Yale College Council
Exam Cap Proposal

January 2013
Introduction & Survey Demographics

In spring of 2013, students reported that some Yale College courses had final examinations worth more than 50% of students’ overall grades. Many students find these exams very stressful, and report that they negatively impact their academic performance. YCC administered a survey on various academic issues to 1,602 freshmen, sophomores, juniors, and seniors, between November 26 and December 8,¹ and has compiled its findings on the subject of final examinations – excluding final papers – into this report. Respondents to the survey were evenly distributed by year and field of study.

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2014</td>
<td>324</td>
<td>20%</td>
</tr>
<tr>
<td>2</td>
<td>2015</td>
<td>410</td>
<td>26%</td>
</tr>
<tr>
<td>3</td>
<td>2016</td>
<td>410</td>
<td>26%</td>
</tr>
<tr>
<td>4</td>
<td>2017</td>
<td>458</td>
<td>29%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1,602</td>
<td>100%</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Humanities</td>
<td>567</td>
<td>37%</td>
</tr>
<tr>
<td>2</td>
<td>STEM</td>
<td>649</td>
<td>43%</td>
</tr>
<tr>
<td>3</td>
<td>Social Sciences</td>
<td>656</td>
<td>43%</td>
</tr>
</tbody>
</table>

Current Situation

A substantial portion of the student body – and potentially over half of students by the time they graduate Yale – have taken courses in which the final exam (excluding term papers) is 50% or more of the overall grade.

- 36% of students (505/1403) have taken or are taking at least one course in which the

¹ Survey questions developed with input from the Office of Institutional Research.
final exam is 50% or more of the overall grade.

- 54.5% of seniors (161/295) have taken or are taking at least one course in which the final exam is 50% or more of the overall grade.

These classes are distributed throughout the majors at Yale, but are concentrated in STEM courses and economics, particularly in introductory courses. As reported by students in the survey, there are some 50 or 60 courses known to have exams that are worth 50% or more of the grade (see Appendix 1, although this list is not exhaustive).

**Harm to Students**

To assign so much value to a three-hour test may not be reflective of how well a student actually mastered the coursework. There is added stress associated with a final that is worth 50% of the overall grade. Students who do not manage stress and pressure well may do worse on the final than they would otherwise, which has a real and sustained academic impact. Adding stress for students, especially during finals week, is also harmful physically and mentally. The student opinion from the survey data shows that the stress generated from finals being worth 50% or more of the overall grade is real and does hurt students.

Q: In general, classes in which final exams are worth 50% or more of the overall grade are more stressful than those that spread the work more evenly throughout the semester.
• 79% of students believe 50% exams add stress compared to spreading work out over the whole semester. Only 7% disagree.

Peer Institution Policies

Princeton and Harvard have not officially adopted policies on exam caps. However, the Princeton undergraduate council had in past years raised the issue, and the Harvard student government has expressed interest in the issue.

Student Opinion

Student responses to questions on YCC’s Fall Academic Survey demonstrate that 70-80% of students prefer grade structures that spread work more evenly throughout the semester to structures that feature exams worth 50% of the grade. While 27% of students indicated their answers depended on the academic discipline, teacher, or other factor, students did not agree on which disciplines should have final exams worth 50% of the grade.

Q: Do you prefer classes in which final exams are worth 50% or more of the overall grade or classes that spread work evenly throughout the semester?
Q: I would prefer that the final exam be worth 50% of my grade in…

(A cross-sectional analysis by academic discipline of the results of the question, “I would prefer that the final exam be worth 50% of my grade in…”)

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some Social Sciences courses</td>
<td>122</td>
<td>9%</td>
</tr>
<tr>
<td>Some STEM courses</td>
<td>114</td>
<td>9%</td>
</tr>
<tr>
<td>All courses</td>
<td>24</td>
<td>2%</td>
</tr>
<tr>
<td>Some Humanities courses</td>
<td>132</td>
<td>10%</td>
</tr>
<tr>
<td>No courses</td>
<td>1,020</td>
<td>78%</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>2%</td>
</tr>
</tbody>
</table>
From the survey results, the vast majority of students find finals that are worth 50% or more of their overall grade to be stressful and would prefer to have the workload spread more evenly throughout the semester. Yet, there is still a small section of the student population who are partial to 50% finals. The main concern of these students is that over-weighted finals can benefit them if they do well and the professor chooses to have the final be worth more to compensate for a less stellar performance on a midterm exam. This is the case in some of the introductory lecture courses, as well as some advanced STEM courses. Student comments on this subject include the following:

- “I generally don’t like the 50% final exam weight, but if I have a low midterm score but a very high final exam score, I would still like my final exam to be weighted more (this is currently a policy in many STEM classes).”

- “I have had some science courses that gave the option of having the final exam worth a certain percentage of the grade OR be your final grade. If mastery of the material is the goal, it does help students who might have done poorly on a previous midterm.”

