

# Nudging students to graduate on time!

## Siyaphumelela: nudging campaign

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**13 June 2018**

**Make today matter**



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA



# First year progression: the good, bad and ugly

## 3 Year Bachelor's degrees

2013		2014		2015		2016		Grad min time
First Time Entering	% returned	% graduate: 2013 cohort						
4,554	87%	4,546	85%	4,362	88%	4,263	86%	39%

## 4 Year Bachelor's degrees

2013		2014		2015		2016		Grad min time
First Time Entering	% returned	% graduate: 2013 cohort						
3426	87%	3539	87%	3849	88%	3197	86%	39%

Students who complete in minimum time...



Choose the right programme.



Ask for help.



Use resources.



Seek advice about financial aid and financial management.



Manage time.





**THE FINISH**

**LINE IS YOURS**

**FLY@UP**  
**#graduateontime**

**1 MANAGE YOUR TIME**

*Make the most of your time*

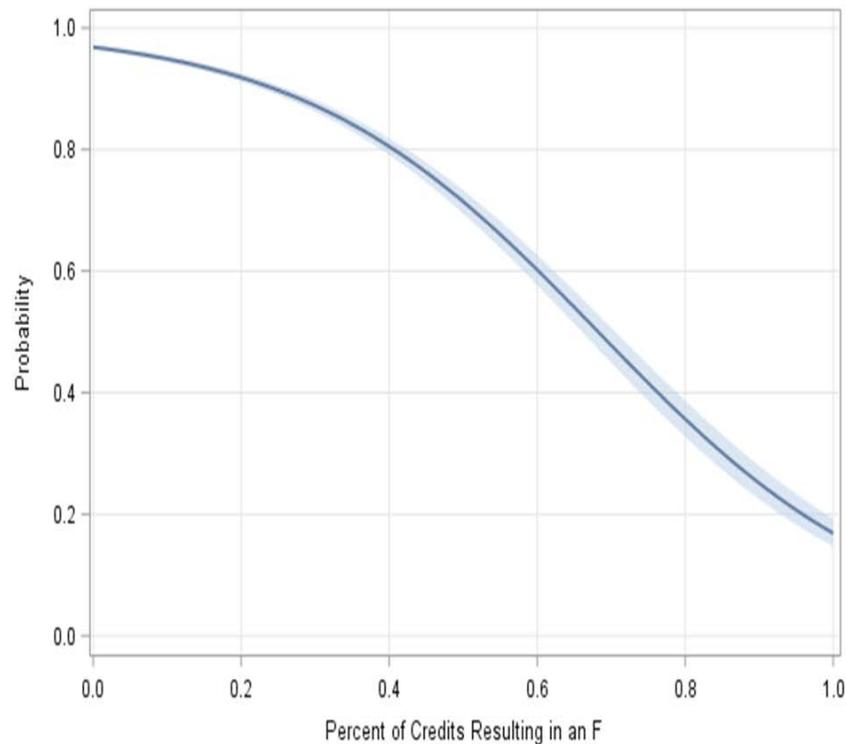
**2 WORK CONSISTENTLY**

**3 KEEP UP A GOOD SEMESTER MARK**

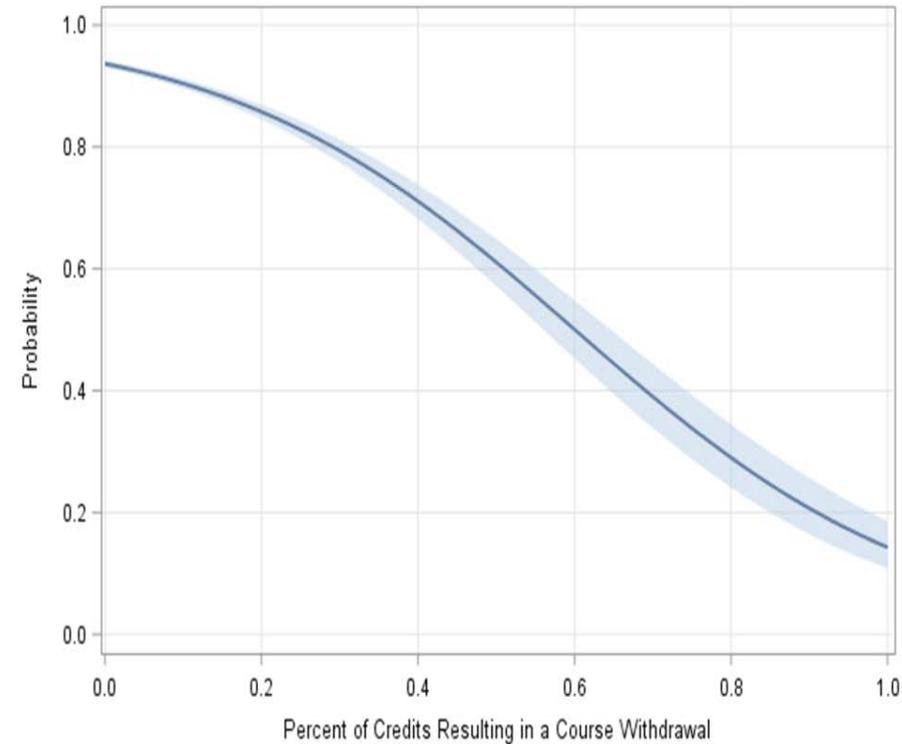
**WWW.U.P.AZ/FLY@UP**



# Credits and progression to second year



**Figure 1. Predicted Probabilities for Retention to a Second Year: Module F's**



**Figure 2. Predicted Probabilities for Retention to a Second Year: Module W's**



# Credits and graduation in four years

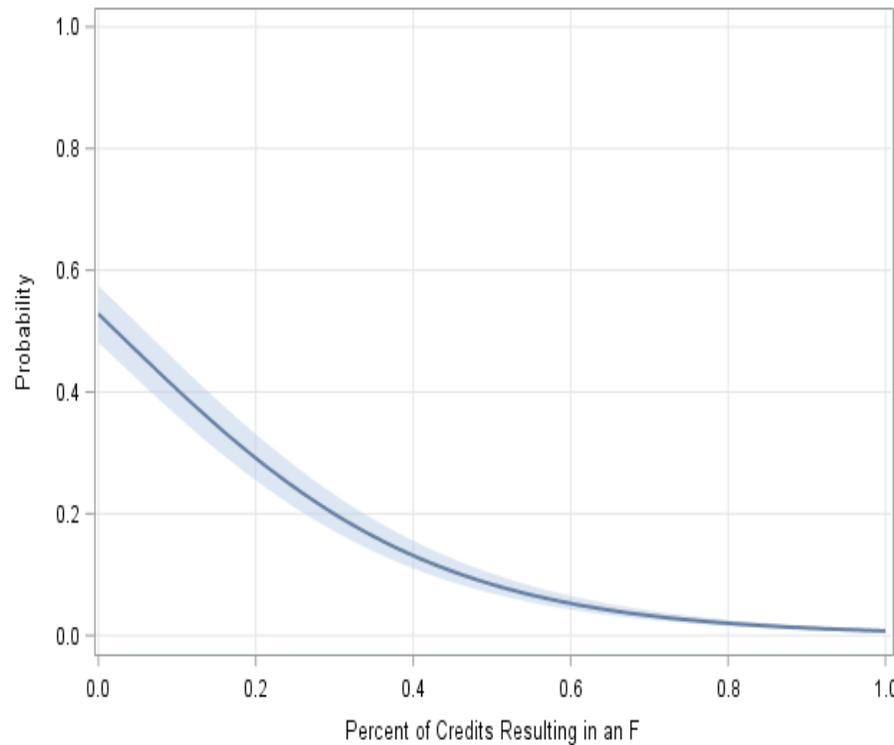


