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Recommended Syllabus Components: What Do Higher Education Faculty Include in Their Syllabi?

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Syllabus use in higher education instruction is ubiquitous, yet what actually constitutes a syllabus remains unclear. The authors assessed the contents of 1000 syllabi, sampled from the Internet, based on 26 criteria determined from a literature review of recommended syllabus components. Syllabi contents were assessed according to four categories: professor information, course information, grading information, and policy information. In addition, each syllabus was categorized by content area domain and academic level. An analysis of the contents of the syllabi demonstrated that the most frequently included syllabus components were course name, course number, professor name, and course texts, and that the least frequently included syllabus components comprised almost entirely policies — specifically, honor code policy, disability policy, missed work policy, late work policy, and student support services. Analyses based on content area domain and academic level demonstrated little systematic variance. Overall, faculty tended to include more professor information, course information, and grading information, than policy information. These findings provide evidence for the need to include greater policy information — honor code, disability, technology, attendance, and student support policies — on syllabi to better inform students.

The use of syllabi in higher education instruction is ubiquitous, and their construction represents a critical moment in instructors' curriculum/

course development thought processes and the communication process between instructors and students. Yet despite the almost universal agreement on the need for a syllabus in college courses, what actually constitutes a syllabus—content, format, and function—remains unclear. This lack of consensus may derive from the need of the syllabus to fulfill multiple purposes (for example, organizational, administrative, communicative) and to satisfy multiple constituents (faculty, students, administrators). Unfortunately, research designed to clarify the content, format, and function of syllabi is limited. Thus, the question remains, *What components do faculty members include in their syllabi?*

An academic syllabus can be understood as a form of communication between a course instructor and his or her students, outlining the course of study and, frequently, including components such as a schedule of assignments, activities, and assessments as well as an introduction to the instructor and course material (Nilson, 2003). Presenting these responsibilities and expectations for performance in writing allows students to decide whether they have the appropriate time and resources to be successful (Parkes & Harris, 2002; Smith & Razzouk, 1993). In addition, when course goals and objectives are included in syllabi, students are made better aware of the purpose of the course and the role the course plays in the larger domain of study, including how the course fits into the college or department curriculum (Davis, 1993).

Often the initial and most formal communication tool received by students regarding the course, a syllabus serves as a practical and intellectual guide to the academic term ahead (Dominowski, 2002; Eberly, Newton, & Wiggins, 2001). It gives students a "common script" (Smith & Razzouk, 1993, p. 219) for the course, including how much time they are expected to spend on reading assignments, problem sets, group projects, lab reports, and research (Davis, 1993). Course effectiveness also can be improved, and communication frustrations avoided, when a syllabus provides students with clear expectations and criteria for determining their success or failure (Diamond, 1998; Grunert, 1997).

One particular purpose of syllabus design is prevention (Boyle & Rothstein, 2003; Matejka & Kurke, 1994). That is, anticipated student questions and concerns can be formally and thoughtfully addressed from the start of the course, thus saving the instructor time spent answering these questions. Parkes, Fix, and Harris (2003) point out that students take significant notice of the quantity and quality of what is included in a syllabus. The more information provided about the course to students in advance, the fewer questions and misunderstandings are encountered later during the term. Vague expectations and unclear policies often

contribute to increased student anxiety. For example, providing students with sample test questions and detailed assignment descriptions has been demonstrated to reduce students' text anxiety and to have a positive impact on their learning (Darley, Zanna, & Roediger, 2004; Diamond, 1998). Indeed, providing brief explanations can reduce student resistance to a challenging course format, process, or assignment.

Clearly, syllabi have an important role to play in teacher-student communications and expectations. Given this importance, is there any consensus regarding what components should be present in a well-constructed syllabus?

Recommended Syllabus Components

Perceptions of the role of the syllabus in educating students are changing, with a shift away from the more traditional view of it as a skeletal outline or general schedule of assignments and toward it as a comprehensive course guide (Eberly et al., 2001). Diamond (1998) argues that the traditional syllabus is ineffective for helping students to understand their vital role in the learning process—"to understand the expectations we have of them and our plans for the learning experience, students need more comprehensive information than the traditional syllabus provides" (p. 192).

There is, however, no singular set of syllabus components accepted by all, or most, higher education researchers or practitioners. However, a considerable amount of practical evidence of desired syllabus components is revealed in numerous texts and articles addressing college teaching. Because these practical syllabus recommendations have not yet been collected and assessed, however, the larger picture they create is unclear. In an attempt to understand and make sense of these recommendations, we examined 15 sources addressing college teaching and syllabus construction. Our examination revealed 81 syllabus components mentioned by at least one of the texts or articles. Of these 81 components, however, only 24 of them were mentioned by at least half of the sources (see Table 1).

Further examination of these 24 agreed-upon components revealed four main component categories: instructor information, course information, grading information, and policy information. Table 1 identifies both these recommended components and the level of agreement among the authors about their inclusion. Overall, the sampled authors agreed most readily on four specific syllabus components: grading policy, instructor's name, course content topics, and course due dates.

