

A photograph of the University of Louisville campus. In the background is a large, red-brick building with a prominent white portico and a dome. The foreground features a large, circular stone seal of the University of Louisville, which includes the text 'UNIVERSITY OF LOUISVILLE' and '1798'. A brick wall with the word 'UNIVERSITY' is visible in the middle ground. The sky is blue with light clouds.

UNIVERSITY OF  
**LOUISVILLE**

# Using Blue Text Analytics to Measure Student Sentiment – Priority Grade Access Implementation

**Bob Goldstein, Vice Provost**  
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# Historical Response Rate Trend by Unit (Fall Semesters)

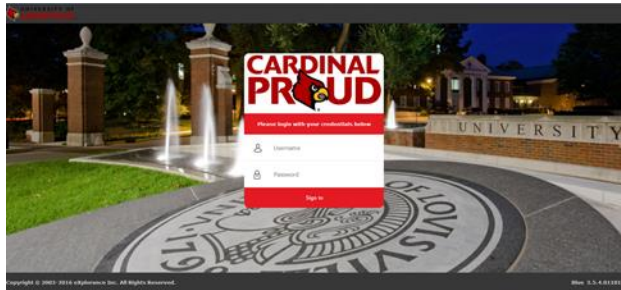
Unit	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015
College of Arts and Sciences	55%	45%	51%	42%	47%	43%
College of Business	59%	53%	47%	40%	43%	45%
College of Education and Human Development	51%	49%	51%	52%	55%	51%
J.B. Speed School of Engineering	65%	59%	63%	51%	52%	51%
School of Nursing	36%	59%	48%	45%	41%	45%
School of Public Health and Information Sciences	78%	66%	59%	63%	55%	48%
School of Dentistry	38%	45%	24%	27%	29%	25%
School of Law	61%	52%	48%	53%	50%	65%
School of Music	53%	42%	40%	31%	36%	35%
School of Social Work	76%	74%	69%	69%	59%	66%
Overall university response rate (unweighted)	54.9%	48.6%	50.3%	52.0%	52.5%	55.1%

# Historical Efforts to Increase Response Rates

- ✓ **Student awareness**
- ✓ **Faculty engagement**
- ✓ **Evaluations easy to access**
- ✓ **Incentives**
- ✓ **Intensive marketing**
- ❑ **“Priority grade access”**

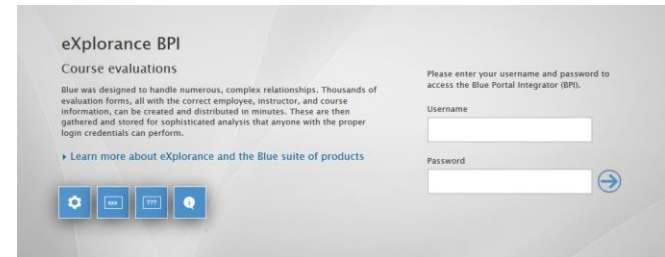


# Using Blue to Implement Priority Grade Access



Evaluations are released in Blue.

The “Grade Pathways” functionality in the BPI triggers a flag in PeopleSoft to block student grades.



Once the block is applied, students are unable to view their grades, unofficial, and official transcripts.

# Priority Grade Access Pilot Projects

## Testing the functionality

- **Two pilot projects (fall 2015 and spring 2016)**
  - ✓ **5 courses in fall 2015 from 2 academic units**
  - ✓ **65 courses in spring 2016 from 4 academic units**
- **Faculty were asked to volunteer for the pilot projects.**
- **“Talking points” were distributed to associate deans and instructors of record.**



## Important Details

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- Only the **student's** ability to view the grade was impacted.
- Students had the ability to complete the evaluation by 'opting out' and not providing feedback.
- The block was removed only after students completed all outstanding evaluations.
- Evaluations remained open through the final exam period.
- All blocks were removed 48 hours after the last final exam, regardless of the status of a student's course evaluation.

