

You can draw here

Physics 111 - Class 1A

Introductions

Do not draw in/on this box!

September 8, 2021

You can draw here

You can draw here

Logistics/Announcements

- No Labs or Tutorials in the first week! Labs will begin in Week 2, Tutorials will begin in Week 3.
- Lab Canvas session is separate from Lecture/Tutorial
- If you are Tutorial-exempt, register for XM2 - even if you are tutorial exempt, you can still attend Tutorials!
- There is no textbook to purchase for this course!
- You will need a UBC Student Email to access Ed Discussion

Introductions



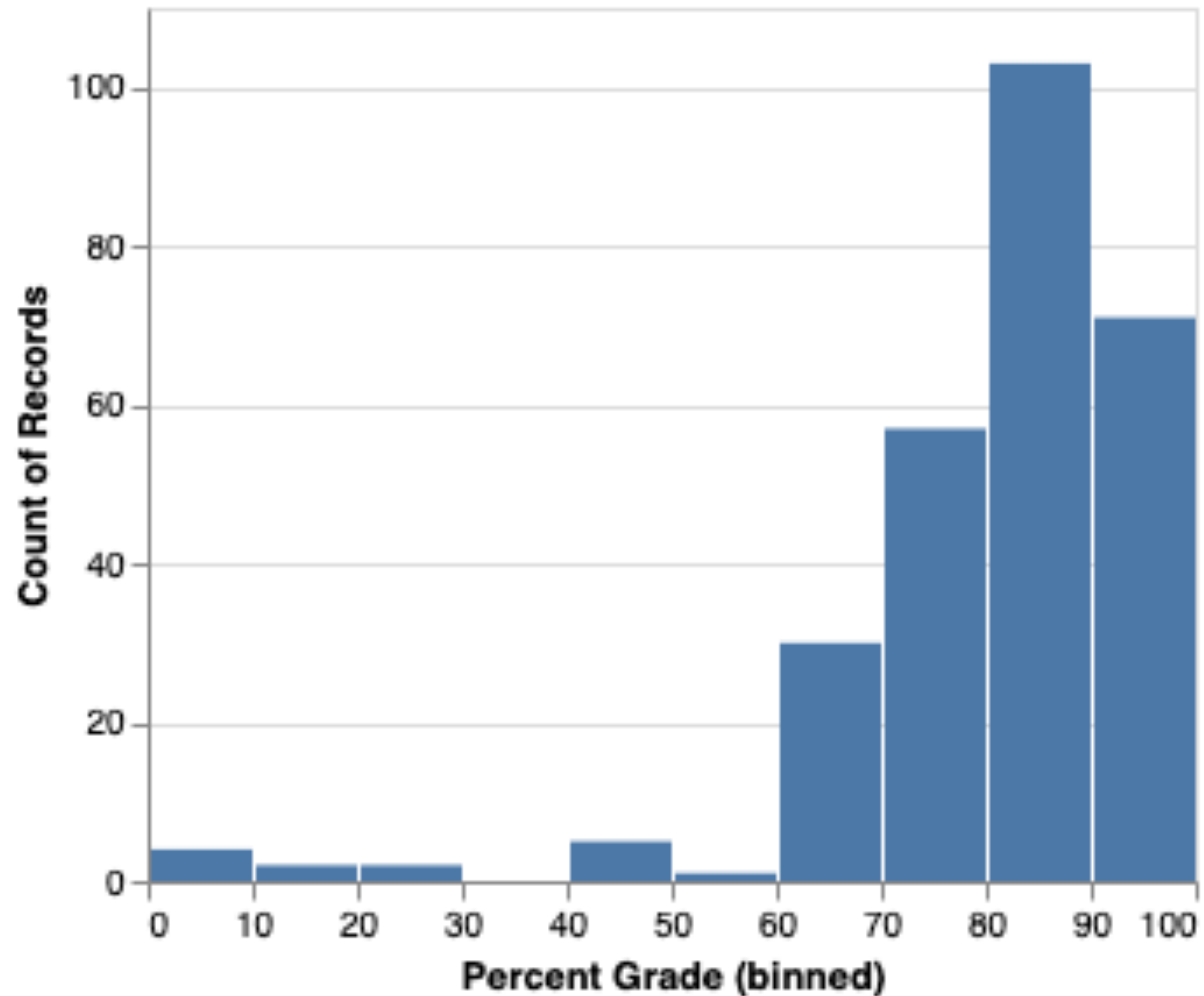
Course Structure



Stats from Last Year

Stats from Last Year

2020 WT1 Physics 111 Grades
Mean/Std = 79.7 / 15.5 %
N = 274, 122 As and 13 Fails,



Stats from Last Year

The highest course grades was 99%

4 of the top 5 grades were women!