Figure 3. Predicted Probabilities for graduating in four years: Module F's

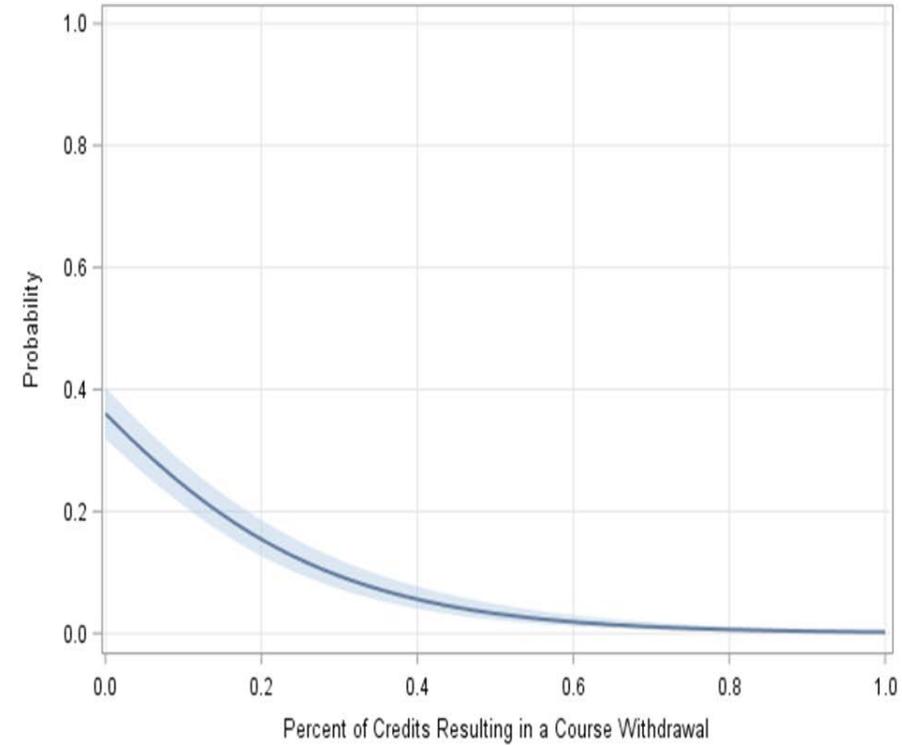


Figure 4. Predicted Probabilities for graduating in four years: Module W's



# Siyaphumelela Nudging campaign



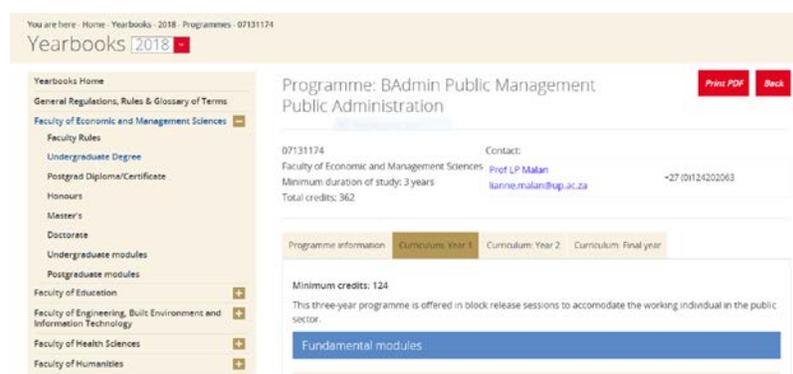
Nudging is an approach that steers people in particular directions, but that also allow them to go their own way (Sustein, 2014).

Nudging is no panacea for all of the complex problems found in higher education (Desouza and Smith, 2016).



# Methodology

- Download course information from SIS: 5, 12, 21 Feb (*and 8 March*)
- Used the total first-year credit load: includes registered credits but excludes dropped credits
- Programme credit load required for the first year was sourced from the faculty yearbooks and captured as a MS Excel lookup table
- *Credit % difference* was calculated:  $\text{sum}((A - B)/B) * 100$
- Credit low risk criteria: *credit % difference* greater than 10%
- Credit high risk criteria: *credit % difference* greater than 20%



The screenshot shows a university website page for 'Yearbooks 2018'. The main content area displays 'Programme: BAdmin Public Management Public Administration'. It includes contact information for Prof LP Malan, a minimum duration of study of 3 years, and a total of 362 credits. A navigation menu on the left lists various faculties and degree levels. A 'Fundamental modules' section is highlighted in blue.



# Methodology

- Focus on 3 and 4 year Bachelor's programmes using 12 February
- Only 'NEW' registered students
- Email sent on 13 February through Qualtrics:
  - 296 emails sent to credit low: 3 year programmes
  - 350 emails sent to credit low: 4 year programmes
  - 70 emails sent to credit high: 3 and 4 year programmes
- Evaluation of the *credit load status* on 12 February: compared with 5 and 21 February downloads (*and 8 March*)
- End of message survey
- Telephonic interviews

# Nudge message

Dear first-year student,

As part of the **FLY@UP** campaign, the University of Pretoria monitors the number of module credits which new first-year students register for. Research has shown that students who register for the optimum number of module credits for a programme, are more likely to graduate in the prescribed minimum time. We observed from the registration data that you might have registered for too many module credits during the registration process. If you are unsure of the module credits required for your programme, you can consult with your Faculty Administration Office to ensure that you have registered for the optimum credits for your programme such that you **graduate on time**.