# Priority Grade Access Pilot Projects

## Fall 2015

- Historical response rate for courses varied from 42% to 57%.
- Final response rate (excluding students who opted out) varied from 71% to 79%.
- No significant difference in mean scores of instructors.

## Spring 2016

- Historical response rate for courses varied from 32% to 60%.
- Final response rate (excluding students who opted out) varied from 80% to 92%.
- No significant difference in mean scores of instructors.



# Fall 2016 Priority Grade Access Implementation (University-wide)

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# Observations



**NO** technical issues were experienced by students.

Student complaints about the evaluations closing before final exams were eliminated.



# Response Rates

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# Historical Response Rate Trend by Unit (Fall Semesters Only)

Unit	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015
College of Arts and Sciences	55%	45%	51%	42%	47%	43%
College of Business	59%	53%	47%	40%	43%	45%
College of Education and Human Development	51%	49%	51%	52%	55%	51%
J.B. Speed School of Engineering	65%	59%	63%	51%	52%	51%
School of Nursing	36%	59%	48%	45%	41%	45%
School of Public Health and Information Sciences	78%	66%	59%	63%	55%	48%
School of Dentistry	38%	45%	24%	27%	29%	25%
School of Law	61%	52%	48%	53%	50%	65%
School of Music	53%	42%	40%	31%	36%	35%
School of Social Work	76%	74%	69%	69%	59%	66%
Overall university response rate (unweighted)	54.9%	48.6%	50.3%	52.0%	52.5%	55.1%

**\*Net response rate - excludes those students who opted out.**



# Analysis of Responses

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Unit	Term	Overall Mean - Instructor Question	Overall Response Rate
College of Arts and Sciences	Fall 2014	4.32	47%
	Fall 2015	4.28	43%
	Fall 2016	4.34	73%
College of Business	Fall 2014	4.14	43%
	Fall 2015	4.32	45%
	Fall 2016	4.65	71%
College of Education and Human Development	Fall 2014	4.14	55%
	Fall 2015	4.09	51%
	Fall 2016	4.21	82%
JB Speed School of Engineering	Fall 2014	3.85	52%
	Fall 2015	3.87	51%
	Fall 2016	3.96	79%
School of Dentistry	Fall 2014	4.23	29%
	Fall 2015	4.33	25%
	Fall 2016	4.24	65%
School of Nursing	Fall 2014	4.11	41%
	Fall 2015	4.03	45%
	Fall 2016	4.08	73%
School of Public Health and Information Sciences	Fall 2014	4.30	55%
	Fall 2015	4.32	48%
	Fall 2016	4.31	70%

- The Blue Text Analytics (BTA) engine uses a combination of custom dictionaries and powerful algorithms.
- Blue Text Analytics identifies **themes** within written content as opposed to key words.



## Positive Attributes

A subcategory within the attributes category. Themes within the positive subcategory are intended to identify aspects of a subject that the commenter views as an asset.

Themes	Definition	Example Keywords	Focus	Example Comment
Approachable (unapproachable)	Easy to meet or converse with.	approachable, calm, easy to talk to, laid-back, good-natured, is open to, open minded, relaxed	behavior of instructor and/or staff. ability to access instructor and/or staff.	The TA was easy to talk to.
Available (unavailable)	Not busy or otherwise committed. Ready to help.	accessible, always around, always available	behavior of instructor and/or staff. ability to access instructor and/or staff.	She was always around and willing to help me out with any questions I had.

