

Workshop for educators “Efteruddannelsesdag”

Tuesday 26 June 2018

AGENDA

12.00 – 12.15	Welcome <ul style="list-style-type: none">▪ Sandwich
12.15 – 14.00 (incl. working on your own courses)	Continous assessment <ul style="list-style-type: none">▪ Assignments▪ Tests▪ Tests from publisher
14.00 – 15.00 (incl. Working on your own courses)	Support good feedback to and from students <ul style="list-style-type: none">▪ Rubrics▪ Peer feedback
15.00-15.30	We are available for further questions and support

WHO ARE WE?



Annika Büchert Lindberg



Anna Hollyoak Helleberg

FRAME WORK

- The value of technology in teaching
- Active learning



Blackboard

**What value does
technology and
IT bring?**



AARHUS UNIVERSITY

ANNA HOLLYOAK HELLEBERG AND ANNIKA BÜCHERT LINDBERG
EFTERUDDANNELSESDAG FOULUM 26.06.2018



Blackboard

IT does not have potential in itself. Instead, we must look at the didactics that IT must support.

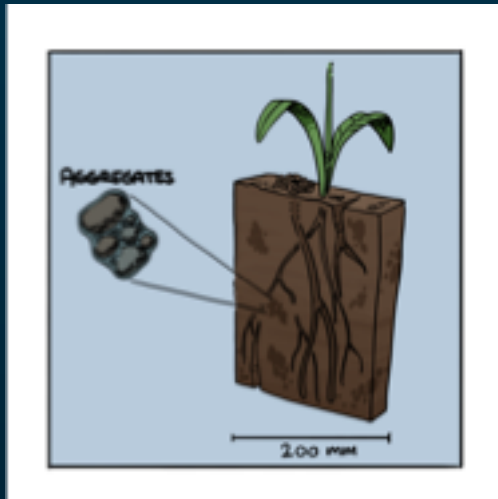
This necessitates that teachers have developed qualifications in didactical integration of IT. This advancement is best achieved through long-term, practice-oriented, collaboration between the teachers...

Translated freely from
Jeppe Bundsgaard, professor in didactics and IT, 2015

Assignments

Active Learning

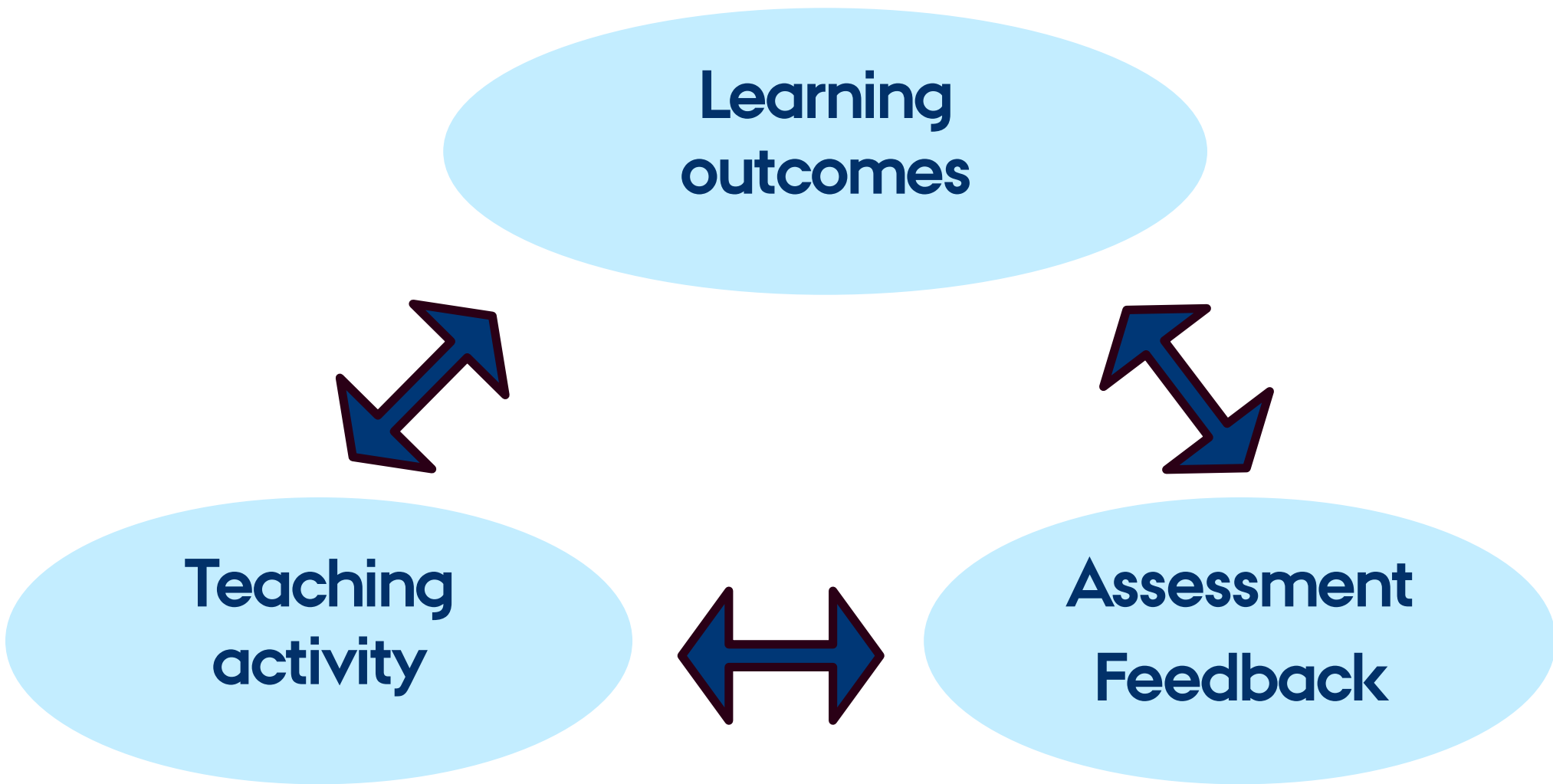
Content



Activity



Constructive alignment



Constructive alignment

Learning outcomes

Argue for strengths and weaknesses of given methods of sampling and recording behaviour



Teaching activity

Written assignment

Assignments in Blackboard

Assignment – Final poster



ACTIVITY 5

	Duration	Deadline
Adjust and upload final poster.	2 hours	05.06.2018 at 10:00 a.m.

On 22 May you will receive the comments and suggestions your fellow students made on your work.

You are free to decide whether you wish to integrate this peer feedback into the final version of your poster, but you will still have to re-upload your poster.

Submit the final version of your poster as a **PDF file** on Blackboard (Deadline **Thursday 5 June**).

Notice: You need to prepare a 4-minute oral presentation of your poster which you can present in front of your poster on course day 4 (no power point or videos).



Assignments in Blackboard

1. Assignment Information

Due Date Tuesday, 5 December 2017 10:00	Points Possible 100
--	-------------------------------



ACTIVITY 5

	Duration	Deadline
Adjust and upload final poster.	2 hours	05.06.2018 at 10:00 a.m.

On 22 May you will receive the comments and suggestions your fellow students made on your work.

You are free to decide whether you wish to integrate this peer feedback into the final version of your poster, but you will still have to re-upload your poster.

Submit the final version of your poster as a **PDF file** on Blackboard (Deadline **Thursday 5 June**).

Notice: You need to prepare a 4-minute oral presentation of your poster which you can present in front of your poster on course day 4 (no power point or videos).

2. Assignment Submission

Text Submission

Write Submission

Attach Files

Browse My Computer

Browse Content Collection

Assignments in Blackboard

First Name	Assignment -	Recall test	Your view o	Assignment	Group 1	Group 1
Anna	10.00	5.80	--	!		
Anne	10.00	9.00	--	!		
Anneke	10.00	9.00	--	!		
Annika	10.00	10.00	--	!	!	! 3.00

19.

