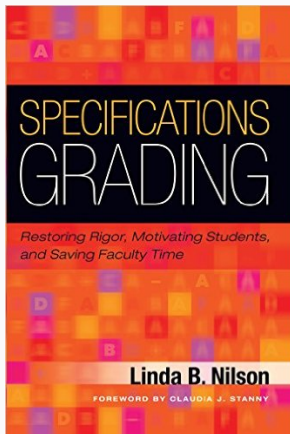
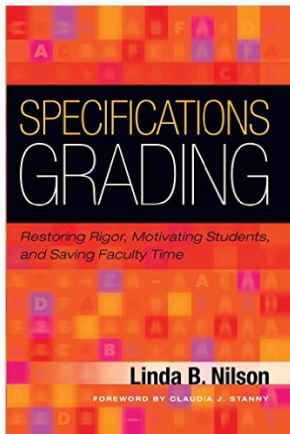


SPECS GRADING IN A LINEAR ALGEBRA COURSE

Mike Janssen
Dordt College
JMM 2016, Seattle WA
January 7, 2016

INTRODUCTION





Robert Talbert's blog: <http://rtalbert.org/blog/>

- Evaluate a *body* of work on a Pass/Fail basis according to whether or not it meets a list of specifications.

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- Provide rich feedback and limited opportunities to revise non-passing work to encourage growth.
- Give students choice: compute a final grade based on the amount/quality of passed work.

MY COURSE

- 11 engineering majors
- 4 math/math ed majors
- 3 actuarial science majors
- 2 CS majors
- 1 chemistry major

TYPES OF ASSESSMENTS

Level 1:

- Computational/definition checks

LEARNING MODULES: THEMATIC HOMEWORK SETS (9)

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- Assessed at Pass/Progressing/Repeat (thanks to Robert Talbert!)

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- Free revision if assessed at Progressing; limited revision if assessed at Repeat

By semester's end, I was somewhat dissatisfied with these assignments.

Modified mastery-based testing:

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- Each assessment contained a collection of 2–3 problems corresponding to level 1 of a LM

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I was fairly happy with how this worked.

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Independent application topics (e.g., traffic flow, Markov chains, Cramer's rule, PageRank)

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These assignments fit the course/grading system really well.

FUTURE PLANS

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- Daily work
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- Exam problems (two levels)
- A written reflection (on, e.g., a reading, the work in the module, the module's content)

Students will also be asked to “re-certify” their mastery of some earlier timed assessments at the end of the semester.

THANKS!

mike.janssen@dordt.edu

	D	C	B	A	Notes
Level 1 Learning Modules	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
Level 2 Learning Modules			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Timed Learning Modules	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Investigations	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	