# General Dictionary Categories

Info Content Content for Export Filters Subjects Viewers Access Project Mapping Distribution Language Publish

Blocks Group Elements Virtual Groups Virtual Question Piping Settings Triggers

Block Edit

## Block Details

**Block Title**  
Comment on course strengths and/or weaknesses:

**Block Description**

Top Horizontal Separator Small Space ▼

Hidden By Default

**Question Title** Comment on course strengths and/or weaknesses: ▼

**Text Analytics - Frequency**

Dictionary eXplorance\_General\_V2 ▼ ★

Category ATTRIBUTES  
ELEMENTS  
POTENTIAL ISSUES

**Display Settings**

Display Options  Chart  Table  Word Cloud

Display Top 10 ▼

Display Overall Value

Presentation  Color Chart  Hatch Chart  Wrap Chart Label

Scale  100%  Dynamic Scale



**Attributes** - are organized into positive, negative and neutral subcategories.



# General Dictionary Category: Attributes

**Positive Attributes** – intended to identify aspects of a subject that the commenter views as an asset.

## UofL example:

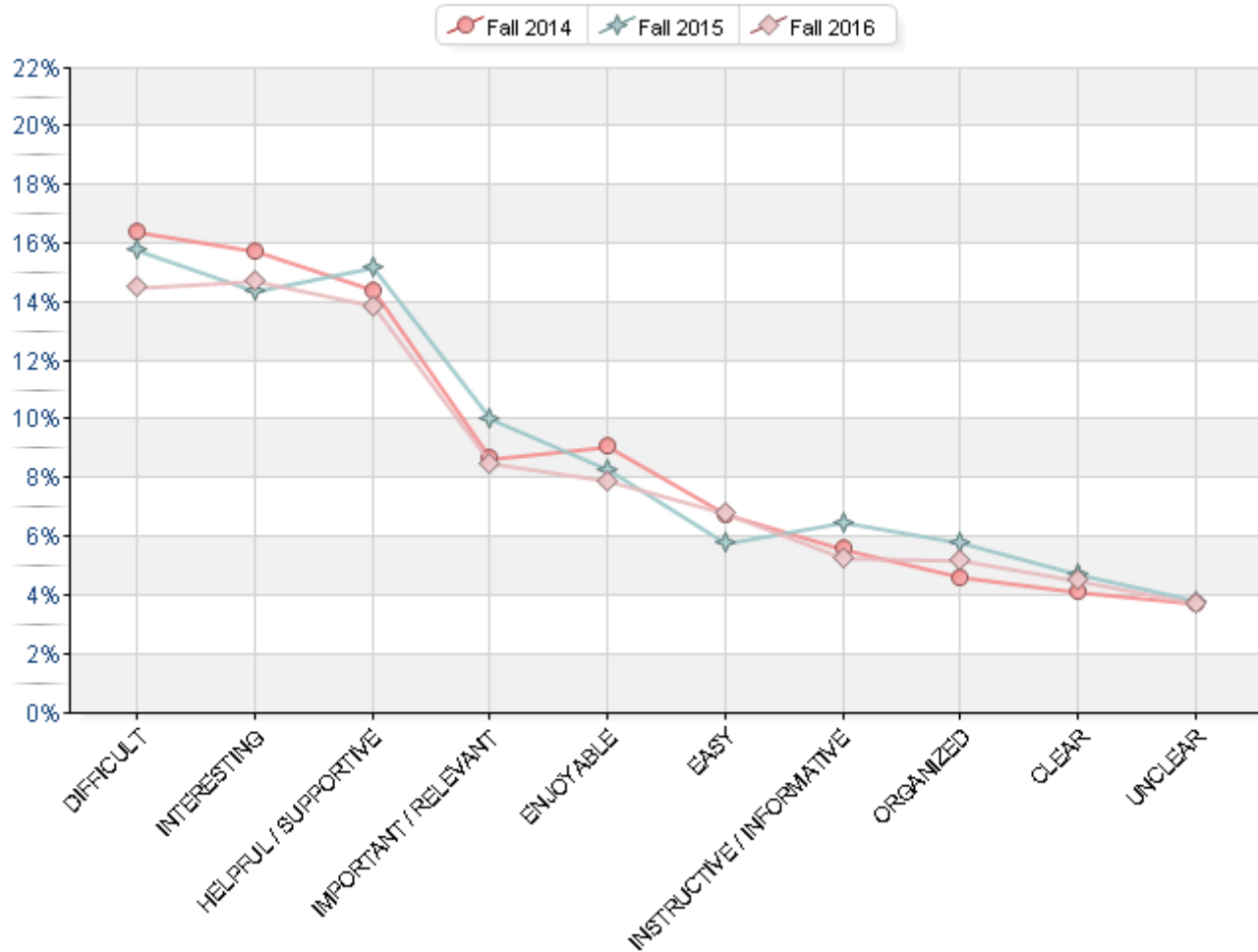
Attribute: Positive

Theme: Enjoyable

“I really enjoy her lectures and find them very interesting and insightful.”