Assignment	Group 1	Group 1
!		
!		
!		
!		
!		
!		

View Grade Details

Exempt Grade

Attempt 28/05/18 !



Blackboard

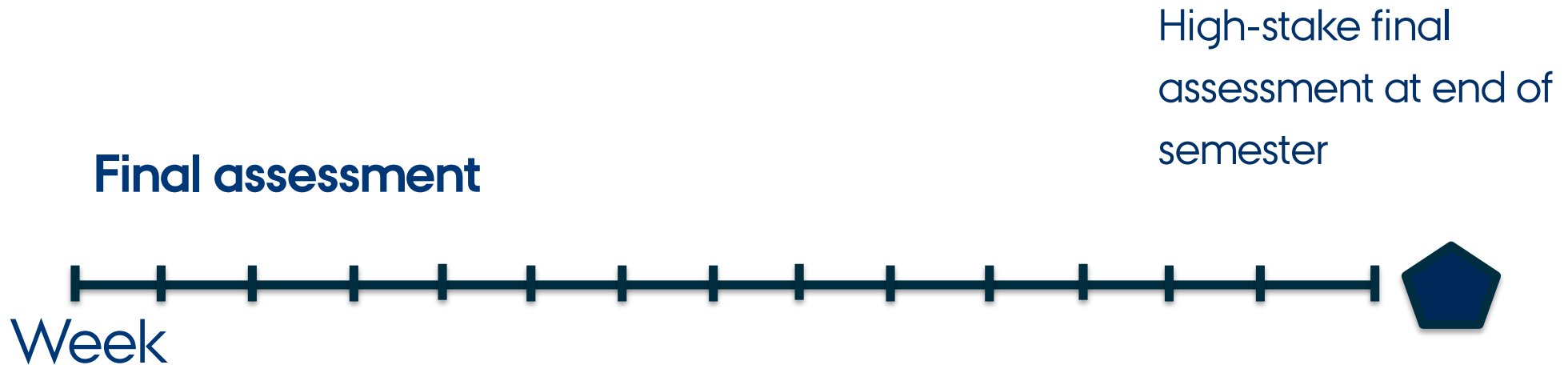
15 minutes

Do it yourself

- Assignments

Continuous assessment

Final examination vs continuous assessment



Definitions

In Danish	In English	Definition
Bedømmelse/ udprøvning	Assessment	'graded and non-graded tasks, undertaken by an enrolled student as part of their formal study, where the learner's performance is judged by others (teachers or peers)' (Bearman et al., 2016).
Eksamen/ afsluttende bedømmelse	Examination/ exam	'Assessment undertaken in strict formal and invigilated time-constrained conditions' (Bridges et al. 2002).
Løbende bedømmelse(Løbende udprøvning	Continuous assessment	Assessments (written assignments, tests, small oral presentations and similar) occur as graded tasks or activities distributed throughout the course.
Evaluering	Evaluation	Students evaluate the teaching/instruction during the course.

Exam regulations and continuous assessment

§ 3

Stk. 3. Universitetet kan tillige fastsætte regler i studieordningen om, at bedømmelsen af skriftlige opgavebesvarelser og mundtlige fremlæggelser m.v. i løbet af undervisningsforløbet indgår som en del af karakterfastsættelsen sammen med den afsluttende prøve i et fag eller fagelement. Det skal fremgå af eventuelle regler, hvorledes bedømmelsen af de skriftlige opgavebesvarelser og mundtlige fremlæggelser m.v. indgår i den samlede bedømmelse af faget eller fagelementet.

Exam regulations 30 June 2016

Committee for better university educations

Recommendation 23

To provide possibilities for continuous assessment of students to improve their learning

”Anbefaling 23

At der skabes bedre mulighed for løbende bedømmelse af de studerende med henblik på et øget læringsudbytte”



Why continuous assessment?

Assessment for learning

- Increased student motivation
- Optimize feedback
- Assess authentic and practical learning outcomes
- Strengthen self-reflection
- Minimize exam anxiety

The logo for Dansk Universitetspædagogisk Tidsskrift (DUUT) consists of the letters 'DUUT' in a stylized, orange, sans-serif font. The 'D' is a simple outline, the 'U' is a simple outline, and the 'T' is a simple outline.

Dansk Universitetspædagogisk Tidsskrift

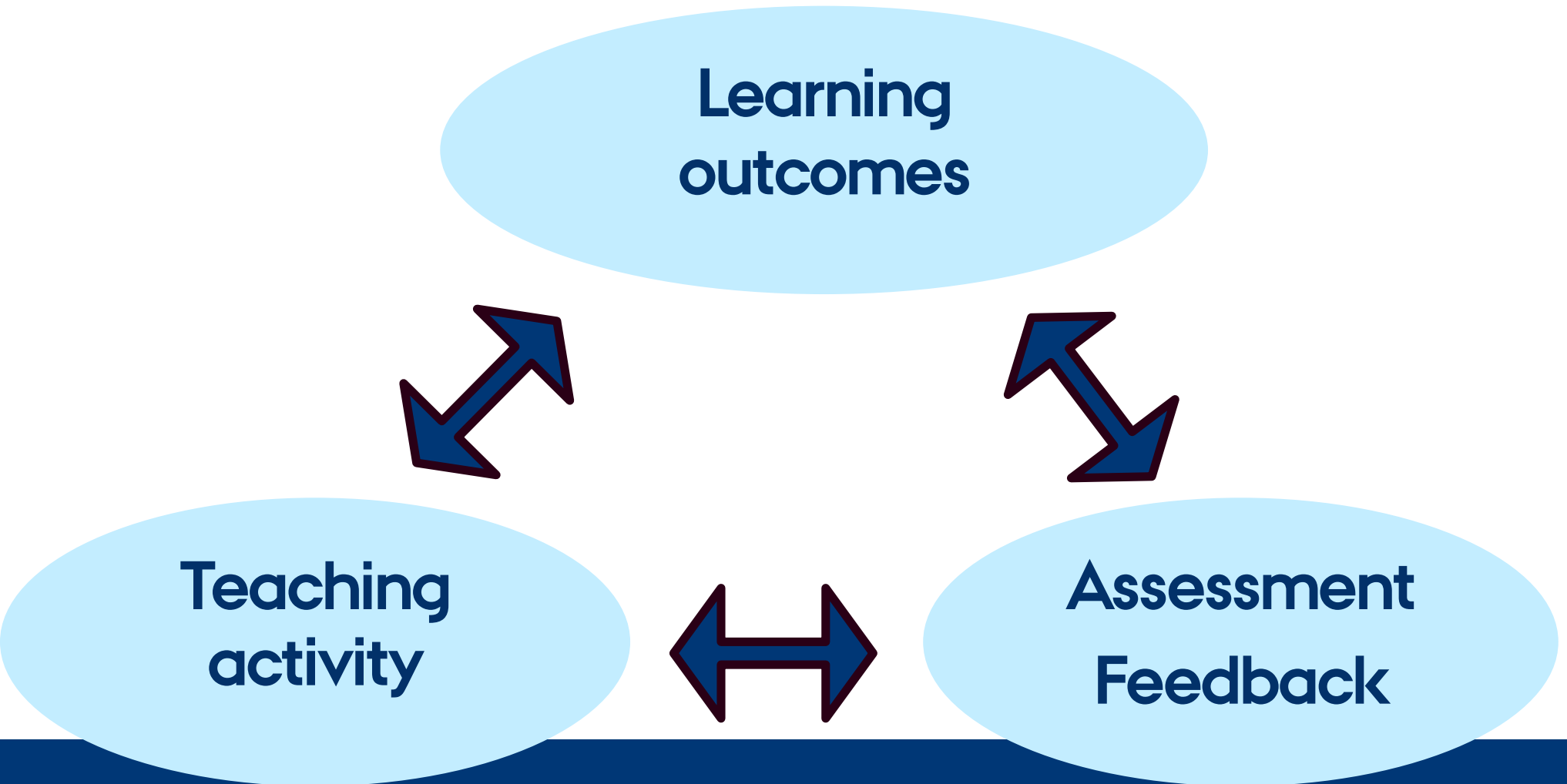
Nye perspektiver på evalueringsformer i universitetspædagogik

Årgang 12 nr. 23 / 2017

**Continuous assessment in higher education in Denmark:
Early experiences from two science courses**

Ole Eggers Bjælde, Tove Hedegaard Jørgensen og Annika Büchert Lindberg

Assessment and feedback



Fit-for-purpose assessment

Learning outcomes

Describe principles of muscle and how growth and muscle function affect the raw material quality...



