

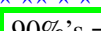
Welcome to class!

with Prof. D'Ambroise

High Expectations



Grading Standards



90%'s = A-range

80%'s = B-range

Grading Standards

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★
★ 90%'s = A-range ★
★ 80%'s = B-range ★
★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

74-79% = C or C-plus = passing

Grading Standards

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★
★ 90%'s = A-range ★
★ 80%'s = B-range ★
★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

74-79% = C or C-plus = passing


70-73% = C-minus = failing

60%'s = D-range = failing

below 60% = F = failing

Grading Standards

*“Aim to pass”
is a bad strategy
(usually results in
failure)*



★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★
★ 90%’s = A-range ★
★ 80%’s = B-range ★
★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

74-79% = C or C-plus = passing

70-73% = C-minus = failing

60%’s = D-range = failing

below 60% = F = failing

*All students are held to the same high standards
regardless of job/home/other class responsibilities.*

Grading Standards

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★
★ 90%'s = A-range ★
★ 80%'s = B-range ★
★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

*“Aim for B”
is better
(not as risky &
leaves room
for error!!)*

74-79% = C or C-plus = passing


70-73% = C-minus = failing

60%'s = D-range = failing

below 60% = F = failing

*All students are held to the same high standards
regardless of job/home/other class responsibilities.*

Grading Standards



*I hope you'll:
Aim for A !
Work hard !
Be humble !
Seek help !
:)*

★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★
★ 90%'s = A-range ★
★ 80%'s = B-range ★
★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

74-79% = C or C-plus = passing

70-73% = C-minus = failing

60%'s = D-range = failing

below 60% = F = failing

*All students are held to the same high standards
regardless of job/home/other class responsibilities.*

Grading Standards

*Aiming to surpass
is the best
strategy!*

★ ★ ★ ★ ★ ★ ★ ★ ★ ★
★ 90%'s = A-range ★
★ 80%'s = B-range ★
★ ★ ★ ★ ★ ★ ★ ★ ★ ★

74-79% = C or C-plus = passing

70-73% = C-minus = failing

60%'s = D-range = failing

below 60% = F = failing

*All students are held to the same high standards
regardless of job/home/other class responsibilities.*

Concrete Steps for Successful Students

- read the book before class & write questions in margins

Concrete Steps for Successful Students

- read the book before class & write questions in margins
- participate in class
 - take notes
 - ask questions & write questions in margins

Concrete Steps for Successful Students

- read the book before class & write questions in margins
- participate in class
 - take notes
 - ask questions & write questions in margins
- revisit the book & clarify your questions

Concrete Steps for Successful Students

- read the book before class & write questions in margins
- participate in class
 - take notes
 - ask questions & write questions in margins
- revisit the book & clarify your questions
- participate outside of class
 - ask questions in office hours, before class, and/or after class
 - meet friends & form a study group

Concrete Steps for Successful Students

- read the book before class & write questions in margins
- participate in class
 - take notes
 - ask questions & write questions in margins
- revisit the book & clarify your questions
- participate outside of class
 - ask questions in office hours, before class, and/or after class
 - meet friends & form a study group
- revisit the book & clarify your questions

Concrete Steps for Successful Students

- read the book before class & write questions in margins
- participate in class
 - take notes
 - ask questions & write questions in margins
- revisit the book & clarify your questions
- participate outside of class
 - ask questions in office hours, before class, and/or after class
 - meet friends & form a study group
- revisit the book & clarify your questions
- start homework early
 - don't skip problems, work hard to understand *every* problem
 - test yourself using additional problems in the book

Concrete Steps for Successful Students

- read the book before class & write questions in margins
- participate in class
 - take notes
 - ask questions & write questions in margins
- revisit the book & clarify your questions
- participate outside of class
 - ask questions in office hours, before class, and/or after class
 - meet friends & form a study group
- revisit the book & clarify your questions
- start homework early
 - don't skip problems, work hard to understand *every* problem
 - test yourself using additional problems in the book
- revisit the book & clarify your questions

Time Commitment

A student *with a strong background* and *who learns at an average pace* will need to commit **at least 10 hours** to this class each week after class interacting *directly* with the course material.

You might need more!

Math is vast!