Although the recommended components listed in Table 1 are based

solely on the authors' logical supposition, there is empirical evidence to support this list. Garavalia, Hummel, Wiley, and Huit (1999) surveyed 316 participants, 242 undergraduate students and 74 faculty members, regarding their perceptions of the importance of including various components within a syllabus. Garavalia et al. created their list of syllabus components for the survey based on an unspecified "review of the literature" (p. 9). Students and faculty evaluated these syllabus components on a Likert scale from 1 (*not very important*) to 5 (*very important*). The syllabus components that were deemed important by faculty members and students (see Table 2) are in general agreement with those listed in Table 1. Specifically, Table 2 represents the 10 most important syllabus components as rated by faculty members and students. Nine of the top faculty-rated components, excluding external work assignments (for instance, field studies), and eight of the top student-rated components, excluding allowable absences and excessive absence penalty, also are included in the recommended components in Table 1.

In addition to Garavalia et al.'s (1999) examination of faculty members' and students' perceptions of syllabus components' importance, Becker and Calhoun (1999) examined the attention that students paid to various syllabus components. They surveyed 863 undergraduate students enrolled in introductory psychology classes regarding to which syllabus components they paid the most attention. The authors chose their survey syllabus components "because several authors listed them as important to include in a syllabus" (p. 7). Students responded to these syllabus components on a Likert scale from 1 (*no attention at all*) to 7 (*a great deal of attention*). Students responded positively to 25 items in the survey (see Table 3), neutrally to only one item, academic dishonesty policy, and negatively to three items: course information, drop dates, and textbook titles and authors. Of the 25 items to which students paid attention, 17 items align directly with the components listed in Table 1.

While to date data have been collected and analyzed in the literature regarding recommended course components, course components perceived as important, and course components to which students paid attention, there are few data on what syllabus components faculty members actually include within their syllabi. The purpose of this study is threefold: (a) to examine the syllabus components included by faculty members within their syllabi, (b) to determine if any differences exist in the inclusion of syllabus components across different content area domains (for instance, business, engineering, liberal arts), and (c) to determine if any differences exist in the inclusion of syllabus components across different academic levels (for instance, lower undergraduate, upper undergraduate, graduate).

Table 1
Course Syllabus Components as Agreed Upon by Text Authors' (continued)

| Authors | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|------------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| Grading Information | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Grading Policy | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Grading Scale | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Assignment Names | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Assignment Descriptions | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Policy Information | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Late Work Policy | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Attendance Policy | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Missed Work Policy | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Honor Code/Academic Conduct Policy | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

Note. The measure of "agreed upon" was that at least 50% of the authors listed the syllabus component. The authors contributing to this analysis included: Boyle & Rothstein (2003), Darity, Zanna, & Roediger (2004), Dominowski (2002), Fink (2003), Grunert (1997), Ko & Rossen (2001), Lyons, Kysilka, & Pawlas (1999), Lyons, McIntosh, & Kysilka (2003), McGlynn (2001), McKeachie (2002), Nilson (2003), Parkes & Harris (2002), Royse (2001), Wankat (2002), and Weimer, Parrett, & Kerns (1988).

Table 2
The 10 Most Important Syllabus Components
as Rated by Faculty Members and Students^a

| Faculty Members | Students |
|--------------------------------------|--------------------------------------|
| 1. Course Title and Number | 1. Dates of Exams |
| 2. Instructor's Name | 2. Assignment Names and Descriptions |
| 3. Grading Scale | 3. Grading Scale |
| 4. Assignment Names and Descriptions | 4. Instructor's Office Hours |
| 5. Grading Policy | 5. Allowable Absences |
| 6. Instructor's Email Address | 6. Grading Policy |
| 7. External Work Assignments | 7. Attendance Policy |
| 8. Attendance Policy | 8. Excessive Absence Policy |
| 9. Goals and Objectives | 9. Instructor's Office Phone |
| 10. Instructor's Office Hours | 10. Course Content Topics |

Note. ^aBased on Garavalia et al. (1999).

Method

Sampling

This study examined 1,000 higher education course syllabi obtained via the Internet using a non-probability—purposive and quota—sampling process. These 1,000 syllabi were selected purposefully so that 125 syllabi were obtained for each of eight content area domain categories selected by the authors as representative of typical colleges found across various institution types (see Table 4). In addition to the syllabi being purposively distributed across the eight domain categories, the syllabi were also non-purposively distributed across academic level so that 421 syllabi were selected from lower-level undergraduate courses (freshman, sophomore), 354 were selected from upper-level undergraduate courses (junior, senior), and 225 were selected from graduate-level courses (master's, doctoral). The syllabi were obtained using the Google™ search engine, with searches taking the form of the word *syllabus* followed by a