Teaching activity

Test, quiz or multiple choice

Fit-for purpose assessment

Teaching activity

Test, quiz or multiple choice

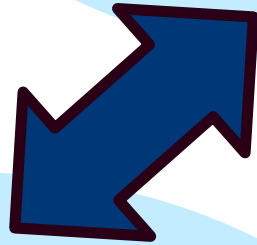
Considerations about why, when and how

- Before, during or after reading
- Before, during or after in-class teaching
- Individual or group presentation
- Online or in-class
- One or more attempts
- Competition

Fit-for purpose assessment

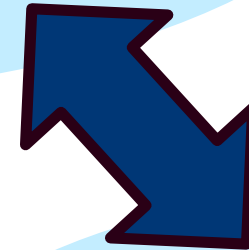
Learning outcomes

Describe principles of muscle and how growth and muscle function affect the raw material quality...



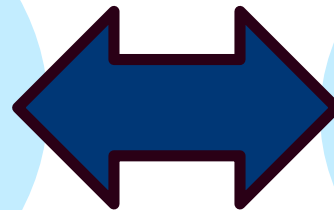
Teaching activity

Test, quiz eller multiple choice



Assessment and feedback

Automated assessment and feedback



Assessment and feedback

Consideration about assessment and feedback

- Immediate or delayed feedback (e.g. after deadline)
- Guiding feedback or correction sheet
- One or several attempts
- Books with online tests

Assessment and feedback

Automated assessment and feedback

Continuous assessment in Blackboard

Tests in Blackboard

Uge 1 quiz

Availability: Item is not available.

I Populationøkologi delen af kurset (uge 1–7) afsluttes hver uge med en uge quiz, der fokuserer på de centrale emner fra ugen. Hver quiz bidrager til din afsluttende karakter for faget. Det bliver angivet for hver uge quiz hvor mange point du maksimalt kan optjene. På hele kurset inklusiv den afsluttende eksamen kan du maksimalt optjene 500 point. Du har mulighed for at tage quizzen flere gange hvis du ønsker at forbedre dit resultat, dog har hver quiz en afsluttende deadline.

Uge 1 quiz (10 point/500 point)

Continuous assessment in Blackboard

Begin: Uge 1 quiz

1. Instructions

Force Completion This Test can be saved and resumed later.

Multiple Attempts This Test allows multiple attempts.

Click **Begin** to start: Uge 1 quiz. Click **Cancel** to go back.
You will be previewing this assessment and your results will not be recorded.

2. Submit

Click Begin to start. Click Cancel to quit.

Cancel

Begin

Question 1

10 points

Save Answer

I marts 2016 kunne ornitologer konstatere at havørne parret ved Egå-engø havde æg i reden. I juli kom 2 unger på vingerne.

Hvad vil populationsstørrelsen være i august 2018, hvis havørnene overlever og biholder samme fødselsrate i 2017 og 2018?



Havørneparret ved Egå Engø har fået to unger, der nu er på størrelse med forældrene. Billedet er taget, før æggene var lagt. Foto: John K. Ravn Lauritzen

Question 2

10 points

Save Answer

Modulære organismer har en række karakteristika der adskiller dem fra unitære organismer. Du skal her afkrydse alle de karakteristika der KUN kendetegner modulære organismer.

- Uforudsigelig form
- Diploid
- Består af et variabelt antal grundmoduler
- Har en maksimal levealder
- Har en forudsigelig udvikling
- Vækst er påvirket af miljøet

Continuous assessment in Blackboard with different variables

Question 3

10 points

Save Answer

En kohort af Rødhalse (*Erithacus rubecula*) er blevet undersøgt i Stavtrup. Livstallen ser således ud:

Alder Andel der overlever til alder x

0	1
1	0.62
2	0.27
3	0.16

Hos disse rødhalse får hunnen i gennemsnit 4 levedygtige unger per år

Opskriv formelen for Generationsvækstraten

HUSK AT SKRIVE DECIMALTAL PÅ ENGELSK MED ET PUNKTUM

Continuous assessment in Blackboard with different variables

Points: 10

3. Calculated Formula: Generationsvækstrate i rødhals population: En kohort af Rødhalse ...

Question

En kohort af Rødhalse (*Erithacus rubecula*) er blevet undersøgt i Stavtrup. Livstallen ser således ud:

Alder	Andel der overlever til alder x
0	1
1	[a]
2	[b]
3	[c]

Hos disse rødhalse får hunnen i gennemsnit [d] levedygtige unger per år

Opskriv formelen for Generationsvækstraten

HUSK AT SKRIVE DECIMALTAL PÅ ENGELSK MED ET PUNKTUM

Answer Formula $(a + d + b + d + c + d)/2$

Precision Decimal

Answer Range +/- ± 0

Number of Answer Sets 10

Correct Feedback Korrekt svar

Incorrect Feedback Husk at nyfødte dvs alder 0 ikke selv for unger.
Husk desuden at beregne antal hunafkom per hun.

Continuous assessment in Blackboard with different variables

Question Title

Generationsvækstrate i rød

* Question Text

Rich text editor toolbar with options: Paragraph, Arial, 3 (12pt), Bulleted List, Numbered List, Text Color, Background Color, Undo, Redo, Bold, Italic, Underline, Strikethrough, Link, Unlink, Table, Table of Contents, HTML, CSS, and Mashups.

En kohort af Rødhalse (*Erithacus rubecula*) er blevet undersøgt i Stavtrup. Livstallen ser således ud:

Alder	Andel der overlever til alder x
0	1
1	[a]
2	[b]
3	[c]

Hos disse rødhalse får hunnen i gennemsnit [d] levedygtige unger per år

Opskriv formlen for Generationsvækstraten

HUSK AT SKRIVE DECIMALTAL PÅ ENGELSK MED ET PUNKTUM

Path: p Words:55

* Answer Formula

Answer formula toolbar with options: Fraction, Square Root, Cube Root, Power, Matrix, Matrix, Multiplication, Pi, Greek Letters (alpha, Omega), Sin, Copy, Paste, Undo, and Help.

$$(a*d + b*d + c*d)/2$$

Continuous assessment in Blackboard with different variables

1. Define Variables

Tip: you can use scientific/exponential notation to represent numeric values. E.g., -0.0001 can be written as 1.0E-4 or as 1.0E-4. Spaces are not allowed.