# Comparison of Comments from the College of Arts and Sciences using Blue Text Analytics - Attributes

Comment on course strengths and/or weaknesses:





## Comparison of Comments from the College of Arts and Sciences using Blue Text Analytics - Attributes

Attributes [No. of comments]	Fall 2014 [5083]	Fall 2015 [4453]	Fall 2016 [13061]
DIFFICULT	16.39 %	15.76 %	14.49 %
INTERESTING	15.74 %	14.37 %	14.72 %
HELPFUL / SUPPORTIVE	14.42 %	15.18 %	13.88 %
IMPORTANT / RELEVANT	8.66 %	10.02 %	8.51 %
ENJOYABLE	9.07 %	8.29 %	7.90 %
EASY	6.77 %	5.77 %	6.79 %
INSTRUCTIVE / INFORMATIVE	5.57 %	6.49 %	5.27 %
ORGANIZED	4.62 %	5.79 %	5.19 %
CLEAR	4.11 %	4.72 %	4.49 %
UNCLEAR	3.72 %	3.82 %	3.72 %

**Observation: Priority grade access **did NOT** negatively impact students' feedback about the course attributes.**

**Elements** - contains commonly mentioned subjects related to the higher education experience of the respondent.



# General Dictionary Category: Elements

**Course Element** – focused on the broader elements of the learning experience provided by the instructor, course and materials.

