Teaching and Learning Physics --- Final Class Survey

The content of this class:
Physics: Useful 7/18 somewhat useful 8/18 neutral 2/18 not so useful 1/18 hateful
Edu. Readings: Useful 17/18 somewhat useful 1/18 neutral not so useful hateful
Fieldwork Useful 16/18 somewhat useful 2/18 neutral not so useful hateful

Homework (usefulness) Useful neutral hateful
Reading summary: 5 (10/16) 4 (3/16) 3 (3/16) 2 1
Content Problems (HRW) analysis: 5 (5/16) 4 (7/16) 3 (4/16) 2 1
Fieldnotes 5 (10/16) 4 (4/16) 3 (1/16) 2 1

Structure of the Class
The amount of work for this class is
i) Too little a little too little just right a little too much way too much
(11/17) (6/17)
ii) Less than others a little less the same more than others way more
(1/14) (4/14) (8/14) (1/14)

Class Sessions on / readings about:

<table>
<thead>
<tr>
<th>AVE</th>
<th>Specifications: please rate 5 – excellent - 3 neutral - 1 terrible</th>
<th># Students voting for:</th>
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</thead>
<tbody>
<tr>
<td>4.3 Introduction / TIMSS / State of Affairs</td>
<td>7 6 3</td>
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<tr>
<td>4.3 Overview of Physics Education Research (Van Heuvelen /McDermott)</td>
<td>7 7 2</td>
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<td>4.3 Phys Ed Reforms (McDermott Tutorials &amp; Mazur Peer Instruction)</td>
<td>7 7 2</td>
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<td>3.9 Constructivism (Redish, Posner) and Constructionism (Papert)</td>
<td>7 4 5 1</td>
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<td>4.5 Knowledge in pieces (diSessa, Redish)</td>
<td>11 7 1</td>
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<td>3.5 Comparing Constructivist approaches (Elby)</td>
<td>3 6 7 1 1</td>
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<td>4.4 Situated Cognition (Brown).</td>
<td>10 6 2</td>
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<td>4.6 Hidden Curriculum /Epistemology (Redish / Hammer)</td>
<td>12 4 2</td>
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<td>4.2 Assessment (Redish)</td>
<td>8 6 4</td>
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<td>4.2 Problem Solving (Finney / Mayer)</td>
<td>5 11 1</td>
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<td>4.5 Gender / Race (Steele / Sheibinger)</td>
<td>13 1 4</td>
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<td>4.2 History / Progressivism: (Dewey / Benezet)</td>
<td>7 8 3</td>
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<tr>
<td>4.6 Social / Political / Econ (Mahajan/ Fish / Barlett)</td>
<td>13 3 2</td>
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<tr>
<td>4.1 Technology (Perkins / Pollock)</td>
<td>7 6 5</td>
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<tr>
<td>4.4 Context (Finkelstein / Wilczek</td>
<td>10 6 2</td>
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Homework Approaches:

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<thead>
<tr>
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<tbody>
<tr>
<td>4.1 Examining chapter problems (pre-assigned)</td>
<td>6 7 3 1</td>
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<tr>
<td>3.8 Selecting chapter problems for others</td>
<td>5 4 6 1</td>
<td></td>
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<tr>
<td>4.2 Designing homework problems</td>
<td>7 7 4</td>
<td></td>
</tr>
<tr>
<td>4.5 Order of Magnitude Problems</td>
<td>11 5 2</td>
<td></td>
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<tr>
<td>3.4 Summary of physics chapter</td>
<td>3 4 6 4</td>
<td></td>
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<tr>
<td>3.8 Summary of readings</td>
<td>7 4 3 2 1</td>
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<tr>
<td>4.6 Questions for readings.</td>
<td>12 5 1</td>
<td></td>
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<td>4.8 Turning in a project proposal</td>
<td>13 2 1</td>
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<tr>
<td>4.6 Project Outline</td>
<td>13 3 2</td>
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<tr>
<td>4.6 Project Draft(s)</td>
<td>12 4 1</td>
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<tr>
<td>4.9 Final Project</td>
<td>14 2</td>
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I get enough feedback: 5 (15/18) 4 (3/18) 3 2 1
Accessibility of instructor: 5 (16/18) 4 (2/18) 3 2 1
Opportunity to participate in class: 5 (15/18) 4 (3/18) 3 2 1
How useful to me is this class: extremely (16/18) somewhat (2/18) not at all
How enjoyable is this class: extremely (17/18) somewhat (1/18) not at all
How much did you learn: a great deal (17/18) something (1/18) nothing at all
How much ownership did you have: (ie. how much say did you have on what happened): a great deal (12/16) something (4/16) none
I recommend this course to others: enthusiastically (16/16) maybe never
The department should offer this course in the future: they must (16/16) maybe definitely not
Are you considering becoming a teacher / educator:
Yes I’m already enrolled very likely possibly, probably not never 4/18 11/18 3/18

Things I would like to definitely remain:
Discussion (x4)
Course readings, broad selection (x7)
Fieldwork is huge (how many courses actually let you do something (x7)
Final project (x4)
Chapter summaries and homework problems (e.g. CAPA) (x3)
Readings determined by the students (x3)
Balance of student led / instructor led
Final Presentations (x3)
Controversial readings (x3)
Creating physics problems
Engaging the students
Atmosphere (4)
Wit
Everything - Great balance between review of research and practical application.

Things I would like to change
Less emphasis on mirroring a physics class. It’s important but less than the readings and discussion. (x2)
Chapter summaries (x4)
CAPA (x2)
More class discussions
Make the class longer
Too many articles to discuss all (x2)
Student presentations of articles. (x2)
Allow more student presentations of articles.
The amount of work for the course [in the beginning] (x3)
Too much theory – level was too high for a new group at times.
Number of students
Summary of readings before they started
More explicit involvement of Tues readings in Thurs sessions.
Attempts at political correctness
More on the social / political

Other comments: (such as favorite and least favorite parts of class).
Course was excellent
Amazing.
Great course – one of the best I’ve taken
Working on the project was the most fun and interesting… So cool to see what others were doing.
The culture of this class was great. Please keep that same level of comfort that we all had
Tell Steve [Pollock] to carry on the torch…
I really liked the pieces on gender and race – interesting topic that is not often discussed [x2]
I definitely enjoyed class and got a lot out of it. Make the class longer.
Obviously I loved the class. I think it fills a huge hold in the current graduate curriculum.
All around awesome.