	Variable Name	Minimum Value	Maximum Value	Decimal Places
1.	a	<input type="text" value="0.35"/>	<input type="text" value="0.5"/>	<input type="text" value="2"/>
2.	b	<input type="text" value="0.21"/>	<input type="text" value="0.34"/>	<input type="text" value="2"/>
3.	c	<input type="text" value="0.07"/>	<input type="text" value="0.21"/>	<input type="text" value="2"/>
4.	d	<input type="text" value="3.0"/>	<input type="text" value="5.0"/>	<input type="text" value="2"/>

2. Answer Set Options

Calculate Answers to

Number of Answer Sets

Correct Answer Format

3. Submit Information

*Click **Calculate** to generate new answer sets. Click **Next** to go to the next page, adjusting the number of answer sets as required but without recalculating existing answer sets if answer sets have already been generated. Click **Back** to go back to the previous page. Click **Cancel** to quit.*

Go Back

Cancel

Calculate

Next

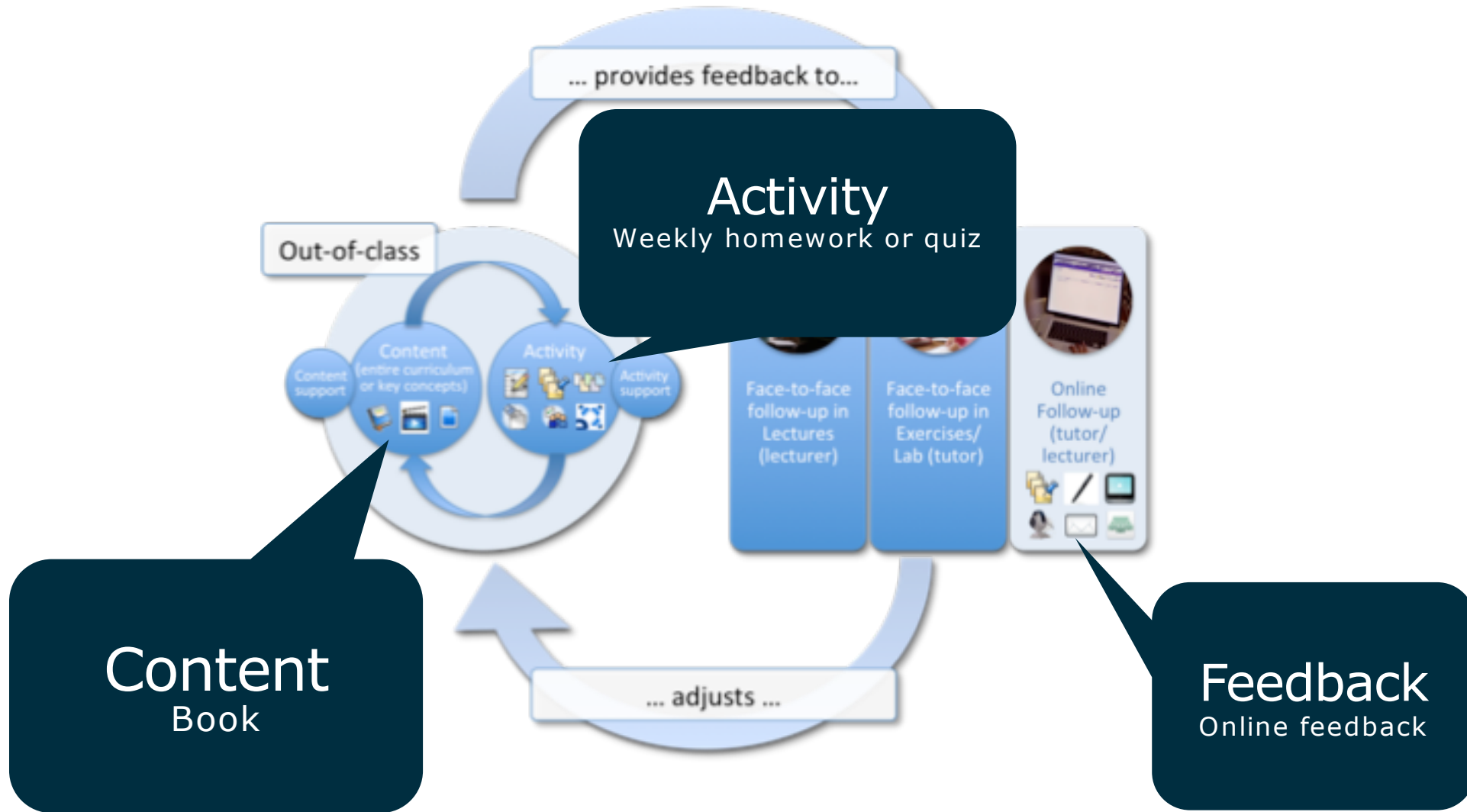
25 minutes



Blackboard

- **Do it yourself**
 - Tests

Ecology



Ecology

Level: Bachelor - 4 semester course

Number of students: 101

ECTS: 10

Language: Danish

Assessment:

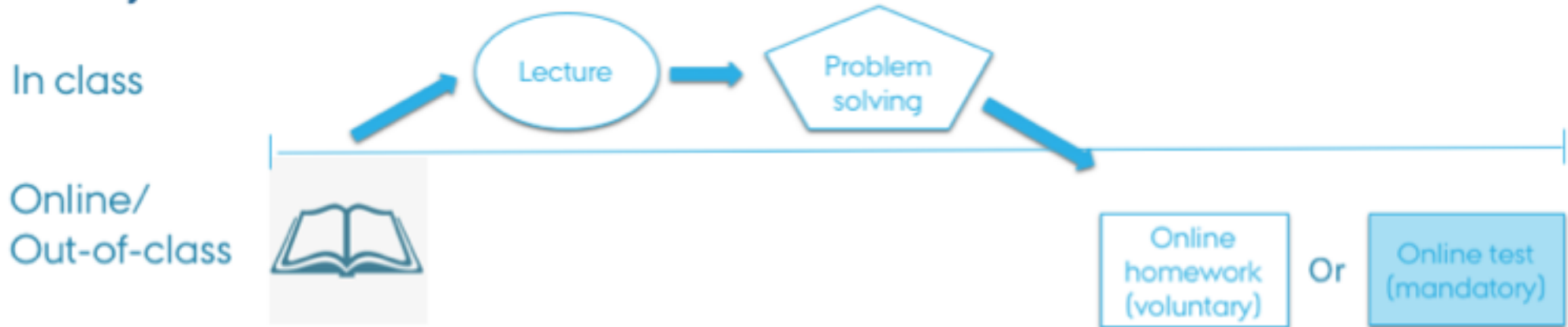
- Continuous assessment – 2 online assessment in 7 week

Purpose of assessment:

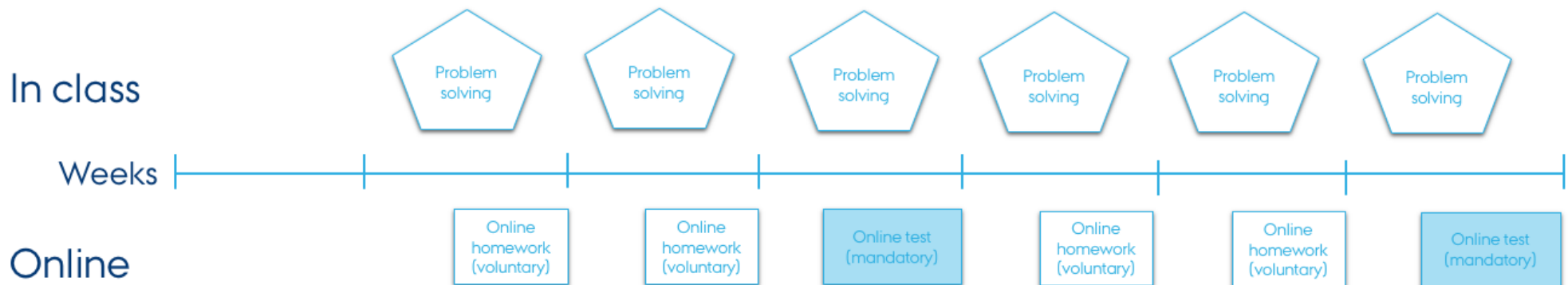
- Practice new concepts/terms
- Practice calculations
- Follow own progress during course

Ecology

Weekly schedule



First 7 weeks



Ecology – tests from publisher

Delprøver

Pearson's MyLab & Mastering

Velkommen til Mastering Biology

Til de teoretiske øvelser i uge 7 vil du få hjælp til at logge på Mastering Biology. Du kan dog allerede logge dig på nu.

