

# KICKSTART

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AUGUST 2021



# WHAT IS KICK-START?

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- Introduction to mechanics and math for new students
- 2 weeks in August before study begins
- Mostly repetitions from high school

Uge 1

<b>Mandag</b>	<b>Tirsdag</b>	<b>Onsdag</b>	<b>Torsdag</b>	<b>Fredag</b>
<b>Mekanik i 1D</b> Bevægelses- ligninger	<b>Mekanik i 1D</b> Energi og impuls	<b>Konceptuel                      formiddag</b>  <b>Studenteroplæg</b>	<b>Mekanik i 2D</b> + hold til dem, der vil have flere udfordringer <b>Refleksion</b> <b>Studieteknikoplæg</b>	<b>Opgaveteknik</b> At læse en opgave  <b>Fremlæggelse af                      opgaver</b>
<b>Frokost</b>	<b>Frokost</b>	<b>Frokost</b>	<b>Frokost</b>	<b>Frokost</b>
<b>Regneregler og                      ligningssystemer</b>  <b>Refleksion</b>	<b>Differentialregning</b>  <b>Refleksion</b>	<b>Læseteknik</b> <b>Legestuen</b>	<b>Funktionsforståelse                      og integralregning</b> <b>Refleksion</b>	<b>Is</b> <b>Opsamling</b>
			Studenterrådets RUS-arrangement	

# WHAT IS THE TAKEAWAY? – GOOD STUDY HABITS

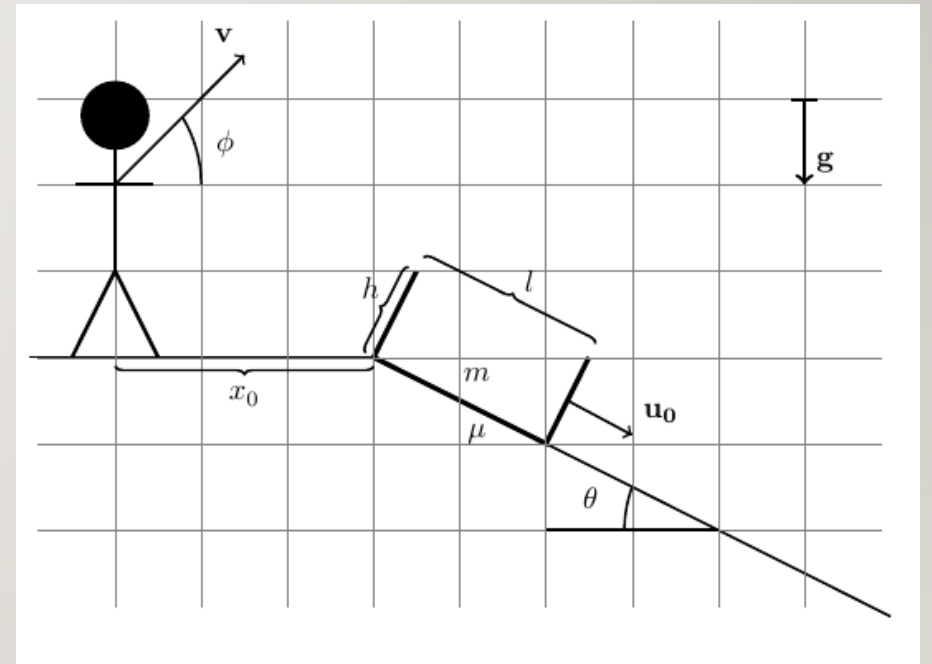
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- Feel prepared and excited to begin studies at university
- Meet the other students in an academic context
- Study habits
  - Become familiar with exercise sessions
  - Check the units and draw sketches
  - Feel comfortable discussing physics in groups and at a blackboard
  - How to break down a difficult problem
  - How to read a physics text
  - How to present a problem to your fellow students

# WHAT IS THE TAKEAWAY? – MATH AND PHYSICS BRUSH-UP

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- Physics
  - Equations of motion in 1 and 2 dimensions (vectors)
  - Work, energy and momentum
  - Plot construction and understanding
- Math
  - Rewriting and isolating variables in equations
  - Differentiation and integration
  - Drawing and recognizing common functions



# MATH AND PYTHON UPDATES

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- New this year - differentiated math teams
  - Small videos that explain the theory to watch at home
  - Self-test before the math classes begin – We don't see their results
  - Students divide themselves into teams based on how well they do
- Python part will be updated to match the python introduction in MekRel and Lynalys

Uge 2

<b>Mandag</b>	<b>Tirsdag</b>	<b>Onsdag</b>	<b>Torsdag</b>	<b>Fredag</b>
<p><b>Konceptuel formiddag</b></p> <p><b>Mekanik i 2D</b>  <u>FBDs</u> og bevægelsesligninger</p>	<p><b>Opgaver ved tavle</b></p> <p><b>Studerteroplæg</b>                      + hold til dem, der vil have flere udfordringer</p>	<p><b>Nedbryd opgaven</b></p>	<p><b>Mekanik i 2D</b>                      Energi og impuls</p> <p><b>Studerteroplæg</b></p>	<p><b>At diskutere fysik</b></p> <p><b>Python</b></p>
<b>Frokost</b>	<b>Frokost</b>	<b>Frokost</b>	<b>Frokost</b>	<b>Frokost</b>
<p><b>Funktionsforståelse II</b></p> <p><b>Refleksion</b></p>	<p><b>Fremlæggelse af opgaver</b></p>	<p><b>Byg og hyg</b></p>	<p><b>Integration II</b></p>	<p><b>Evaluering</b></p> <p><b>Reception</b></p>