## UofL example:

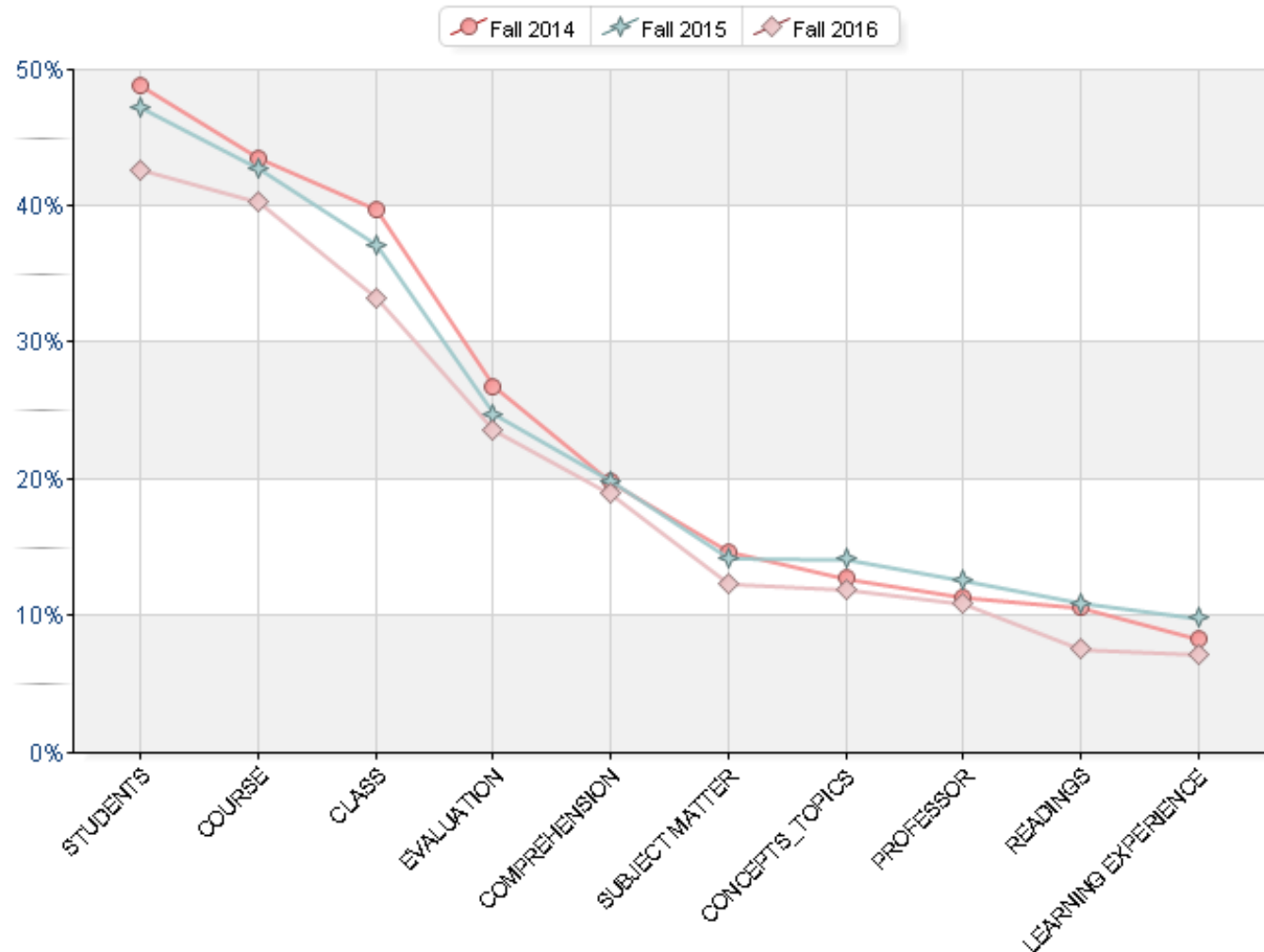
Element: Course Element

Theme: Attendance

“I like how we fill out a sheet every class to mark attendance and participation.”

# Comparison of Comments from the College of Arts and Sciences using Blue Text Analytics - Elements

Comment on course strengths and/or weaknesses:





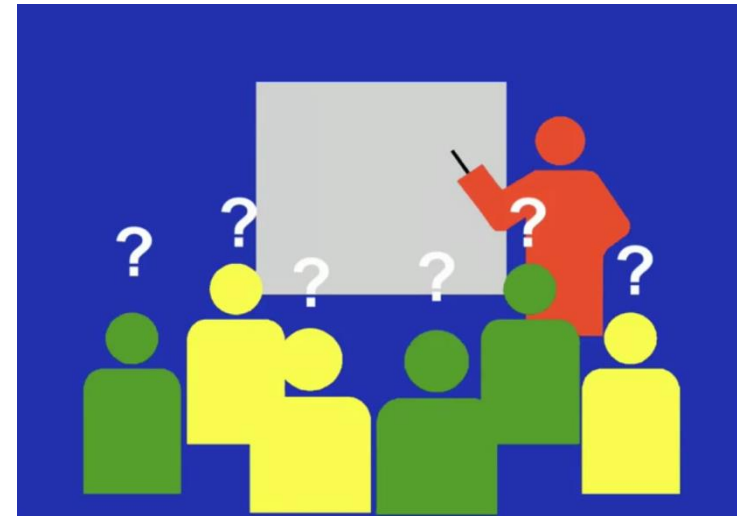
# Comparison of Comments from the College of Arts and Sciences using Blue Text Analytics - Elements

Elements [No. of comments]	Fall 2014 [5083]	Fall 2015 [4453]	Fall 2016 [13061]
STUDENTS	48.77 %	47.18 %	42.64 %
COURSE	43.50 %	42.74 %	40.27 %
CLASS	39.74 %	37.17 %	33.28 %
EVALUATION	26.80 %	24.77 %	23.58 %
COMPREHENSION	19.75 %	19.85 %	18.88 %
SUBJECT MATTER	14.70 %	14.22 %	12.34 %
CONCEPTS_TOPICS	12.71 %	14.13 %	11.92 %
PROFESSOR	11.35 %	12.58 %	10.87 %
READINGS	10.58 %	10.94 %	7.54 %
LEARNING EXPERIENCE	8.28 %	9.81 %	7.17 %

**Observation: Priority grade access **did NOT** negatively impact students' feedback about elements of the course.**



**Potential Issues** - a miscellaneous category for themes that occur with some regularity but do not fit into the attributes or elements categories.