Table 3
Syllabus Components to Which Students Paid Most Attention^{a, b}

| | |
|--|--|
| 1. Exam and Quiz Dates | 13. Late Assignment Policy |
| 2. Assignment Due Dates | 12. Make-up Policy |
| 3. Required Reading Material | 11. Extra Credit Availability |
| 4. Grading Policy | 10. Amount of Required Work |
| 5. Type of Exams and Quizzes | 9. Class Participant Requirements |
| 6. Dates of Required Events Outside of Class | 8. Types of Assignments |
| 7. Number of Exams and Quizzes | 7. Number of Exams and Quizzes |
| 8. Types of Assignments | 6. Dates of Required Events Outside of Class |
| 9. Class Participant Requirements | 5. Type of Exams and Quizzes |
| 10. Amount of Required Work | 4. Grading Policy |
| 11. Extra Credit Availability | 3. Required Reading Material |
| 12. Make-up Policy | 2. Assignment Due Dates |
| 13. Late Assignment Policy | 1. Exam and Quiz Dates |
| 14. Attendance Policy | 15. Schedule of Topics to be Covered |
| 15. Schedule of Topics to be Covered | 16. Course Format |
| 16. Course Format | 17. Where to Obtain Course Materials |
| 17. Where to Obtain Course Materials | 18. Days, Hours, and Location of Class |
| 18. Days, Hours, and Location of Class | 19. Prerequisite Skills and Course Work |
| 19. Prerequisite Skills and Course Work | 20. Course Goals and Objectives |
| 20. Course Goals and Objectives | 21. Holidays |
| 21. Holidays | 22. Course Description |
| 22. Course Description | 23. Instructor Information |
| 23. Instructor Information | 24. Available Support Services |
| 24. Available Support Services | 25. Instructor's Office Hours |
| 25. Instructor's Office Hours | |

Note.

^aComponents are listed in order of student attention, that is, students paid the most attention to those components listed first and the least attention to those components listed last.

^bBased on Becker and Calloon (1999).

Table 4
Domain Categories and Specific Content Areas^a

| Domain | Content Areas |
|--------------------|---|
| Art & Architecture | Architecture, Art History, Interior Design, Landscape Architecture |
| Business | Accounting, Finance, Hospitality and Tourism, Management, Marketing |
| Engineering | Aerospace, Chemical, Civil, Electrical, Mechanical, Systems |
| Liberal Arts | Communication, History, Languages, Philosophy, Theatre Arts |
| Life Sciences | Agriculture, Biochemistry, Dairy/Poultry, Entomology, Horticulture |
| Natural Sciences | Fisheries, Forestry, Geography, Wildlife Science, Wood Science |
| Physical Sciences | Biochemistry, Biology, Chemistry, Geology, Mathematics, Physics |
| Social Sciences | Anthropology, Education, Political Science, Psychology, Sociology |

Note. ^aThe listed content areas are not exhaustive, but are provided for clarification.

plus sign (+) followed by a specific content area domain in quotation marks, for example:

syllabus + "social sciences"

This type of search and subsequent selection of syllabi is not random, as Google utilizes a non-random algorithm to search and display results (Google, 2004).

Materials

Each syllabus selected from the Internet was evaluated based on the 24 syllabus components reported in Table 1. These syllabus components were selected based on the recommendations of the sampled authors included in Table 1 and on the general agreement of the syllabus components with the research of Garavalia et al. (1999) and Becker and Calhoun

(1999). However, we added two new syllabus components to this list of 24 components based on literature support and our interests: a disability policy and a student support services policy.

It should be noted that the inclusion of a disability policy was advocated by only 3 of the 15 texts and articles evaluated for Table 1. This is somewhat surprising given the increasing numbers of students with disabilities enrolling in higher education institutions (see Gordon, Lewandowski, Murphy, and Dempsey, 2002; Smith, 2001) and the legal requirement for higher education institutions and faculty members to accommodate students with documented disabilities (ADA, 1990; IDEA, 1990). According to Lerner (2003), "one of the greatest challenges faced by college students with learning disabilities is gaining and maintaining the acceptance and cooperation of the academic faculty" (p. 314). Faculty can demonstrate acceptance and encourage students with disabilities to self-identify by providing disability policy statements on syllabi, thus recognizing the rights of students with disabilities to receive needed and entitled accommodations.

Yet accommodating students goes beyond students with disabilities to include all students via student support services. These support services comprise a vast array of instructional programs and resources designed to foster student learning and development, including reading and writing centers, tutoring and study centers, health and counseling centers, women's centers, and library assistance programs. Indeed, Cheng (2004) stresses the vital need for faculty and administrators to collaborate in the creation of a more supportive and holistic academic community for all students. Syllabi that incorporate intercampus learning opportunities promote more effective faculty-student interactions, student affairs programming, and academic advising by creating a complete learning experience (Cheng, 2004; Tinto, 1998). While student support services can be key to students' academic success and retention, only 5 of the 15 sources evaluated for Table 1 included such services in their list of recommended syllabus components.

Ultimately, each syllabus was evaluated using a checklist of 26 syllabus components—the 24 original components and the 2 new components. We made no effort to evaluate the efficacy or quality of the syllabus components, only their presence or absence.

Procedure

The 1,000 syllabi were selected during the summer and fall of 2004 using the aforementioned Google™ searches. We created an online utility to al-

low evaluators to complete the syllabus checklist for each syllabus selected and to store the evaluation results in an electronic database. The online utility prevented any syllabus from being evaluated more than once.

Results

The following results begin the process of evaluating our three research questions: (a) What syllabus components are included by faculty members within their syllabi? (b) What differences, if any, exist in the inclusion of syllabus components across different content area domains? and (c) What differences, if any, exist in the inclusion of syllabus components across different academic levels?

Syllabus Components Included in Higher Education Syllabi

The frequency distribution of syllabus components included in the sampled syllabi is displayed in Table 5. The most frequently included syllabus components were Course Name (96.7%), Course Number (91.0%), Professor Name (90.8%), and Course Texts (84.0%). The least frequently included syllabus components consisted almost entirely of policies, specifically, Supplemental Readings (34.0%), Honor Code Policy (33.8%), Disability Policy (23.0%), Missed Work Policy (20.2%), Late Work Policy (19.2%), and Student Support Services (7.2%).