Du skal gøre følgende

1. Click på titlen "Pearson's MyLab & Mastering"
2. Vælg: Welcome to MasteringBiology
3. Accepter License agreement
4. Create Pearson account ELLER anvende din tidligere konto hvis du kan huske password
5. Indtaste følgende kode: Student Access Code: **ISSELE-SPOIL-GLORY-BENUE-ASTIR-FLEES**
6. Du vil herefter kunne gå til kurset. Hvis du får en fejlmeddelelse, så gå tilbage til Blackboard siden og prøv igen.
7. Hvis du får problemer vil det være en stor hjælp hvis du skriver det i Q&A så vi kan få Pearson support til at hjælpe. Det er også muligt at skrive direkte til Annika (abl@stl.au.dk)

Hilsen Annika Lindberg, Science and Technology Learning Lab

Hvis du har problemer med log in kan du og hente hjælp hos Pearson: [In this site you have a handout](#) and a [video](#) to help you log in.

Delprøver

Eksamen i Økologi består af to online Delprøver (1 og 2) i løbet af kurset (5. og 8. kursusuge) samt en afsluttende mundligt eksamen.

De to Delprøver samt de fire obligatoriske Forberedende delprøver (a-d) afholdes via Mastering Biology.

Til første øvelsesgang i 3. kursusuge vil I kunne få hjælp og vejledning til hvordan I logger på Mastering Biology.

De fire Forberedende delprøver giver dig mulighed for at øve dig inden de to Delprøver. Både Forberedende delprøver og de to Delprøver vil indholde opgavetyper så som multiple choice, matching, short answer og regneopgaver. I regneopgaverne vil de variable være forskellige i hvert testforsøg.

Uge	Kursusuge	Dagvæ	Antal forsøg	Tidsperiode	Feedback	Bedømmelse
7	3	Forberedende delprøve a	Ubegrænset	12 feb. - 20 feb. kl. 23.59	Efter eget prøveforsøg	Bestået/ikke bestået
8	4	Forberedende delprøve b	Ubegrænset	16 feb. - 25 feb. kl. 23.59	Efter eget prøveforsøg	Bestået/ikke bestået

- 1 Start — 2 **Select Content** — 3 Organize Content — 4 Specify Outcomes — 5 Preview and Assign

Source

Book/Source: Chapter: Section:

Item Filters and Answer Types

Select filters below to refine your search results. ([How do I find accessible content?](#)) **Apply Filters**

Choosing across columns results in matches that meet both criteria, such as test bank items with the multiple choice answer type. To broaden your search, select multiple boxes within a column for items that meet either criteria.

Mobile Items Items with Feedback Item Difficulty

- | | | |
|--|---|--|
| Item Types | Answer Types | Special Features |
| <input type="checkbox"/> Tutorial | <input type="checkbox"/> Labeling | <input type="checkbox"/> Videos/Animations |
| <input type="checkbox"/> Activities | <input type="checkbox"/> Multiple Choice/Select | |
| <input type="checkbox"/> Coaching Activities | <input type="checkbox"/> Sorting | |
| <input type="checkbox"/> Reading Questions | | |
| <input type="checkbox"/> Test Bank | | |
| <input type="checkbox"/> My Items | | |

i Selected Filters: Difficulty 1-5 [Clear All](#)

Items

34 items found (To sort, click any column heading)

ASSIGN	ITEM TYPE	TITLE (Hide Descriptions)	TIME	DIFFICULTY (5-hardest)	USAGE STATISTICS (Roll over any colored segment)
<input type="checkbox"/>		9.1 Population Growth Reflects the Difference between Rates of Birth and Death			
<input type="checkbox"/>	Coaching Activities	Concept Review: Calculating Population Growth Rates - Copy Students calculate growth rates for exponentially increasing populations.	--	--	
<input type="checkbox"/>	Coaching Activities	BioFix Activity: Population Ecology -- Exponential Growth Students watch the BioFix 3D animation on Population Ecology and label a graph showing exponential growth.	1m	1	
<input type="checkbox"/>	Coaching Activities	Concept Review: Calculating Population Growth Rates Students calculate growth rates for exponentially increasing populations.	3m	1	
<input type="checkbox"/>	Reading Questions	Chapter 9 Reading Quiz Question 7 [[Bloom's Taxonomy: Knowledge/Comprehension]] (a) _____ is the instantaneous per capita rate of population growth.	1m	1	
<input type="checkbox"/>	Reading Questions	Chapter 9 Reading Quiz Question 1 [[Bloom's Taxonomy: Knowledge/Comprehension]] (a) In _____ populations, individuals enter or leave the population only through birth and death.	1m	1	
<input type="checkbox"/>	Reading Questions	Chapter 9 Reading Quiz Question 14 [[Bloom's Taxonomy: Knowledge/Comprehension]] (a) In the model for exponential population growth, what is e?	1m	1	

▼ Course Calendar



[Don't show this message again](#) ✕

MasteringBiology automatically creates the first assignment to teach students how to work in the application. To preview the assignment, click its title.

March 2018



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
25	26 Forberedende...	27	28	1	2 Delproeve 1	3
4	5	6	7	8	9	10
11 Forberedende...	12	13	14 Forberedende...	15	16	17 Forberedende...
18	19	20	21	22	23	24 Delproeve 2
25	26	27	28	29	30	31
1	2	3	4	5	6	7

[+ Create Assignment](#)

[View All Assignments](#)



Automated assessment

Chapter 9 Reading Quiz Question 6

▼ Part A

If the birth and death rates of a growing population remain constant through time, the rate of population growth will _____ through time.

▶ [View Available Hint\(s\)](#)

ABC News Video: The Cuttlefish

Watch the ABC News video (2:20 minutes). Then answer the questions below.



▶ 02:03 02:20

▼ Part A

The changes to the cuttlefish's skin are related to _____.

- reproductive strategies
- feeding behavior
- elimination of waste
- camouflage

[Submit](#)

[Request Answer](#)

Part B This question will be shown after you complete previous question(s).

Instructors: [View all hidden parts](#)

Part C This question will be shown after you complete previous question(s).

Individually graded assessment

<p>Submitted at 02/19/18 11:42 am</p> <p>Generationsvækstraten er den rate hvormed en population vokser per generation. Dvs. væksten i populationsstørrelsen efter 1 generation.</p>	<p>Score: 100%</p> <p>Comment:</p> <p>Change Grade</p>
<p>(anonymous) Submitted at 02/19/18 11:02 pm</p> <p>Generationsvækstraten R_0 beskriver hvor meget en population vokser på generation, dvs. hvor meget afkom man forventer et individ bidrager til næste generation.</p>	<p>Graded by Annika Lindberg (abl@stfl.au.dk) at 02/21/18 07:28 am</p> <p>Score: 100%</p> <p>Comment:</p> <p>Change Grade</p>
<p>(anonymous) Submitted at 02/20/18 03:01 pm</p> <p>$R_0 = l(x) \cdot b(x)$. Dette betyder, generationstilvæksten er et udtryk for antal levende (fra start til x) ganget med dets antal afkom.</p>	<p>Graded by Annika Lindberg (abl@stfl.au.dk) at 02/21/18 07:39 am</p> <p>Score: 25%</p> <p>Comment: Din beskrivelse er ikke præcis. Hvad angiver "starten" og hvad angiver x? Husk at population vækstraten er væksten over en generation, så starten må være fødselen og x det sidste leve år. 1: Generationsvækstraten R_0 - nettoreproduktionsrate 1. Den faktor som en population vokser (\pm) med over én generation (dvs variationen i overlevelses- og reproduktionsrate) 2. Det forventede antal afkom et individ får i sin levetid (bidrag til næste generation)</p> <p>Change Grade</p>

Own questions with different variables

Introduction



Answer

Answer Type: numeric value or expression

Yellow Warbler lever på Galá Marchena lever der 700 Yello Genovesa, og her har den er tilsyneladende en stabil same warblers og 450 træfinke

Enter the correct answer. Use Tex for mathematical notation.