# General Dictionary Category: Potential Issues

**Potential Issues** - Common issues that are regularly mentioned in course evaluations and should be measured, but do not fit within the Attributes or Elements categories.

## UofL example:

Potential Issue

Theme: Pace

“She also talks too fast (at time her voice becomes a blur) and moves through material too fast which would not be a problem if she posted her lecture slides.”

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# Comparison of Comments from the College of Arts and Sciences using Blue Text Analytics – Potential Issues

Potential issues [No. of comments]	Fall 2014 [5083]	Fall 2015 [4453]	Fall 2016 [13061]
HIGH_QUANTITY/LEVEL	21.19 %	21.22 %	17.86 %
LOW_QUANTITY/LEVEL	19.95 %	18.50 %	16.55 %
QUANTITY_OTHER	16.76 %	16.98 %	14.12 %
TIME_ISSUES	4.70 %	4.47 %	3.28 %
PACE	2.52 %	2.27 %	2.32 %
WORKLOAD	2.05 %	2.47 %	1.75 %
MEMORIZATION	1.26 %	1.28 %	0.87 %
VOICE ISSUES	0.51 %	0.49 %	0.32 %

**Observation: Priority grade access **did NOT** identify any new potential issues with the course.**

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- Info
- Content
- Content for Export
- Filters
- Subjects
- Viewers
- Access
- Project Mapping
- Distribution
- Blocks
- Group Elements
- Virtual Groups
- Virtual Question
- Piping Settings
- Triggers

Block Edit

## Block Details

### Block Title

Comment on course strengths and/or weaknesses:

### Block Description

- Top Horizontal Separator Small Space ▼
- Hidden By Default

### Question Title

Comment on course strengths and/or weaknesses:

Dictionary Text Analytics - Frequency

- eXplorance\_General\_V2
- eXplorance\_Sentiments\_V2** ★

Category ATTRIBUTES ▼

Display Options  Chart  Table  Word Cloud

Display Top 2 ▼

The Blue Text Analytics engine harnesses the eXplorance Sentiments Dictionary to discern whether feedback reflects a generally positive opinion or negative opinion regarding the question being asked.

The eXplorance Sentiments Dictionary contains only these two top level categories.