We further analyzed the data using Cochran's Q to determine if there were any differences between category frequencies, followed by an analysis of standardized residuals as a post-hoc test to locate specific frequency differences. Because the analyses of standardized residuals does not constitute independent analyses (Siegel & Castellan, 1988), inflation of Type I error was controlled through the use of the Sidák-Bonferroni correction, resulting in significance being measured at $\alpha = .001$ ($z = \pm 3.30$). The Cochran Q was statistically significant, and the analysis of residuals revealed three clusters of categories. Those categories that had high frequencies of inclusion in the syllabus components included the professor's name, office location, office phone, and e-mail address, as well as the course name, number, description, goals/objectives, required texts, topics, calendar, and grading policy. Those categories that had low frequencies of inclusion in the syllabus components included course supplemental readings, late work policy, missed work policy, honor code policy, disabilities policy, and student support services (see Table 5).

Beyond the frequency of syllabus components included in course syllabi is the question of what components generally were included. Of the

Table 5
Components Included on Higher Education Syllabi (N = 1000)*

| Category | Frequency | Standardized Residual | Rank |
|--------------------------|-----------|-----------------------|------|
| Professor Name | 908 | 12.22 ⁺ | 3 |
| Office Location | 740 | 7.18 ⁺ | 8 |
| Office Hours | 575 | 2.24 | 13 |
| Office Phone Number | 745 | 7.33 ⁺ | 6 |
| Professor E-mail Address | 732 | 6.94 ⁺ | 9 |

Table 5
Components Included on Higher Education Syllabi (N = 1000)^a (continued)

| Category | Frequency | Standardized Residual | Rank |
|------------------------------|-----------|-----------------------|------|
| Course Name | 967 | 13.98 ⁺ | 1 |
| Course Number | 910 | 12.28 ⁺ | 2 |
| Course Description | 676 | 5.27 ⁺ | 11 |
| Course Location | 442 | 1.73 | 20 |
| Course Time | 492 | 0.23 | 16 |
| Course Goals/Objectives | 680 | 5.35 ⁺ | 10 |
| Course Require Texts | 840 | 10.18 ⁺ | 4 |
| Course Supplemental Readings | 340 | 4.79 ⁻ | 21 |
| Course Topics | 741 | 7.21 ⁺ | 7 |
| Course Calendar | 628 | 3.83 ⁺ | 12 |
| Course Due Dates | 454 | 1.37 | 19 |

| Grading Information | | | |
|--------------------------|-----|--------------------|----|
| Grading Policy | 762 | 7.84 ⁺ | 5 |
| Grading Scale | 504 | 0.11 | 15 |
| Assignment Names | 537 | 1.10 | 14 |
| Assignment Descriptions | 459 | 1.22 | 17 |
| Policy Information | | | |
| Attendance Policy | 457 | 1.28 | 18 |
| Late Work Policy | 192 | 9.22 ⁻ | 25 |
| Missed Work Policy | 202 | 10.93 ⁻ | 24 |
| Honor Code Policy | 338 | 4.85 ⁻ | 22 |
| Disability Policy | 230 | 8.08 ⁻ | 23 |
| Student Support Services | 72 | 12.82 ⁻ | 26 |

Note.
^aCochran Q (25,1000) = 6598.76; $p < .001$.
⁺ $p < .001$ = observed frequency significantly greater than expected frequency.
⁻ $p < .001$ = observed frequency significantly less than expected frequency.

26 course syllabus components we examined, only 4 were included in at least 80% of the sampled syllabi, 15 components were included in at least 50% of the sampled syllabi, and 11 components were included in less than 50% of the sampled syllabi. In addition, when the syllabus component frequencies are examined by theme, a clear trend emerges. Faculty tended to include more Professor Information (74.0%), Course Information (65.1%), and Grading Information (56.6%), than Policy Information (24.8%).

Syllabus Components and Content Area Domains

While the course component frequencies provide an overview of the syllabus components included, we also performed two more detailed analyses. The first analysis examined the inclusion of course components across content area domains by grouping the course components into categories, specifically, Professor Information, Course Information, Grading Information, Policy Information, and All Information, which includes all course components regardless of category. The second analysis examined the inclusion of course components without any groups, examining each course component individually.

Examining Syllabus Components by Category

For each syllabus examined, a score was computed for each of the four syllabus component categories based on the number of syllabus components included with each category. These data were analyzed using a 3 (Academic Level) x 8 (Content Area Domain) x 5 (Syllabus Component Category) multiple analysis of variance (MANOVA), with syllabus component inclusion as the dependent variable (see Table 6). All follow-up comparisons were analyzed using the Tukey HSD post hoc with $\alpha = .05$. Only the Content Area Domain x Syllabus Component Category aspects of this analysis are discussed here; the Academic Level x Syllabus Component Category aspect of this analysis is addressed in the next section.