You can make changes until 19 February 2018 without any financial penalties at your Faculty Administration Office.

# Findings: Low credit load at 12 February

Program duration	5 February	12 February	21 February	Outcome
3 Year	Risk	<i>Risk</i>	Risk	54% students remain at-risk
4 Year	Risk	<i>Risk</i>	Risk	54% students remain at-risk
3 Year	Risk	<i>Risk</i>	No risk	32% students increased their credit load to optimum level
4 Year	Risk	<i>Risk</i>	No risk	30% students increased their credit load to optimum level
3 Year	No risk	<i>Risk</i>	No risk	14% Students with PSCS data irregularity or missing
4 Year	No risk	<i>Risk</i>	No risk	16% Students with PSCS data irregularity or missing

# Findings: Low credit load at 21 February

Program duration	5 February	12 February	21 February	Outcome
3 Year	Risk	No risk	<i>Risk</i>	2 Students with PSCS data irregularity
4 Year	Risk	No risk	<i>Risk</i>	5 Students with PSCS data irregularity
3 Year	No risk	No risk	<i>Risk</i>	48 students decreased their credit load to below optimum level
4 Year	No risk	No risk	<i>Risk</i>	37 students decreased their credit load to below optimum level

# Findings: High credit load at 12 February

Program duration	5 February	12 February	21 February	Outcome
3 Year	Risk	<i>Risk</i>	Risk	75% students remain at-risk
4 Year	Risk	<i>Risk</i>	Risk	48% students remain at-risk
3 Year	Risk	<i>Risk</i>	No risk	0% students decreased their credit load to optimum level
4 Year	Risk	<i>Risk</i>	No risk	39% students decreased their credit load to optimum level
3 Year	No risk	<i>Risk</i>	No risk	25% Students with PSCS data irregularity or missing data
4 Year	No risk	<i>Risk</i>	No risk	11% Students with PSCS data irregularity or missing data

# Survey results

- Received assistance in choosing modules during orientation:
  - 47% received assistance
  - 50% received no assistance
  - 3% were unsure if they received assistance
- Session on the optimal number of credits during orientation:
  - 49% recall the session
  - 30% no recollection of the session
  - 21% were unsure whether the session happened
- Consulted their Faculty Administration office
  - 22% of the students consulted after the nudge



# Telephonic interviews: 3 year Bachelor's programmes

32/79

- 19% of the students consulted their Faculty Administration office after the nudge
- 53% of the students reported that they used the faculty yearbook to confirm their credit load

# Summary: low credit risk

(12 Feb – 8 March)

## 3 Bachelor's

- 145 at-risk on 12 Feb
- 93 at-risk after 21 Feb
- 89 at-risk on 8 March

## 4 Bachelor's

- 147 at-risk on 12 Feb
- 90 at-risk after 21 Feb
- 79 at-risk on 8 March

- 56 fewer students with low credit load (12 Feb-8 March)
- 44 students decreased their credit load (8 March)
- 8% real *difference* at 8 March

- 68 fewer students with low credit (12 Feb-8 March)
- 38 students decreased their credit load (8 March)
- 20% real *difference* at 8 March



# Summary: survey and interviews

## Survey results:

- 40% received assistance with their modules during the orientation
- 49% recall a discussion on the “optimal credit load” during the orientation

## Survey results:

- 22% consulted Faculty Administration

## Interview results:

- 19% consulted Faculty Administration



# Conclusion and next steps

- ***Nudging is no panacea*** for all of the complex problems found in higher education (Desouza and Smith, 2016)
- Nudges must be included as ***part of an existing intervention and data analytics strategy*** to be most effective
- Implementation of pre-registration academic advising during Orientation
- Nudging campaign functions as a catch-net for students who did not attend the orientation or had made mistakes during registration or made course changes
- The next steps:
  - First semester results will be used to calculate the **credit-pass ratio**
  - Students will be classified in **performance bands**
  - **Targeted nudges** will be directed to these groups for academic development

THANK YOU.

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