6 of the top 10 grades were also women!

Class Structure

Class Structure

15 mins before class:

Relax with elevator music
or screen annotations

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At start time (8 AM)

Logistics and
Announcements

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Logistics and
Announcements

Class Outline

Quick Introduction

Clicker Questions

Worksheet Activity

Debrief and Wrap-up

Class Structure

15 mins before class:

Relax with elevator music
or screen annotations

At start time (8 AM)

Logistics and
Announcements

Class Outline

Quick Introduction

Clicker Questions

Worksheet Activity

Debrief and Wrap-up

At end time (8:50 AM)

Informal student hours

Gotta go by ~ 9:20 AM

Growth Mindset

Why Does Mindset Matter?

Designed by GA-CTL Workgroup: Crystal Edenfield
Rhonda Porter
Deborah Walker
Joyce Weinsheimer
Lisa Yount

Why Does Mindset Matter?

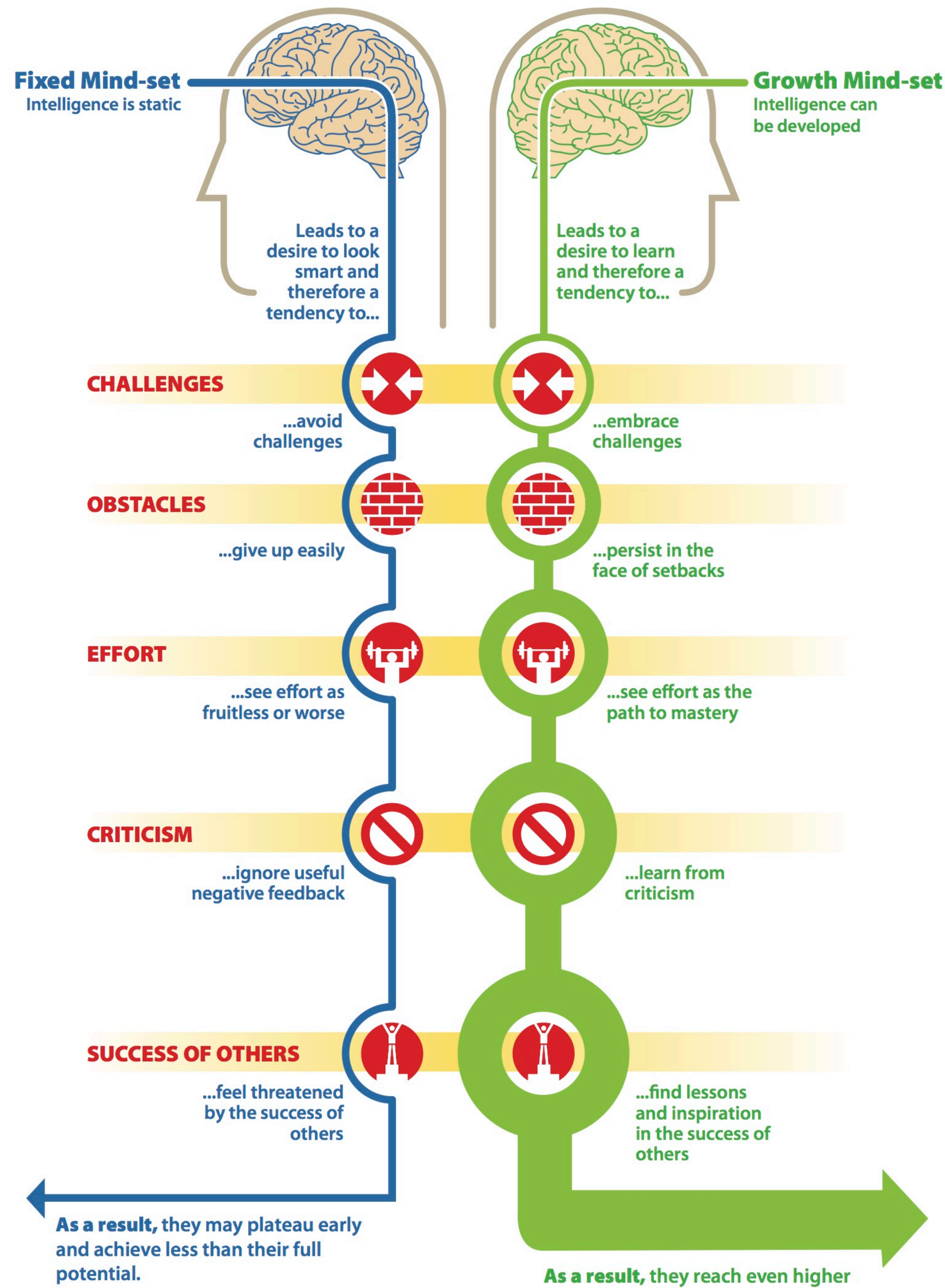
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What is mindset?