Correct answer set has 1 terms.

Correct Answer(New entry box. [Learn more](#)) [About entering variables](#)

α_{TW}

(600-NT)/200

[add](#)
[units](#)

[Preview](#)

=

Acceptable variation or rounding error: 2.00%

[add pre-text](#)

[remove](#)

Default tolerance is 2%. [Learn more.](#)

[add post-text](#)

Answer format (display of significant figures):

Default display is 3 significant figures. [Learn more.](#)

[add an additional correct answer](#)

Grade answer as symbolic

Require Phasor Notation

Show additional rounding message (when the student response from the current part is used for a calculation of a subsequent part)

Edit Item



Item Variables [Defi](#)

Name Ty

NT Nur

Yellow Warbler lever på Galápagosøen Pinta sammen med en anden fugleart Den Lille Træfinke. På nabøen Marchena lever der 700 Yellow Warbler, og her er der ingen træfinker, mens Lille Træfinke lever alene på øen Genova, og her har den en populationsstørrelse på 600. På Pinta, konkurrerer de to arter om føde, men der er tilsyneladende en stabil sameksistens. Efter et par tørre år har konkurrenceforholdene dog ændret sig og der er nu 200 warblers og 550 træfinker på Pinta.

**Part A**

Udregn på baggrund af ovenstående oplysninger og Lotka-Volterras konkurrence ligninger konkurrencekoefficienten α_{WT} (effekten af træfinke på warbler).

$\alpha_{WT} =$

[Submit](#)[Request Answer](#)**Part B**

og konkurrencekoefficienten α_{TW} (effekten af warbler på træfinke).

$\alpha_{TW} =$

[Submit](#)[Request Answer](#)**Part C**

Hvordan påvirker de ændrede konkurrence-forhold de to arters sameksistens?

- De to arter vil have ustabil sameksistens
- Den Yellow warbler vil udkonkurre Lille Træfinke
- Den Lille Træfinke vil udkonkurre Yellow warbler
- De to arter vil bibeholde stabil sameksistens

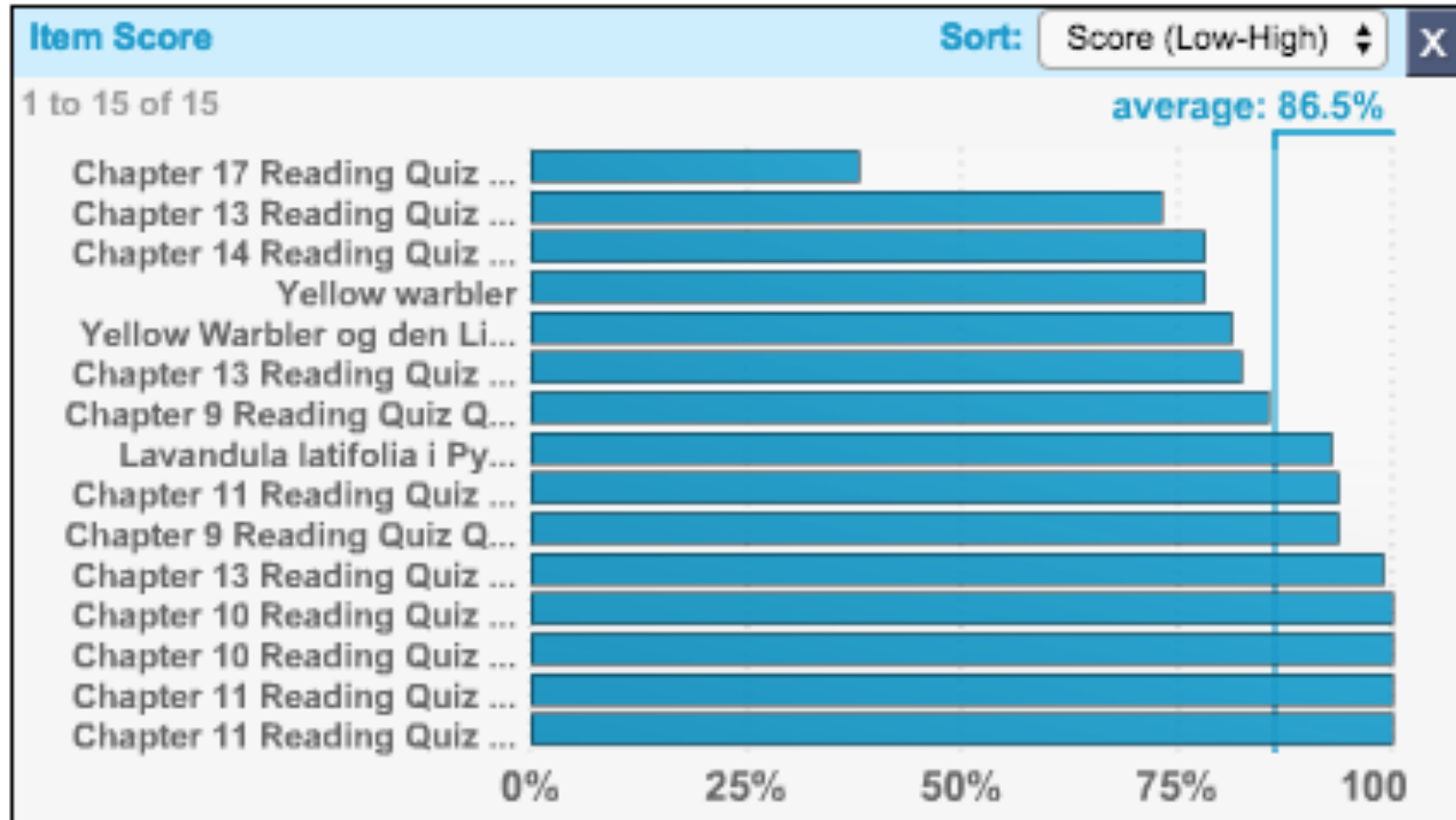
[Submit](#)[Request Answer](#)