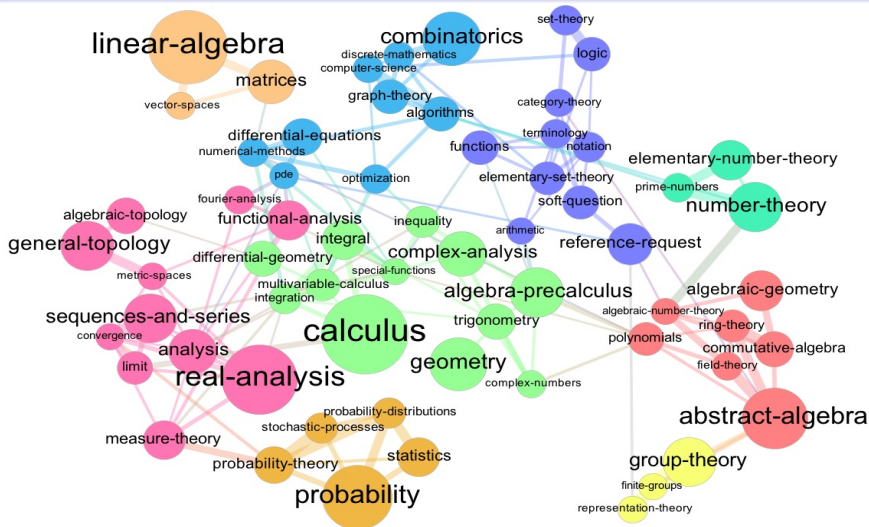


Image from Stack Exchange: <http://meta.math.stackexchange.com/questions/6479/a-graph-map-of-math-se>

Warning on outside resources

Relying too heavily on outside resources
can cause *confusion and failure!*

Warning on outside resources

Relying too heavily on outside resources
can cause *confusion and failure!*

- youtube \neq your textbook

Warning on outside resources

Relying too heavily on outside resources
can cause *confusion and failure!*

- youtube \neq your textbook
- khan academy \neq office hours

Warning on outside resources

Relying too heavily on outside resources
can cause *confusion and failure!*

- youtube \neq your textbook
- khan academy \neq office hours
- even one-on-one tutoring \neq appointment with Prof.

Warning on outside resources

Relying too heavily on outside resources
can cause *confusion and failure!*

- youtube \neq your textbook
- khan academy \neq office hours
- even one-on-one tutoring \neq appointment with Prof.

If you use outside resources you must follow up with
reading the book, coming to office hours,
and interacting with *our* course material.

Only your Prof. can tell you what WE focus on in THIS class!

Time Commitment

A student *with a strong background* and *who learns at an average pace* will need to commit **at least 10 hours** to this class each week after class interacting directly with our course material.

You might need more!

Getting Help

- Read the syllabus thoroughly

Getting Help

- Read the syllabus thoroughly
- Check the course HUB everyday

Getting Help

- Read the syllabus thoroughly
- Check the course HUB everyday
- Make time for office hours and/or appointments !

Getting Help

- Read the syllabus thoroughly
- Check the course HUB everyday
- Make time for office hours and/or appointments !
- Plan ahead, don't delay!

Understand the Five Stages of Learning[†]

[†] A Five-Stage Model of the Mental Activities Involved in Directed Skill Acquisition

by Stuart E. Dreyfus and Hubert L. Dreyfus, published by US Air Force, available at

<http://www.dtic.mil/dtic/tr/fulltext/u2/a084551.pdf>

1 Novice

- knows the rules, but has no situational decision-making skills
- cannot adapt quickly or handle complex combinations of the rules

Understand the Five Stages of Learning[†]

[†] A Five-Stage Model of the Mental Activities Involved in Directed Skill Acquisition

by Stuart E. Dreyfus and Hubert L. Dreyfus, published by US Air Force, available at

<http://www.dtic.mil/dtic/tr/fulltext/u2/a084551.pdf>

1 Novice

- knows the rules, but has no situational decision-making skills
- cannot adapt quickly or handle complex combinations of the rules

The novice car driver knows the rules of the road but does not respond quickly or efficiently to new situations.

Understand the Five Stages of Learning[†]

[†] A Five-Stage Model of the Mental Activities Involved in Directed Skill Acquisition

by Stuart E. Dreyfus and Hubert L. Dreyfus, published by US Air Force, available at

<http://www.dtic.mil/dtic/tr/fulltext/u2/a084551.pdf>

1 Novice

- knows the rules, but has no situational decision-making skills
- cannot adapt quickly or handle complex combinations of the rules

The novice car driver knows the rules of the road but does not respond quickly or efficiently to new situations.

