Mastery grading: Respecting student's values through autonomy

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Industrial and Manufacturing Engineering
Produced to specifications

- Independent
- Profit oriented
- Competitive
Individualized Learning

Variety of outcomes
Innovative
Social Good
Collaborative

University
University

Individualized Learning

Mastery Grading

Motivation theory

Learning theory

Example in a course

Result
Motivation Theory
Self-Determination Theory
(Deci and Ryan, Popularized by Daniel Pink)

RSA Animate - Drive: The surprising truth about what motivates us
http://www.youtube.com/watch?v=u6XAPnuFjJc
Learning Theory

Relearning is easier with initial mastery

Learning Objectives for the course
67.4% => “C-”
Mastery (90%) of most important LO’s => "C"
Mastery (90%) of most important LO’s => “C”

Learn Something new
1 focus area = “B”
2 focus areas = “A”
Autonomy

BITCOIN: CRYPTO CURRENCY

DIFFERENT TYPES OF QUALITY INSPECTIONS IN AGRICULTURE
Nuts and bolts

• Students can retake exams as many times as necessary to achieve mastery grade (more test creation)
• Students need all the resources available to relearn topics (Flipped classroom is helpful, Polylearn)
• Extension learning is reviewed by instructor and can be resubmitted

Observations

• Remove me from power position
• Must hand over learning to student accept that they may not put effort into your class
• Low grade on a exam leads to continued desire to learn
• Some students prefer a “C”
I feel like I took advantage of the opportunities offered by the course and by Liz, but some (maybe most) students did not. It takes a real "go-getter" to be able to control one's own learning and, in my experience, a great amount of students are not used to that. My openness for other ideas really bloomed in this class, and I am very excited about 430 with Liz!

I thoroughly enjoyed the grading scheme, it gave me a reachable goal from the beginning of the course and left the responsibility to me whether I wanted to earn an A-F.

I learned more about myself and how I would be in the "real world" on staying current with topics, etc.

I really enjoyed the grading structure. I loved getting to chose the subjects I would do reports on, because it didn't narrow my possibilities and I was able to tap into my interests instead of conforming my interests to a specific assigned task. I appreciated the retakes for the midterms because I'm not a very good test-taker, so having the ability to take a test two times took a lot of the anxiety off my shoulders about not passing the first time. I really feel empowered in my education as a result of this class because I have finally got an A in a meaningful course, and I no longer feel like I'm wasting my time and efforts by getting B's and C's in classes that are "important." I really love the way Liz helps educate us.

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