Individual student scores

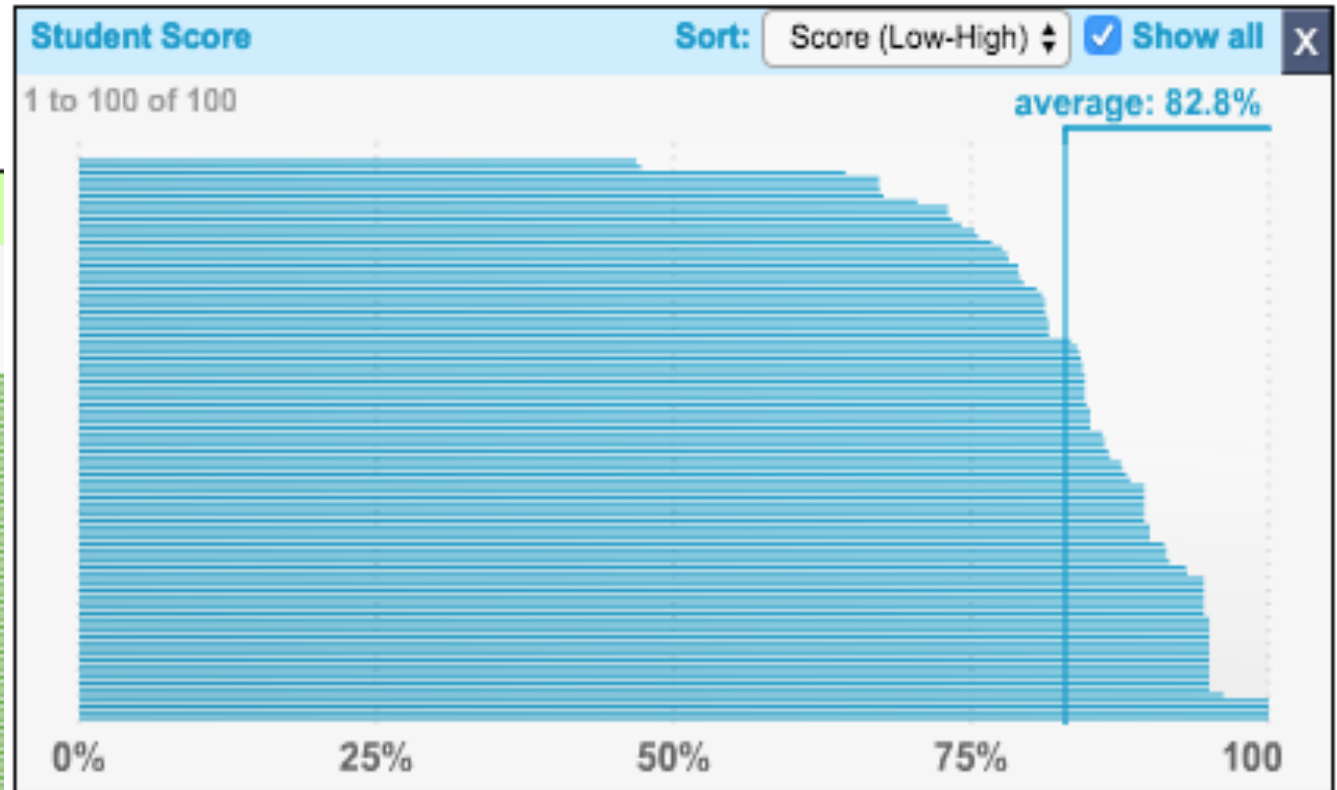
Students will receive no credit for items they complete after the assignment is due. [Grading Policy](#)

TITLE	POINTS	SCORE %	FINISHED
Chapter 9 Reading Quiz Question 14	1.00 / 1.00	100%	03/21/18 at 10:22am
Chapter 9 Reading Quiz Question 5	1.00 / 1.00	100%	03/21/18 at 10:24am
Chapter 10 Reading Quiz Question 7	1.00 / 1.00	100%	03/21/18 at 10:25am
Chapter 10 Reading Quiz Question 14	1.00 / 1.00	100%	03/21/18 at 10:31am
Lavandula latifolia i Pyrenæerne	2.00 / 2.00	100%	03/21/18 at 10:40am
Chapter 11 Reading Quiz Question 2	1.00 / 1.00	100%	03/21/18 at 10:45am
Chapter 11 Reading Quiz Question 14	0.00 / 1.00	0.00%	03/21/18 at 10:55am
Chapter 11 Reading Quiz Question 16	1.00 / 1.00	100%	03/21/18 at 11:04am
Chapter 13 Reading Quiz Question 15	0.00 / 1.00	0.00%	03/21/18 at 11:11am
Chapter 13 Reading Quiz Question 19	0.00 / 1.00	0.00%	03/21/18 at 11:13am
Chapter 13 Reading Quiz Question 7	1.00 / 1.00	100%	03/21/18 at 11:14am
Chapter 14 Reading Quiz Question 19	1.00 / 1.00	100%	03/21/18 at 11:19am
Yellow warbler	4.00 / 4.00	100%	03/21/18 at 11:42am
Yellow Warbler og den Lille Træfinke	0.67 / 2.00	33.33%	03/21/18 at 12:07pm
Chapter 17 Reading Quiz Question 18	0.00 / 1.00	0.00%	03/21/18 at 12:10pm
TOTAL ASSIGNMENT GRADE	14.67 / 20.00	73.33%	

Overall student score per question



Student time and score



Student scores in Blackboard

Forberedende	Delprøve 1 (sa)
9.75	14.00
9.67	12.70
10.00	11.00
9.98	16.00
9.97	12.70
-0.00	12.70
9.84	13.00

Feedback

Why feedback?



Students wants it at AU



BAGGRUND

40% af de
STUDERENDE
PÅ AU MENER AT
DE FÅR TILSTRÆKKELIG
FEEDBACK



MADS
KRISTIAN
WARMING

STUDENTERÅDET

Student perception of feedback

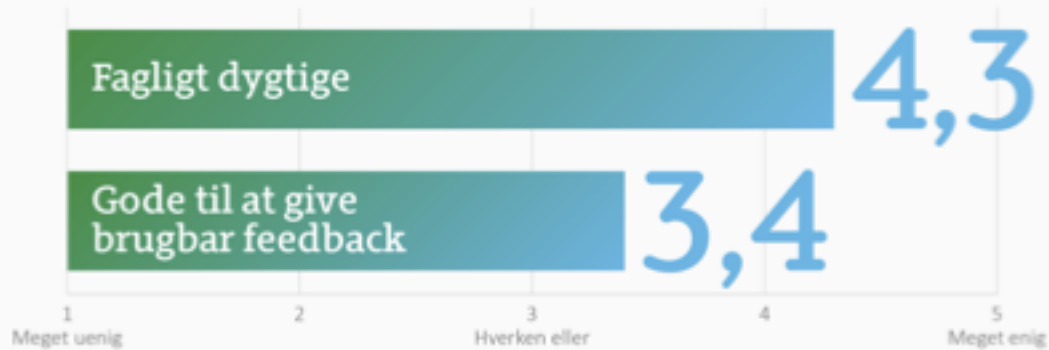
40 % of the students at AU
thinks that they get sufficient
feedback



Uddannelses- ZOOM

Studerende på de videregående uddannelser
Mine undervisere er:

På en skala fra 1-5



Kilde: Uddannelseszoom.dk

Kandidatuddannelse
✕ Agrobiologi
Aarhus Universitet - Aarhus

Mine undervisere er engagerede i undervisningen



Mine undervisere er fagligt dygtige



Mine undervisere er gode til at formidle i undervisningen



Mine undervisere er gode til at give brugbar feedback



Mine undervisere er nemme at komme i kontakt med





2. Feed-up:
Where am I
going?

3. Feed-forward:
How best to get
there?

1. Feedback:
Where I am?

Automated feedback

Content



Activity



Feedback on assignments

Content



Assignment

Aflevering Uge 2 – Indsæt Navn

(Aflevering – uploades til kursus hjemmesiden under uge 2 senest torsdag den 12/11 kl. 23.59 – brug gerne netter som inspiration til jeres svar, hvis det kan hjælpe.)
For Jupiters tre måner Io, Europa og Ganymedes gælder følgende sammenhæng mellem deres baneperioder

$$4P_{Io} = 2P_{Europa} = P_{Ganymedes}$$

Masserne af de tre måner samt Jupiter er

$$M_{Io} = 8.93 \times 10^{22} \text{ kg}$$

$$M_{Europa} = 4.75 \times 10^{22} \text{ kg}$$

$$M_{Ganymedes} = 1.48 \times 10^{23} \text{ kg}$$

$$M_{Jupiter} = 1.90 \times 10^{27} \text{ kg}$$

Den halve storakse af banen af Io omkring Jupiter er bestemt til

$$a_{Io} = 4.22 \times 10^5 \text{ km.}$$

a) Bestem baneperioderne af de tre måner

b) Bestem den halve storakse af banerne af Europa og Ganymedes

15 minutes



Blackboard

Do it yourself

**- Feedback on
Assessments
(assignments and tests)**

Feedback

Learning outcomes

Develop an assessment activity to support student learning

Teaching/assessment activity

Written assignment

Assessment and feedback

Feedback with a rubric (Educator/TA/peers)

Peer feedback with rubric

What is a rubric?