Mindsets are beliefs and perceptions about learning.

Fixed vs. Growth

- A fixed mindset is based on the belief that your qualities are carved in stone
- A growth mindset is based on the belief that your basic qualities are things you can cultivate through your **efforts**, your **strategies**, and **help from others**



By Nigel Holmes based on the work of Carol Dweck

Why does mindset matter?

Resources

Books

- Dweck, C. (2016). Mindset: The new psychology of success. Penguin Random House, New York, New York.
- Major, C. H., Harris, M. S., & Zakrajsek, T. (2016). Teaching for learning: 101 intentionally designed educational activities to put students on the path to success. Taylor & Francis, New York, New York.
- McGuire, S. Y. (2015). Teach students how to learn: Strategies you can incorporate into any course to improve student metacognition, study skills, and motivation. Stylus Publishing, Sterling, Virginia.

Websites

- <https://www.mindsetkit.org/topics/about-growth-mindset/what-is-growth-mindset>
- <http://mindsetscholarsnetwork.org/>

Other Logistics



Assessing the 1st year physics program

Research Study

To improve physics teaching at UBCO, we are doing a two-part diagnostic to:

- help us stay current on what students know coming into the course
- understand the impact of different teaching methods
- assess the quality of the program
- understand how the program serves different populations

Your instructor (me) will not see the results until final exam grades have been submitted!

This diagnostic is NOT FOR MARKS!

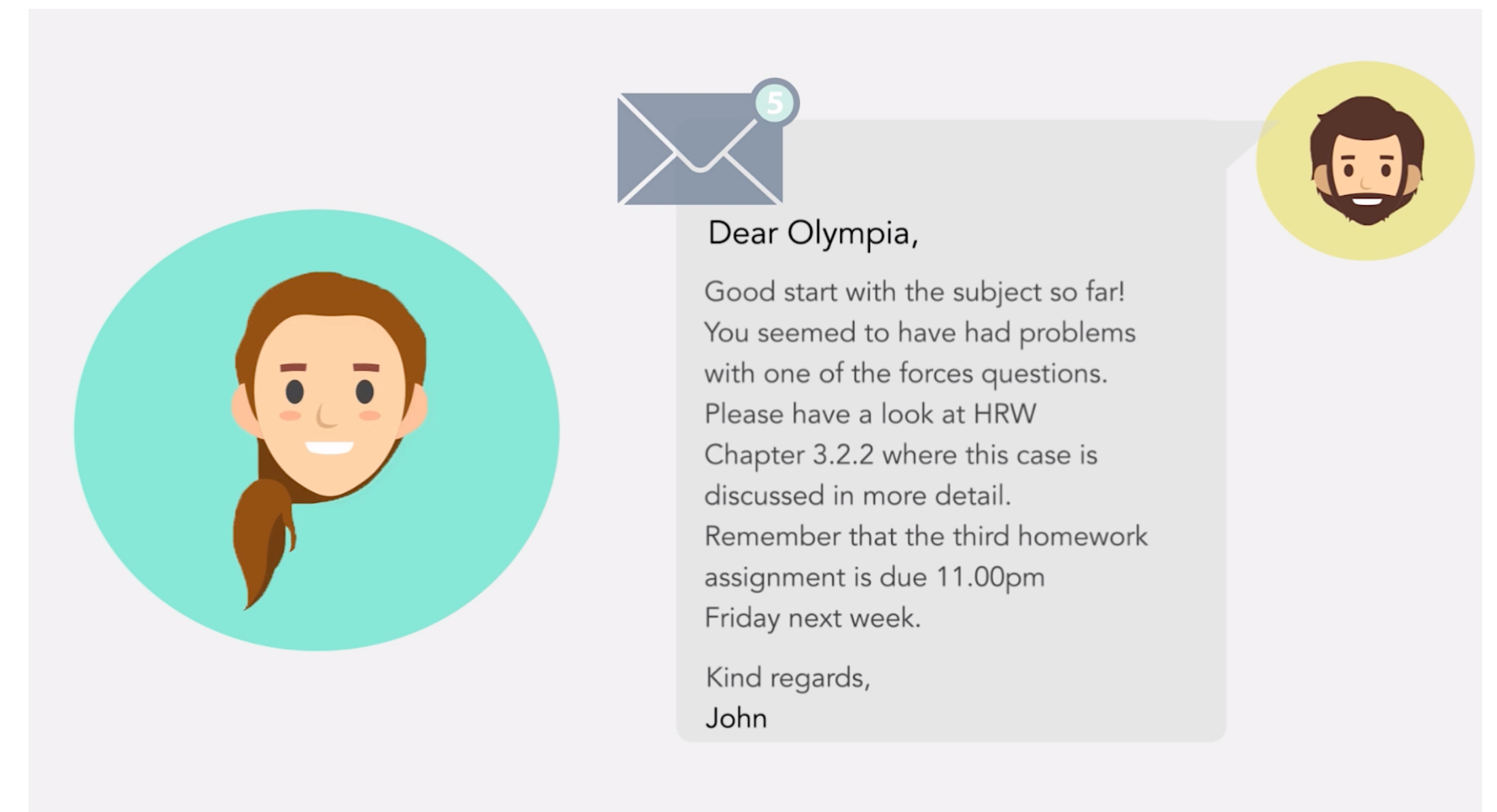
You do NOT need to study as this is just a baseline for how you think.