The MANOVA revealed four significant main effects, for Course Information ($F[7,976] = 3.31$; $p < .002$; $MSE = 13.94$), Grading Information ($F[7,976] = 8.17$; $p < .000$; $MSE = 11.34$), Policy Information ($F[7,976] = 4.19$; $p < .000$; $MSE = 8.33$), and All Information ($F[7,976] = 3.70$; $p < .001$; $MSE = 66.21$); and one non-significant main effect for Professor Information ($F[7,976] = .56$; $p > .78$; $MSE = 1.56$). Post hoc analyses demonstrated that the main effect for Course Information was the result of engineering course syllabi including fewer of the 11 course syllabus components than social science course syllabi. The main effect for Grading Information was the

Table 6
Means (and Standard Deviations) for Syllabus Component Categories
by Content Area Domain of Syllabus

| Syllabus Component Categories | AA | BS | BN | LA | LS | NS | PS | SS | Total |
|------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| Professor Information ^a | 3.34 (1.74) | 3.91 (1.57) | 3.84 (1.68) | 3.67 (1.63) | 3.75 (1.54) | 3.77 (1.67) | 3.70 (1.66) | 3.62 (1.80) | 3.70 (1.66) |
| Course Information ^b | 7.44 (2.26) | 6.99 (1.82) | 6.76 (1.83) | 7.07 (2.18) | 7.07 (1.88) | 6.98 (2.15) | 7.37 (2.09) | 7.74 (2.12) | 7.18* (2.06) |
| Grading Information ^c | 2.36 (1.21) | 2.71 (1.13) | 1.64 (1.07) | 2.28 (1.18) | 2.30 (1.22) | 2.28 (1.13) | 2.09 (1.17) | 2.42 (1.29) | 2.26* (1.21) |
| Policy Information ^d | 1.31 (1.37) | 1.62 (1.33) | .94 (1.21) | 1.19 (1.40) | 1.50 (1.39) | 1.38 (1.45) | 1.66 (1.43) | 1.83 (1.66) | 1.43* (1.43) |
| All Information ^e | 14.46 (4.49) | 15.23 (3.60) | 13.18 (4.02) | 14.22 (4.29) | 14.62 (3.44) | 14.41 (4.44) | 14.82 (4.56) | 15.62 (4.88) | 14.57* (4.28) |

Note.
AA = Art & Architecture; BS = Business; BN = Engineering; LA = Liberal Arts; LS = Life Sciences; NS = Natural Sciences; PS = Physical Sciences; SS = Social Sciences.
^aMax. value is 11; ^bMax. value is 5; ^cMax. value is 4; ^dMax. value is 6; ^eMax. value is 26.
* $p < .05$.

result of engineering course syllabi including fewer of the four Grading components than the syllabi of all other content area domains. The main effect for Policy Information was the result of two content area domains; specifically, liberal arts syllabi included fewer of the six Policy components than social science syllabi, and engineering syllabi included fewer of the Policy components than life science, business, physical science, and social science syllabi. Finally, examining all 26 syllabus components at once revealed that engineering syllabi included fewer syllabus components than business, physical science, and social science syllabi.

Examining Syllabus Components by Individual Component

While the MANOVA provides a broad overview of categorized syllabus component inclusion and content area domain, we also performed a series of chi-square analyses to determine the relationship between individual syllabus component inclusion and content area domain (see Table 7). One chi-square analysis was performed per syllabus component, yielding a total of 26 analyses. In order to establish a familywise $\alpha = .05$, the Sidák-Bonferroni correction was used, yielding a per comparison $\alpha = .002$ (Keppel & Wickens, 2004). In addition, to gain a better sense of each content area domains' contribution to each significant chi-square analysis, an analysis of standardized residuals was performed for each significant chi-square analysis, with significance measured at $\alpha = .007$ ($z = \pm 2.70$), again, using the Sidák-Bonferroni correction to control for Type I error (Hays, 1994; Siegel & Castellan, 1988).

The chi-square series revealed that 17 of the 26 syllabus components included significant variability in the inclusion of syllabus components across content area domains (see Table 7). Of specific interest, however, is that only 22 of the 208 standardized residual analyses were significant, revealing remarkable overall consistency of syllabus component inclusion. Two exceptions to this consistency are engineering and social science course syllabi. Engineering syllabi included less frequently than other content area domains the syllabus components of Course Calendar, Course Due Dates, Grading Scale, Assignment Names, Assignment Descriptions, Attendance Policy, and Missed Work Policy. Social sciences syllabi included more frequently than other content area domains the syllabus components of Course Description, Grading Scale, Late Work Policy, and Missed Work Policy.

Table 7
Observed Frequencies of Syllabus Components Within Content Area Domains

| Syllabus Components | Content Area Domains - O_j | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|----------|----------------|-----------------|--------------|---------------------|--------------------------|----|-----|----|----|----|-------|--|------|----|----|----|----|----|----|----|----|------|--|------|-----|-----|----|-----|----|----|----|--------|--|------|----|-----|-----|----|----|----|----|----|----|-------|--|
| | E(f) ^b | AA | BS | EN | LA | LS | NS | PS | SS | χ^2 | Professor Name | Office Location | Office Hours | Office Phone Number | Professor E-mail Address | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 113.5 | 113 | 117 | 112 | 115 | 113 | 112 | 109 | 109 | 4.98 | | 92.5 | 80 | 90 | 101 | 89 | 104 | 99 | 93 | 84 | 20.54 | | 71.9 | 71 | 77 | 75 | 72 | 61 | 73 | 76 | 70 | 5.79 | | 93.1 | 75* | 103 | 92 | 103 | 89 | 95 | 96 | 23.36* | | 91.5 | 79 | 105 | 100 | 89 | 86 | 93 | 87 | 93 | 84 | 19.24 | |

