
 - Only 8 law schools in Ontario,
 - Only 6 medical schools in Ontario
- The instructor to student ratio will converge to 0.
- For the next 4 years, learn to read the textbook on your own!

- Transitivity
 - a relates to b , b relates to c , then a relates to c .
- D.I.C.
 - If $a|b$ and $a|c$, then $a|bx + cy$
- Is converse of D.I.C. true?
- Prove it
 - If $a|bx+cy$, then $a|b(1) + c(0)$. So $a|b$.

Assignment 3

- 1a) Brute force is okay
- 1d) Try brute force on m , what if it starts to look like the statement is false?
 - negate and prove that negation is true.
 - $\forall n \text{ in } \mathbb{Z}, \neg A \vee \neg B.$
 - Case 1: $\neg A$ true.
 - Case 2: $m^2 - 5$ is even $\Rightarrow \neg B$ true.

Assignment 3

- For many cases:
 $\frac{1}{2}$ the marks are for correct answer,
 $\frac{1}{2}$ for correct argument
 (even for 1-pont questions)

Q2a)

$$\forall x \in \mathbb{R}, \quad P \Rightarrow Q \vee R$$

Case 1: Assume $P \Rightarrow Q$ is true. Then statement is true in this case.

Case 2: Assume $P \Rightarrow Q$ is false. Then R turns out implied by P.

b) Converse?

$$\forall x \in \mathbb{R}, \quad Q \vee R \Rightarrow P$$

Q2a)

$$\forall x \in \mathbb{R}, \quad P \Rightarrow Q \vee R$$

Case 1: Assume $P \Rightarrow Q$ is true. Then statement is true in this case.

Case 2: Assume $P \Rightarrow Q$ is false. Then R turns out implied by P .

b) Converse?

$$\forall x \in \mathbb{R}, \quad Q \vee R \Rightarrow P \quad (\text{quantifier doesn't change!})$$

c) Case 1: Assume Q . Does it imply P ?

Case 2: Assume R . Does it imply P ?

Q3)

$$\forall a, b \in \mathbb{N}, A \wedge B \Rightarrow C \vee D$$

Converse?

$$\forall a, b \in \mathbb{N}, C \vee D \Rightarrow A \wedge B$$

Quantifier stays same!

List all methods you use (e.g. Transitivity, D.I.C., contrapositive, etc.)

Q4) If it's false:

give a correct counter-example, and explain why counter-example is correct

If it's true:

prove it, using words!

e.g. prove c is even, then prove a and b have same **parity**