## UofL examples:

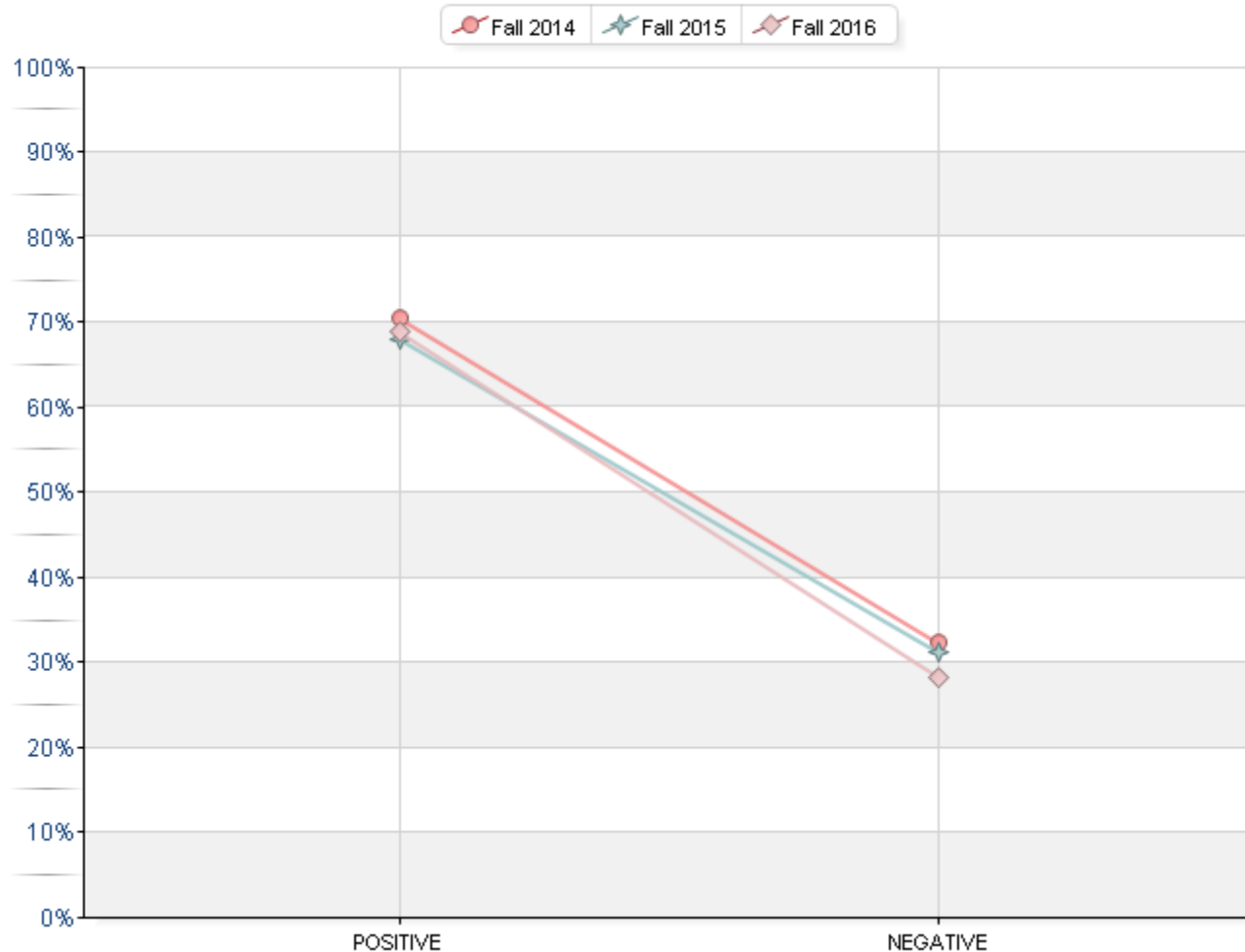
1. “Good teacher smart guy needs more of a command presence.”
2. “The class is good.”
3. “I really enjoy her lectures and find them very interesting and insightful.”

## UofL examples:

1. “She goes very fast and it is hard to keep up with note taking.”
2. “The course is dry. but there is no way around that. Way too many readings.”
3. “Gets off topic and can be condescending.”

# Comparison of Comments from the College of Arts and Sciences using Blue Text Analytics - Sentiment

Comment on course strengths and/or weaknesses:







# Comparison of Comments from the College of Arts and Sciences using Blue Text Analytics - Sentiment

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Attributes [No. of comments]	Fall 2014 [5083]	Fall 2015 [4453]	Fall 2016 [13061]
POSITIVE	70.41 %	67.98 %	68.80 %
NEGATIVE	32.24 %	31.17 %	28.27 %

**Observation: Priority grade access **did NOT** negatively impact students' sentiment about the course.**



# University Community Response

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# Students

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- ✓ Overall response was either positive or neutral (i.e., “not a big deal”).
- ✓ Some students needed clarification on who to contact if they were unable to access their grades due to different types of account “holds” (such as an outstanding balance).

# Faculty

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- **A few faculty had questions about whether to post final grades in the Blackboard grade center.**
- **Two faculty contacted the Office of Institutional Research and Planning to indicate they were unaware of the process change.**

# Questions?

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