Table 7
Observed Frequencies of Syllabus Components Within Content Area Domains (continued)

| Syllabus Components | Content Area Domains - O(f) ^a | | | | | | | | | | χ ² |
|-------------------------|--|-----|-----|-----|-----|------|-----|-----|------|---------|----------------|
| | E(f) ^b | AA | BS | EN | LA | LS | NS | PS | SS | | |
| Course Name | 120.9 | 119 | 121 | 124 | 120 | 122 | 116 | 124 | 121 | 12.25 | |
| Course Number | 113.8 | 107 | 119 | 116 | 105 | 118 | 114 | 121 | 110 | 23.39** | |
| Course Description | 84.5 | 98 | 79 | 70 | 92 | 67* | 69 | 95 | 106* | 58.36** | |
| Course Location | 55.3 | 51 | 39 | 66 | 36 | 65 | 55 | 74 | 56 | 39.42** | |
| Course Time | 61.5 | 72 | 46 | 69 | 45 | 66 | 60 | 77 | 57 | 30.79** | |
| Course Goals/Objectives | 85.0 | 88 | 93 | 81 | 65* | 104* | 74 | 77 | 98 | 44.26** | |
| Course Require Texts | 105.0 | 105 | 110 | 106 | 114 | 95 | 104 | 98 | 108 | 15.83 | |
| Course Supplement | 42.5 | 66* | 29 | 31 | 47 | 35 | 27 | 48 | 57 | 50.76** | |
| Readings | | | | | | | | | | | |
| Course Topics | 92.6 | 82 | 90 | 95 | 102 | 96 | 99 | 81 | 96 | 17.16 | |
| Course Calendar | 78.5 | 79 | 74 | 51* | 92 | 79 | 87 | 78 | 88 | 38.42** | |
| Course Due Dates | 56.8 | 63 | 72 | 36* | 66 | 37 | 65 | 48 | 67 | 46.07** | |

| Syllabus Components | Grading Information | | | | | | | | | |
|--------------------------|---------------------|----|------|-----|-----|-----|-----|-----|-----|---------|
| | E(f) ^a | AA | BS | EN | LA | LS | NS | PS | SS | |
| Grading Policy | 95.3 | 97 | 111* | 109 | 85 | 109 | 108 | 67* | 76* | 91.11** |
| Grading Scale | 63.0 | 66 | 66 | 38* | 56 | 74 | 59 | 61 | 84* | 40.77** |
| Assignment Names | 67.1 | 73 | 84 | 31* | 76 | 65 | 62 | 72 | 74 | 58.07** |
| Assignment Descriptions | 57.4 | 59 | 80* | 27* | 68 | 40 | 56 | 61 | 68 | 63.78** |
| Policy Information | | | | | | | | | | |
| Attendance Policy | 57.1 | 63 | 67 | 37* | 55 | 47 | 47 | 67 | 74 | 36.39** |
| Late Work Policy | 24.0 | 26 | 14 | 19 | 13 | 22 | 25 | 34 | 39* | 29.90** |
| Missed Work Policy | 16.9 | 11 | 11 | 5* | 14 | 16 | 15 | 32* | 31* | 44.59** |
| Honor Code Policy | 42.3 | 36 | 60 | 35 | 40 | 50 | 44 | 36 | 37 | 19.36 |
| Disability Policy | 28.8 | 23 | 39 | 21 | 14* | 41 | 33 | 26 | 33 | 27.53** |
| Student Support Services | 9.0 | 5 | 10 | 0 | 13 | 11 | 6 | 12 | 15 | 20.59 |

Note. For all χ² calculations, N = 1000 and df = 7; for all individual cells, n = 125. AA = Art & Architecture. BS = Business. EN = Engineering. LA = Liberal Arts. LS = Life Sciences. NS = Natural Sciences. PS = Physical Sciences. SS = Social Sciences. O(f) = Observed frequencies. E(f) = Expected frequencies. *p < .007; **p < .002

Syllabus Components and Academic Level

As mentioned previously, we performed a 3 (Academic Level) x 8 (Content Area Domain) x 5 (Syllabus Component Category) MANOVA, with syllabus component inclusion as the dependent variable, with all follow-up comparisons analyzed using the Tukey HSD post hoc with $\alpha = .05$. Only the Academic Level x Syllabus Component Category aspects of this analysis are discussed here (see Table 8). The MANOVA revealed three significant main effects, for Professor Information ($F[2,1000] = 6.20$; $p < .002$; $MSE = 17.05$), Course Information ($F[2,976] = 3.25$; $p < .039$; $MSE = 13.71$), and All Information ($F[2,976] = 4.10$; $p < .017$; $MSE = 73.48$); and two non-significant main effects, for Grading Information ($F[2,976] = .62$; $p > .53$; $MSE = .86$) and Policy Information ($F[2,976] = .04$; $p > .95$; $MSE = .09$). Post hoc analyses demonstrated that the main effect for Professor Information was the result of lower-undergraduate syllabi including fewer Professor syllabus components than upper-undergraduate syllabi, while the main effect for Course Information was the result of lower-undergraduate syllabi including fewer Course syllabus components than graduate syllabi.