- A type of matrix that provides scaled levels of achievement or understanding for a set of criteria or dimensions of quality for a give performance.
- Can be used as scoring or grading guidance and to provide formative feedback

Allen and Tanner (2006)

What is a Rubric

Poster Score:

Criteria	Level of Achievement		
	<i>High</i>	<i>Medium</i>	<i>Low</i>
Scientific approach Scientific Approach <ul style="list-style-type: none"> • Clarity in stating the problem • Identification of important variables • Appropriateness of methods and materials • Extent to which the conclusion is supported by the data 		X	
		Presentation <ul style="list-style-type: none"> • Effective use of figures and tables in presenting data • Degree of visual appeal • Neatness and organization • Writing skill • Fielding of judges' questions 	

Com

Originality

- Originality of the research topic and design
- Degree of assistance with carrying out the project, and acknowledgment of needed assistance

Allen and Tanner (2006)

What is a Rubric

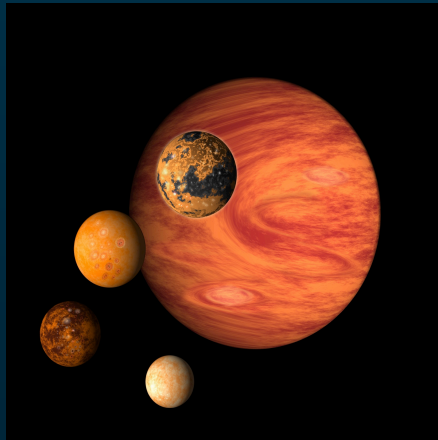
Table 1. A full analytical rubric for assessing student poster presentations that was developed from the scoring checklist (simple rubric) from Figure 1

Criteria	Level of achievement		
	High (3)	Medium (2)	Low (1)
Scientific approach (×1.0)	<ul style="list-style-type: none"> • <u>Purpose:</u> The research question or problem is well-defined and connected to prior knowledge in the chosen area of study. • <u>Design:</u> The experimental design is appropriate to the problem; it is efficient, workable, and repeatable. If appropriate to the design, important variables are identified and contrasted to the standard conditions. The design allows for a sufficient number of comparisons of variables and of tests to provide meaningful data. 	<ul style="list-style-type: none"> • <u>Purpose:</u> The question or problem is defined adequately, but may lack a clear rationale or purpose that stems from prior knowledge. • <u>Design:</u> The design is appropriate to the question or problem, but may fail to identify an important variable or to account for all important aspects of standard conditions. Or, it may lack enough comparisons or tests to obtain data that have a clear meaning. 	<ul style="list-style-type: none"> • <u>Purpose:</u> The study shows evidence of focus within a given topical area, but the search for new knowledge does not seem to be guided by an overlying question; there may be little or no stated connection to prior knowledge. • <u>Design:</u> There may be some evidence of an experimental design, but it may be inappropriate or not used well. The design may fail to account for an important variable or a major aspect of standard conditions. Another experimenter would have difficulty repeating the experiment.

Allen and Tanner (2006)

Feedback on assignments w. rubrics

Content



Written assessment

Afløring Uge 2 – Indsæt Navn

(Afløring – uploades til kursus hjemmesiden under uge 2 senest torsdag den 12/11 kl. 23.59 – brug gerne nettet som inspiration til jeres svar, hvis det kan hjælpe.)
 For Jupiters tre måner Io, Europa og Ganymedes gælder følgende sammenhæng mellem deres baneperioder

$$4P_{Io} = 2P_{Europa} = P_{Ganymedes}$$

Masserne af de tre måner samt Jupiter er

$$M_{Io} = 8.93 \times 10^{22} \text{ kg}$$

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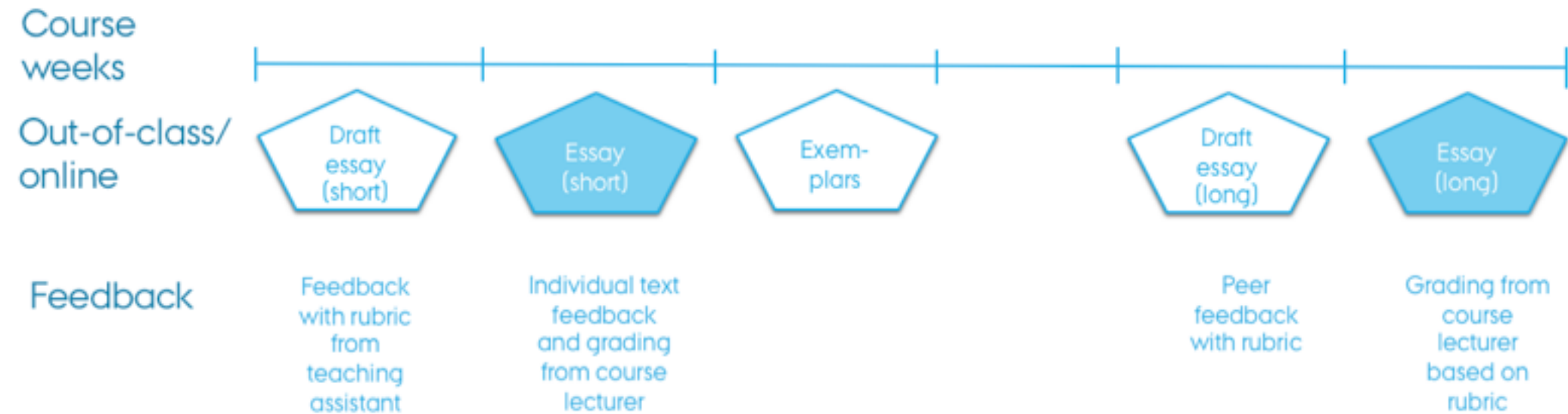
Den halve størrelse af banen af Io omkring Jupiter er bestemt til

$$a_{Io} = 4.22 \times 10^5 \text{ km.}$$

a) Bestem baneperioderne af de tre måner
 b) Bestem den halve størrelse af banerne af Europa og Ganymedes

	Eksemplarisk	Kompetent	Utilstrækkelig
Delspørgsmål a	4 (26.67%) - 5 (33.33%) Korrekt resultat samt kort argumentation.	2 (13.33%) - 3 (20%) Resultat med mindre fejl eller forkert argumentation.	0 (0%) - 1 (6.67%) Forkert resultat.
Delspørgsmål b	4 (26.67%) - 5 (33.33%) Korrekt resultat samt kort argumentation.	2 (13.33%) - 3 (20%) Resultat med mindre fejl eller forkert argumentation.	0 (0%) - 1 (6.67%) Forkert resultat.
Delspørgsmål c	4 (26.67%) - 5 (33.33%) Svar som med fagtermer både gør rede for en eller flere fysiske grunde til at Io er præget af vulkansk aktivitet og sandsynliggør at de to andre måner ikke er det.	2 (13.33%) - 3 (20%) Svar som gør rede for hvorfor Io er præget af vulkansk aktivitet, men som indeholder små misforståelser eller ikke sandsynliggør hvorfor de andre måner ikke er vulkansk aktive.	0 (0%) - 1 (6.67%) Svar som ikke gør rede for hvorfor Io er præget af vulkansk aktivitet eller som er uforståeligt.

Feedback loops



15 minutes



Blackboard

Do it yourself

**- Feedback on
Assessments with rubrics**



Blackboard

Do it yourself

- Peer feedback

Pop up shop



Blackboard