The novice math student knows the basics but cannot solve problems quickly or efficiently.

Understand the Five Stages of Learning

2 Competency

- has considerable situational experience
- understands exceptions or deviations to the rules that might apply in different situations
- knows which situations are advantageous and which to avoid

Understand the Five Stages of Learning

2 Competency

- has considerable situational experience
- understands exceptions or deviations to the rules that might apply in different situations
- knows which situations are advantageous and which to avoid

The competent car driver can recognize various dangerous situations and s/he can correct the situation by applying differing techniques such as slowing down, swerving, pulling over, or other maneuvers.

Understand the Five Stages of Learning

2 Competency

- has considerable situational experience
- understands exceptions or deviations to the rules that might apply in different situations
- knows which situations are advantageous and which to avoid

The competent car driver can recognize various dangerous situations and s/he can correct the situation by applying differing techniques such as slowing down, swerving, pulling over, or other maneuvers.

The competent math student knows how to deal with edge cases such as undefined quantities, and knows how and why to choose different techniques based on different situations.

Understand the Five Stages of Learning

3 Proficiency

- less focus on situational difficulties
- more focus on long term goals

Understand the Five Stages of Learning

3 Proficiency

- less focus on situational difficulties
- more focus on long term goals

The proficient car driver responds naturally to situational difficulties; they focus more on the higher overall goal of getting to the destination safely.

Understand the Five Stages of Learning

3 Proficiency

- less focus on situational difficulties
- more focus on long term goals

The proficient car driver responds naturally to situational difficulties; they focus more on the higher overall goal of getting to the destination safely.

The proficient math student knows how to respond to edge cases and s/he knows how to choose between various techniques; they focus most on higher level understanding such as relating math to their desired career goals among other things.

Understand the Five Stages of Learning

4 Expertise

- learner responds automatically without consciously using rules
- *highly developed and accurate* intuition; rules are instinctual

Understand the Five Stages of Learning

4 Expertise

- learner responds automatically without consciously using rules
- *highly developed and accurate* intuition; rules are instinctual

The expert car driver has seen so much on the road that s/he is not surprised at challenges or incidents, and responds to them automatically.

Understand the Five Stages of Learning

4 Expertise

- learner responds automatically without consciously using rules
- *highly developed and accurate* intuition; rules are instinctual

The expert car driver has seen so much on the road that s/he is not surprised at challenges or incidents, and responds to them automatically.

The expert math student has seen so many problems that they are not surprised at the exam questions. The expert wastes no time deciding between various methods because they respond know instinctually what to do.

4 Expert Level **= your goal before each exam**

Exams test you at the expert level.

A rough guide for what to expect

- expert level knowledge = **B or above on exam**

4 Expert Level **= your goal before each exam**

Exams test you at the expert level.

A rough guide for what to expect

- expert level knowledge = **B or above on exam**
- competence or proficiency level knowledge = **possible exam pass**

4 Expert Level **= your goal before each exam**

Exams test you at the expert level.

A rough guide for what to expect

- expert level knowledge = **B or above on exam**
- competence or proficiency level knowledge = **possible exam pass**
- novice or competence level knowledge = **exam failure**

Understand the Five Stages of Learning

5 Mastery

- moments of intense absorption in the subject matter
- mental energy no longer needed to produce nearly perfect results

Understand the Five Stages of Learning

5 Mastery

- moments of intense absorption in the subject matter
- mental energy no longer needed to produce nearly perfect results

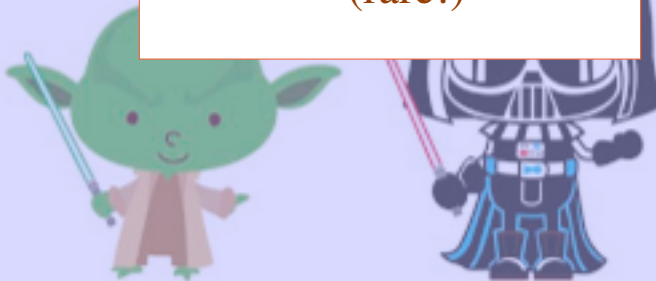


Understand the Five Stages of Learning

5 Mastery

- moments of intense absorption in the subject matter
- mental energy no longer needed to produce nearly perfect results

Mastery = A-performance
(rare!)



Everyday

**I WILL TRY HARDER
THAN I DID BEFORE!**



imgflip.com