While the MANOVA provides a broad overview of syllabus component category inclusion, we also performed a series of chi-square analyses to determine the relationship between individual syllabus component inclusion and academic course level (see Table 9). One chi-square analysis was performed per syllabus component, followed by an analysis of standardized residuals for those chi-squares that were significant. The Sidak-Bonferroni correction again was used with both the chi-square analyses and the standardized residual analyses, resulting in alpha levels of .002 and .01, respectively. The chi-square series revealed that only 2 of the 26 syllabus components, Professor Name and Course Required Texts, included significant variability in the inclusion of syllabus components across academic levels. The subsequent standardized residual analyses revealed that lower undergraduate syllabi included Professor Name less often than expected and that graduate syllabi included Course Required Texts less often than expected.

Discussion

This investigation set out to examine the syllabus components that are included on higher education syllabi and whether or not this inclusion varies by content area domain or academic course level. The overall analysis of the course requirements included on syllabi revealed three

Table 8
Means (and Standard Deviations) for Syllabus Component Categories by Academic Level of Syllabus

| Syllabus Component Categories | Lower Undergraduate (n = 421) | | Upper Undergraduate (n = 354) | | Graduate (n = 225) | | Total (n = 1000) |
|------------------------------------|-------------------------------|--------|-------------------------------|--------|--------------------|--------|------------------|
| | Mean | SD | Mean | SD | Mean | SD | |
| Professor Information ^a | 3.48 | (1.83) | 3.92 | (1.52) | 3.78 | (1.50) | 3.70* |
| Course Information ^b | 7.02 | (2.06) | 7.24 | (2.01) | 7.38 | (2.13) | 7.18* |
| Grading Information ^c | 2.21 | (1.17) | 2.28 | (1.21) | 2.32 | (1.21) | 2.26 |
| Policy Information ^d | 1.42 | (1.29) | 1.42 | (1.43) | 1.45 | (1.50) | 1.43 |
| All Information ^e | 14.13 | (4.26) | 14.86 | (4.09) | 14.93 | (4.54) | 14.57* |

Note.

^aMax. value is 5; ^bMax. value is 11; ^cMax. value is 4; ^dMax value is 6; ^eMax. value is 26. * $p < .05$.

Table 9
Observed Frequencies (and Expected Frequencies)
of Syllabus Components Within Academic Levels*

| Syllabus Components | Academic Level | | | χ^2 |
|--------------------------|-------------------------------------|-------------------------------------|-----------------------|----------|
| | Lower Undergraduate (n = 421) | Upper Undergraduate (n = 354) | Graduate (n = 225) | |
| Professor Name | 362 (382)* | 333 (321)* | 213 (204)* | 20.23** |
| Office Location | 289 (311)* | 280 (262)* | 171 (166)* | 11.51** |
| Office Hours | 236 (242)* | 219 (203)* | 120 (129)* | 4.71** |
| Office Phone Number | 291 (313)* | 275 (263)* | 179 (167)* | 11.32** |
| Professor E-mail Address | 287 (308)* | 275 (259)* | 170 (164)* | 9.69** |

Professor Information

| Course Information | | | | |
|------------------------------|------------|------------|------------|---------|
| Course Name | 407 (407)* | 343 (342)* | 217 (217)* | .08** |
| Course Number | 388 (383)* | 317 (322)* | 205 (204)* | 1.60** |
| Course Description | 291 (284)* | 234 (239)* | 151 (152)* | .83** |
| Course Location | 178 (186)* | 150 (156)* | 114 (100)* | 4.92** |
| Course Time | 195 (207)* | 177 (174)* | 120 (110)* | 3.02** |
| Course Goals/Objectives | 271 (286)* | 241 (249)* | 168 (153)* | 7.14** |
| Course Required Texts | 365 (353)* | 305 (297)* | 170 (189)* | 15.44** |
| Course Supplemental Readings | 124 (143)* | 127 (120)* | 89 (76)* | 7.52** |
| Course Topics | 302 (312)* | 267 (262)* | 172 (166)* | 2.19** |
| Course Calendar | 257 (264)* | 222 (222)* | 149 (141)* | 1.68** |
| Course Due Dates | 191 (191)* | 161 (160)* | 102 (102) | .01** |

Table 9
Observed Frequencies (and Expected Frequencies)
of Syllabus Components Within Academic Levels* (continued)

| Syllabus Components | Academic Level | | | χ^2 |
|-------------------------|-------------------------------------|-------------------------------------|-----------------------|----------|
| | Lower Undergraduate (n = 421) | Upper Undergraduate (n = 354) | Graduate (n = 225) | |
| Grading Policy | 319 (320)* | 279 (269)* | 164 (171)* | 2.72** |
| Grading Scale | 217 (212)* | 189 (178)* | 98 (113)* | 5.70** |
| Assignment Names | 214 (226)* | 180 (190)* | 143 (120)* | 11.34** |
| Assignment Descriptions | 177 (193)* | 159 (162)* | 123 (103)* | 9.62** |