- “Only if I did remarkably well on the final (policy with intro calc and physics courses)”

Therefore, keeping this interest in mind, it would be reasonable to recommend that in addition to the final exam cap policy, an exception should be made in cases where professors are willing to weigh the finals more for students who do well on the final (in these cases, final examinations could be worth more than 50% for these students).
Recommendations

The administration should implement one of the following mutually exclusive policy changes, listed below in order of preference:

1. Add to the Faculty Handbook the provision: “No final examination shall be worth 50% or more of a student’s overall grade in a course unless it will improve that student’s grade.”

2. Add to the Faculty Handbook the provision: “No final examination should be worth 50% or more of a student’s overall grade in a course unless it will improve that student’s grade.”

Contact Information

This project is managed by YCC Representative Mason Ji (MC ’16) and is supervised by YCC Academics Chair David Lawrence (CC ‘15). They can be contacted at mason.ji@yale.edu and david.r.lawrence@yale.edu.

Appendix 1: Student Responses to “Please list the classes you have taken in which the final exam was 50% or more of the overall grade.”

Full list of student responses are on the next page
Europe in the age of total war, misc plsc classes
Dilemmas of Nuclear Age
Biomaterial Tissue Interactions
CHEM 220 - missed an exam because of illness and the final ended up being worth both the final and that midterm.
Race and Class in Comparative Perspective
Math 225
History of epidemics
It was a graduate seminar
Intro Micro and Intro Macro
Intro micro economics
Math 115, Math 120
General Equilibrium Theory, Econ 135
Military History of the West since 1500, MATH 112
South Asian Social Worlds, Intro Macro,
Military History of the West
PHYS 260, PHYS 261
Introduction to Sociocultural Anthropology
Math 120, Math 222, Math 244, Math 246 (I’m not 100% sure about Math 120 and 222)
Math 120
HIST 231
Econ 115
MMES 184
HSAR 266: Introduction to Islamic Architecture
ECON125
Bio 102
PHYS 401
econ 108
Introductory Microeconomics
Senior Essay
EENG 310
PLSC 118
Neurobiology
MCDB 320, MATH 225
Micro Econ? Intro linguistics?
CSTD something, PLSC something, why do you assume this is bad? I love finals that are like 80% of my grade.
Dilemmas
Psychology and the Law, the Technological World, Crime and Punishment (?), probably others but can’t remember
Intro Micro
PHYS260
Introduction to Bioethics
can't remember
Military History of the West since 1500
Complex Analysis
National Security Law (GLBL 375)
MATH 350
Balance of Power
ASTR 220, G&G 100, MATH 120, SOCY 147, SPAN (Borges: Literature and Power)
Phys 170
I think physics 260/261, but I could be wrong
MATH 120
Math 222 linear algebra
Moral foundations of politics
Macroeconomic Theory, Linear Algebra, maybe some others that I don't remember
Math 350
AFAM 343
Biomaterial Tissue Interactions
Behavioral and Institutional Economics, MATH 120
Introductory Microeconomics
Nuclear dilemmas
ECON 115: Introductory Microeconomics
Military History of the West, 1500-present
Physics 260, Physics 261, Physics 401, Physics 402
PHYS 260
ECON 115; ECON 116
Fossil Fuels and Energy Transitions
HIST 221 (60%)
Treasures of Yale
Physics 260 (I believe, I might have to check, though)
Introduction to the Middle East
Bioethics and Law
Russian History
Dilemmas of the nuclear age; math 115 (only >50% if helps your grade; otherwise, 40%)
Linear Algebra with Matrix Theory (MATH 225), General Equilibrium Theory (ECON 350), Advanced Organic Chem (CHEM 418)
MATH 225, PHYS 260
CSSY 290
Introduction to the Middle East
Econ 125, Physics 260
MATH 225
Physics 260
Can't remember--pretty sure history seminars generally have final papers worth over 50% of the grade
MATH 222
Most STEM classes.
ECON 115, ECON 116, MATH 115, MATH 120, ENGL 200, HSAR 115,
I don’t remember all of them.

<table>
<thead>
<tr>
<th>Moral Foundations of Politics</th>
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<tr>
<td>ECON 115</td>
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<tr>
<td>STAT 241 (Probability Theory), STAT 242 (Theory of Statistics)</td>
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<tr>
<td>GSAS...it was a qual. . .</td>
</tr>
<tr>
<td>in effect: econ 169, econ 135</td>
</tr>
<tr>
<td>Econ 115, 116</td>
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<tr>
<td>Bio</td>
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<tr>
<td>Lobbying and the Law - a residential college seminar</td>
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<tr>
<td>Math 246, ECON 125/126</td>
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<tr>
<td>Physics</td>
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<tr>
<td>Linear Algebra, Intermediate Microeconomics, Intro Macro,</td>
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<tr>
<td>ECON 125</td>
</tr>
<tr>
<td>Microeconomic Theory (Econ 121)</td>
</tr>
<tr>
<td>War in Germany 1618-2010; Macroeconomic Theory, Microeconomic Theory, a few more I’m sure</td>
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<tr>
<td>CHEM 114 and CHEM 115</td>
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<tr>
<td>physics 260</td>
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