### How much is being shared?

Attempt to track and measure the change in volume of uploaded course material.

‘Google Alerts’ vs. Course Villain vs. CourseHero.com (native search)

ECON210; MATH111; MGMT221

### Measured change in number of artifacts

<table>
<thead>
<tr>
<th>Course</th>
<th>C.H.</th>
<th>G.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON210</td>
<td>+8,357</td>
<td>6</td>
</tr>
<tr>
<td>MATH111</td>
<td>+2,794</td>
<td>0</td>
</tr>
<tr>
<td>MGMT221</td>
<td>+1,728</td>
<td>1</td>
</tr>
</tbody>
</table>

**Course Villain:**

- 55 reports / 836 “matches”
- 360 unique documents
- 20 matching university content
- 17 matching queries
- 16 MATH111 / 1 ECON210

*Lots of noise, repeat ‘hits,’ and removed content*

### Conclusions:

- Clearly a great deal of content being shared, but it is very difficult to accurately track changes in volume of pace.
- Scope of the space and its activity will remain concealed without better access.

### What is being shared?

Attempt to track and differentiate kinds of uploaded course materials:

- What kind of material is being shared from/within a single course?
- Is there a difference in shared content between courses?

**Compromise Metric** *

<table>
<thead>
<tr>
<th>Course</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEAX 201</td>
<td>44%</td>
</tr>
<tr>
<td>ENGL 123</td>
<td>31%</td>
</tr>
<tr>
<td>RSCH 202</td>
<td>56%</td>
</tr>
<tr>
<td>MATH 111</td>
<td>71%</td>
</tr>
<tr>
<td>UNIV 101</td>
<td>0%</td>
</tr>
<tr>
<td>PYSC 102</td>
<td>46%</td>
</tr>
</tbody>
</table>

* (Medium + High value assignments) / total number of artifacts uploaded

### Research implications

Plagiarism is a deeply nuanced issue: Cultural / Disciplinary / Institutional. And how happening in new, hidden spaces, on incredible scales. Spaces like CourseHero.com don’t simply represent problematic to be solved – they also represent opportunities to investigate how and to what degree students are engaging in ethically grey behavior, in real-time.

### 168,627 ERAU artifacts

**105,641 ERAU WW artifacts**

(as of 3/1/2020)

(student affinity\(^2,3\) + networked information economy\(^1,4\))

\[ \text{structural barriers (access + DCMA claim workflow)} \]

= Challenger-deep of academically dishonest behavior

### Course Villain

Search and report tool leveraging CourseHero.com API (application programming interface) metadata.

Searches CourseHero.com twice, daily. Custom queries. Generates reports with 20 most recently uploaded query matches.

Facilitates the review of flagged documents, and expedites DCMA claim workflow.