Grading Information

| Policy Information | | | | |
|--------------------------|------------|------------|-----------|--------|
| Attendance Policy | 208 (192)* | 153 (161)* | 96 (102)* | 4.04** |
| Late Work Policy | 77 (80)* | 57 (68)* | 58 (43)* | 8.69** |
| Missed Work Policy | 53 (56)* | 43 (47)* | 39 (30)* | 3.68** |
| Honor Code Policy | 135 (142)* | 135 (119)* | 68 (76)* | 4.82** |
| Disability Policy | 93 (96)* | 87 (81)* | 50 (51)* | .77** |
| Student Support Services | 30 (30)* | 25 (25)* | 17 (16)* | .05** |

Note.
For all χ^2 , $df = 2$.
* $p > .01$; ** $p > .002$

main levels of inclusion (see Table 10). In general, professors were much more likely to include general professor, course, and grading information than policy information. Specifically, professors included on their syllabi who they are (name) and how they can be reached (office location, phone number, and e-mail address), course identifiers (course name, number, and description), what the course entails (course goals, required texts, topics, and calendar), and how the course will be graded (grading policy). It is interesting to note that the components most included on faculty syllabi match up moderately well with faculty ratings of the importance of various syllabus components, but very poorly with student ratings of various components' importance (see Table 2). Faculty members' inclusion of syllabus components and ratings of importance both stress *descriptive* attributes of the course, that is, descriptions of who is the professor, what is the course content, and what is the grading policy. Students, however, focus more on the *production* attributes of the course, that is, what are the assignments (tests, quizzes, readings), when are the assignments due, and what is the attendance policy (see Tables 2 and 3).

This research also varies somewhat from the data attained by Eberly, Newton, and Wiggins (2001), who examined 145 syllabi from a mid-sized comprehensive university. Our data concur with Eberly et al.'s data for the inclusion of Professor Name, Course Number, Course Required Readings, Grading Policy, and Course Time. However, we found a much lower frequency of inclusion for Professor Office Phone (74.5% to 91.0%), Professor Office Location (74.0% to 91.0%), Professor Office Hours (57% to 88.8%), and Course Topics (74.1% to 89.0%), and a much higher frequency of inclusion for Professor E-mail Address (73.2% to 24.8%) and Honor Code Policy (33.8% to 16.6%). These differences may call into question the variability of syllabus component inclusion based on differences between institutional cultures (for instance, research institutions versus comprehensive institutions).

In addition to what is included on professors' syllabi, it is interesting to note what is not: Professors generally do not include course policy information. For example, the course Attendance Policy, which students both rate as important (see Garavalia et al., 1999) and pay significant attention to (see Becker and Calhoun, 1999) was included on less than half of the syllabi evaluated. The next most frequently included policy, included on one third of the syllabi, was the Honor Code Policy. Finally, only approximately one fourth of the syllabi included a Late Work Policy, a Missed Work Policy, and a Disability Policy, and only 1 in 10 syllabi made reference to Student Support Services.

The analyses of the effects of content area domain and academic level

| Least Frequently | Somewhat Frequently | Most Frequently |
|------------------------------|-------------------------|---------------------------|
| Course Supplemental Readings | Professor Office Hours | Professor Name |
| Late Work Policy | Course Location | Professor Office Location |
| Missed Work Policy | Course Time | Professor Office Phone |
| Honor Code Policy | Course Due Dates | Professor E-mail Address |
| Disability Policy | Grading Scale | Course Name |
| Student Support Services | Assignment Names | Course Number |
| | Assignment Descriptions | Course Description |
| | Attendance Policy | Course Goals/Objectives |
| | | Course Required Texts |
| | | Course Topics |
| | | Course Calendar |
| | | Grading Policy |

on syllabus component inclusion are remarkable in their consistency. While there were differences in the frequency of inclusion of various components across the different content area domains, the only patterns of interest revealed by the data are that engineering course syllabi tended to include less and social sciences syllabi tended to include more of the syllabus components evaluated than did the remainder of the content area domains. In addition, the differences in syllabus component inclusion across academic level were almost nonexistent, with lower-level undergraduate syllabi including the Professor Name less often than expected and graduate course syllabi including Course Required Texts less often than expected.

While this study identifies what syllabus components faculty generally include and provides evidence that these included components vary little across domain and academic level, questions regarding syllabus construction remain. Specifically, we examined only for the presence or absence of syllabus components, not for the content or quality of the components. Are there differences in the quality of syllabus components, such as clarity of writing and completeness of information? In addition, we did not attempt to differentiate syllabi components across institutional type. Are there also differences in the inclusion of syllabus components across institutions' Carnegie Classifications? Finally, this study began with 26 syllabus components and determined whether or not syllabi contained these components. This relation could be reversed, however, and syllabi could be evaluated simply for their components without a pre-existing list to determine what faculty include on their syllabi.

Ultimately, the extant literature is fairly consistent in providing recommended components of college course syllabi and in identifying those components that are important to faculty and students. This study, however, indicates that these syllabi tend to focus on what faculty value rather than on what students value, and that syllabi, in general, lack information that students consider important. Indeed, while there is a call for the development of more comprehensive, inclusive, student-centered, and robust syllabi (Eberly et al., 2001; Garavalia et al., 1999), there is little evidence that this call is being heeded. Ultimately, to fulfill the needs of the different syllabus constituents—faculty, students, and administrators—it will be necessary for faculty to include more specific material regarding grading information and policy information in addition to the already well reported professor and course information.

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