

Teaching and Learning Physics --- Final Class Survey

The content of this class: (scale of 0-4)

(C+) Physics: Useful*2 somewhat useful*4 neutral*2 not so useful*3 hateful*0 AVE=2.45/4

(A) Edu. Readings: Useful*8 somewhat useful*3 neutral*0 not so useful*0 hateful*0 Ave=3.73

(B-) Fieldwork Useful*3 somewhat useful*4 neutral*1 not so useful*3 hateful*0 Ave=2.64

<u>Homework (usefulness)</u>	<u>Useful</u>	<u>neutral</u>	<u>hateful</u>		
(A+) Reading summary/questions:	4*10	3*1	2*0	1*0	0*0 (ave=3.91)
(C+) Physics Problem analysis:	4*1	3*6	2*1	1*3	0*0 (ave=2.45)
(C+) Fieldnotes	4*2	3*3	2*4	1*1	0*1 (ave=2.36)

Structure of the Class . The amount of work for this class is

i) Too little*0 a little too little*0 just right *4.5 a little too much *6 way too much *.5
(ave= 1.36/4)

ii) Less than others*1 a little less*1 the same *2 more than others *4.5 way more*2.5
(ave=1.41/4)

Specifics: please rate 4 – excellent - 2 neutral - 0 terrible

Topics:

(B-) 4,4,4,3,3,2,2,2,1,-- Introduction / TIMSS / State of Affairs (ave=2.5/4)

(B+) 4,4,4,4,4,4,4,3,3,2,2 Overview of PER (Van Heuvelen /McDermott) (3.36)

(B+) 4,4,4,4,4,4,3,3,2,2,2 Phys Ed Reforms (McDermott Tutorials & Mazur Peer Instruct) (3.27)

(B) 4,4,4,4,4,4,3,3,2,2,0 Constructivism (Redish, Posner) and Constructionism (Papert) (3.09)

(B) 4,4,4,4,4,3,3,2,2,2,2 Knowledge in pieces (diSessa, Redish) (3.09)

(B-) 4,3,3,3,3,3,3,2,2,2,0 Comparing Constructivist approaches (Elby) (2.55)

(C+) 4,3,3,3,3,3,2,2,2,0.- Situated Cognition (Brown). (2.27)

(B+) 4,4,4,4,4,4,3,3,3,3,2,2 Hidden Curriculum /Epistemology (Redish / Hammer) (3.45)

(B) 4,4,4,4,3,3,3,3,2,2,2 Assessment (Hake, Redish) (3.09)

(B+) 4,4,4, 3,3,3,3,3,3,3,2 Problem Solving (Finney / Mayer) (3.18)

(B+) 4,4,4,4,4,3,3,3,3,2,1.5 Gender / Race (Steele / Seibinger) (3.23)

(B-) 4,4,4,3,3,3,3,2,2,1.5,0 Social / Political / Econ (Mahajan/ Fish / Barlett) (2.68)

(B-) 4,4,4,4,3,3,3,3,1,0,0 Sociocultural (Sfard, Greeno, Otero) (2.64)

(B+) 4,4,4,4,4,3,3,3,2,5,2,-History / Progressivism: (Dewey / Benezet) (3.35)

Homework

(C+) 4,4,4,3,3,2,5, 2,1,1,0,0 Examining chapter problems (pre-assigned) (Ave=2.23/4)

(C+) 4,4,4,3,3,3,2,5,2,1,0,0 Designing homework problems (2.41)

(D+) 3,2,2,2,2,2,1,1,1,0,0 Summary of physics chapter (1.45)

(B/B-) 4,4,4,4,4,3,2,2,2,2,0 Summary of readings (2.82)

(A) 4,4,4,4,4,4,4,3,3,2 Questions for readings. (3.64)

(B+) 4,4,4,4,4,4,3,3,3,2,2,2 Turning in a project proposal (3.36)

(B) 4,4,4,4,3,3,3,3,2,2,2,2 Project Outline (3.09)

(B) 4,4,4,4,3,3,3,3,2,2,2,2 Project Draft(s) (3.09)

(B) 4,4,4,3,3,3,3,3,2,2,- Final Project (3.1)

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Classroom approaches

	<u>Useful</u>		<u>neutral</u>		<u>hateful</u>	
(B+) students (ourselves) lead classes:	4*7	3*2	2*0.5	1*1.5	0*0	Ave=3.32/4)
(B+) visitors (Valerie, Noah) lead classes:	4*5	3*4.5	2*1.5	1*1	0*0	Ave =3.32
(B+) Breaking into pairs/small groups:	4*7	3*3	2*1	1*0	0*0	Ave=3.27

Feedback

	<u>Excellent</u>		<u>adequate</u>		<u>not enough</u>	
(A+) I get enough feedback:	4*11	(Ave = 4.0)				
(A+) Accessibility of instructor	4*10	3*1	(Ave = 3.91)			
(A-) Opportunity to participate in class:	4*6	3*5	(Ave=3.55)			
(A) How useful to me is this class:	extremely*10	somewhat*1		not at all	Ave=3.82	
(A-/B+) How enjoyable is this class:	extremely*8	somewhat*3		not at all	Ave=3.45	
(A) How much did you learn:	a great deal*10	something*1		nothing at all	Ave=3.82	
(C+) How much ownership did you have: (ie. how much say did you have on what happened):	a great deal *3.5	something *6.5		none *1	(Ave=2.45)	
(A-) I recommend this course to others	enthusiastically*8.5	maybe*2.5		never*0	(Ave=3.55)	
(A+) The department should offers this course in the future:	they must*10	maybe		definitely not	(Ave=4.0, 1 blank)	
Are you considering becoming a teacher / educator:						
Yes I'm already enrolled*2	very likely*6	possibly *1	probably not	never	(2 blank)	

Things I would like to definitely remain:

readings*3, + "readings at the end" (spoke to me more)
Good to relate readings to class practice
summary/questions*2 (continue summary through semester)
posting on WebCT
Final project (work, but fun)
Everything
Field work (but sometimes too time consuming)
Atmosphere of discussion
This class for grad students
Diversity issues
Topics
Feedback/attention
Group work was great
Malleability of course/control students have
lack of emphasis on grades
workload

Things I would like to change

physics content not always useful*2.

Few weeks of prep time before physics content assignments
summary before readings would be nice
make it 2 semesters
Add review in middle
More classroom/curric activities
Less workload (hw was interesting, relevant, nontrivial, just too much)
1 time/week
More time *2
Individualized work (more ownership of assignments, let us choose the content)*2
More small group work
Dedicate a class to research techniques
Try to make class more...resolved... at the end of the course ("I feel confused")

Other comments: (such as favorite and least favorite parts of class).

Show us what classmates think [here you are!]
Some articles confusing - need more background
readings at end more difficult
Leading class was fun
I think I'll enjoy creating a concept map of the course
"I learned a great deal"
"I would like to take this course again"
"Good job. You're a very dedicated teacher"
"Thanks Steve! You rock!"