Incentive: 0.5% per diagnostic

Diagnostic (Part 1) will happen in class on Friday (about 45 mins)

Exploring Personalized Feedback

- OnTask is a free and open source platform that enables data-driven personalization of feedback
- Helps instructors communicate more efficiently and effectively with students
- Allows instructors to provide high quality and personalized feedback to students, increasing motivation for learning and enhancing student-instructor rapport
- OnTask messages can include:
 - Weighted grades on assignments/exams,
 - Participation and attendance marks,
 - Study tips,
 - Office hour reminders, and
 - Other materials related to the course



An example of an OnTask message: <https://www.ontasklearning.org/>

New Thread

Search

Filter

Pinned

Welcome!

General

DrMoosvi (Firas)

STAFF

13d

9

1

This Week

Calculator

Tech Support

Anonymous

2d

1

1

Last Week

physics lab

Individual

Rileigh Payne

3d

1

29 Aug 2021

Live lectures?

Logistics and Course Fee...

Anonym...

13d

1

6

Welcome! #1



DrMoosvi (Firas) STAFF
13 days ago in General

UNPIN

STAR

WATCHING

270
VIEWS



Hello everyone!

1

We will be using Ed Discussion for our class Q&A, it's really great! I hope you like it

This is the best place to ask questions about the course, whether about content, or logistics. You should ask every question here, and the only thing you need to decide is whether your question should be public (helps everyone) or private (applies only to you, for e.g., regrade requests, personal circumstances etc...)

You will get faster answers here from the teaching team as well as other students here on Ed Discussion - all of your TAs are on here as well. Neither TAs nor instructors will be responding to emails or Canvas messages (unless it's a legitimate emergency, or if you cannot access Ed Discussion).

Here are some tips:

- Do a quick scan to search before you post, it's possible your question was already asked. If it has, add a response to it, rather than creating a new question
- Click the heart emoji ❤️ for questions and answers you find/found useful
- Try to answer questions you feel comfortable answering and just try your best! if it's not quite correct, TAs and instructors will be offering helpful edits and corrections. This will be a learning experience as well.
- For each questions that were answered by students (high recommended!), the first answer that we think is fully correct, we will "Endorse" it - this means that the answer was approved by an instructor
- Share interesting course related content with staff and peers - ask lots of questions and let's build a community together!

Here is a quick overview of the main features of Ed Discussion:

1. Interface

Interface

Clean and intuitive.

Start a new thread

Open Ed Discussion

COURSES

CS 101

ECON 102

MATH 201

ENGG 202

Playground

CATEGORIES

General

Lectures

Tutorials

Problem Sets

Assignments

Midterm

Exam

ed Playground – Discussion

New Thread

Search

Filter

Pinned

Welcome!

General

Scott Maxwell

STAFF

4h

This Week

Quadratic equation

Lectures – M1

Anonymous

2h

4

4

Supersonic flow

Assignments – A1

Anonymous

2h

2

2

Quadratic equation

Anonymous

2 hours ago in Lectures – M1

ENDORSED

PIN

STAR

WATCHING

242

VIEWS

Hi all,

4

How do we solve $ax^2 + bx + c = 0$?

Comment Edit Delete Unendorse

1 Answer

Scott Maxwell

STAFF

2 hours ago

Good question! You can use the quadratic formula:

2

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Comment Edit Delete Endorse

Add comment

Emily Kewig

2 hours ago

Also note the graph of a quadratic function is called a *parabola* and has this general shape:



See you on Friday!