

An Analysis of Trends in Chapel Attendance

Chanell Anderson

Lauren Waggoner

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Purpose

Chapel is an integral part of nearly every student's time at Point Loma Nazarene University. Every Monday, Wednesday, and Friday provides a time for the student body to gather together as a whole along with faculty and staff in order to participate in Christ-centered community. Prior to Fall 2011, students enrolled in 12 or more units and all residential students with Freshman or Sophomores standing were required to attend 36 Chapels each semester and students with Junior or Senior standing were required to attend 28. In Fall 2008, the student-led service Time Out was offered to students as another opportunity to receive Chapel credit during the week. Through Spring 2009, a student could receive a maximum of three Chapel credits per week. This meant that Time Out could count as an alternate third Chapel credit for a given week. This policy changed in Fall 2009, however, and in a given week a student could earn up to four Chapel credits if they were to attend each Chapel service and Time Out. Because of flexibility in acquiring Chapel credits, it can be valuable from a Chapel programming perspective to understand the make-up of the congregation at different points of the semester. This project will explore the last five years of Chapel attendance, from Fall 2006 to Spring 2011, in order to better understand trends in attendance patterns, identify any emerging trends related to student demographics in the congregation throughout each semester, and determine if there are any correlations between the speaker of Chapel and who is in attendance. This will build off of the research project completed by Marilee Rickett, a 2010 PLNU graduate, who began analysis work on Chapel attendance from 2006 to 2009 (Rickett, 2009).

Data and Speaker Analysis

For the project, three main data sets were compiled and cleaned in order to perform analysis. This data encompassed five years, beginning with the Fall semester of 2006 and ending

with the Spring semester of 2011. The first data set contained the raw Chapel scan data, including Chapel attendance records for every Chapel from Fall 2006 to Spring 2011. This data set also included attendance records from Time Out services from Fall 2009 to Spring 2011. A separate file held Time Out scans from Spring 2007 to Spring 2009. The second data set held the student demographic information for each student present in Chapel during the same time period, and the final data set included categorization information related to each of the Chapel speakers and Time Out speakers for which attendance records were kept. The original data was generated by the Office of Spiritual Development and housed by Information Technology Services at PLNU. The data was then pulled by PLNU Mathematics professor, Dr. Greg Crow. To maintain confidentiality, each student who attended Chapel between Fall 2006 and Spring 2011 was assigned a unique faux identification number by Dr. Crow in order to distinguish each student and to link them to their demographic information pertinent to the study. All names were excluded.

The raw Chapel scan data included attendance records for each student for every Chapel from Fall 2006 to Spring 2011 and for every Time Out from Spring 2007 to Spring 2011. These files included over one million lines of scan data. Because of the size, organization, and number of duplicate scans in the raw data, a cleaning process was necessary. The original file of raw scan data included Faux IDs, the year, a scan date, a scan hour, a scan minute, and a tchap_no (a unique identification number for each service). Over the course of analysis, the date associated with each Chapel was found in many instances to be inaccurate. However, since each Chapel and Time Out service over the last five years was assigned a unique Chapel number, that number was used for the basis in analysis.

The student demographic information data set was an important piece for understanding which groups of students were present at different points of the semester for Chapel and Time Out. This data set also gave more information pertaining to each student who attended Chapel for a particular semester. This file included the number of Chapels required and excused for each student, each student's GPA for a particular semester rounded to the nearest 0.25, their class (FR, SO, JR, SR) at the end of the semester, a list of the students living on campus and a list of commuters, a list of students who had a class before Chapel on Monday, Wednesday, and/or Friday, and finally the gender of each student.

The final data set included categorization information related to each of the Chapel speakers from Fall 2006 to Spring 2011 and Time Out speakers from Fall 2009 to Spring 2011. Scans for Time out have been kept since Spring 2007, however records of who spoke during Time Out were not kept until Fall 2009. This file included the year, academic session (SP for Spring and FA for Fall), the Chapel number, the date, the day of the week (Mon, Wed, Fri, or "TO" for Time Out services so as not to be confused with Wednesday Chapels), and a short description including the speaker or topic of the Chapel. Based on this information, each Chapel was categorically broken down and this was included in the file as well. The additional categorical descriptors are: Communion, Spiritual Renewal Week, Creation Care Week, Writer's Symposium, Praise and Worship, Student Led, and gender of the speaker. "Communion" indicated whether or not communion was served as a part of the service on a given day. "Spiritual Renewal Week" referred to whether or not that Chapel or Time Out was a part of the week during each semester devoted to spiritual emphasis. "Creation Care Week" indicated if the particular Chapel was a part of the week during each semester focused on creation care and focused on topics or discussion relating to the week's events. "Writer's Symposium" indicated if

the Chapel was part of the Writer’s Symposium in the Spring hosted by the Department of Literature, Journalism, and Modern Languages. This information was obtained and confirmed by checking the Writer’s Symposium speakers on the PLNU website (Writer's Symposium By The Sea, 2011). “Praise and Worship” referred to Chapels where music and worship was the main focus of the Chapel rather than a particular speaker or panel. “Student Led” indicated whether or not a Chapel was largely run by students or if students were primary speakers in the service. Finally the gender of the speaker or speakers was accounted for. Each Chapel was either categorized as having a male speaker, female speaker, or both if multiple genders were involved in the Chapel service. This information was compiled using a list of Chapel speakers along with their date and Chapel number for each of the Chapels and Time Outs compiled by Spiritual Development and housed by Information Technology Services. Because it is important to make sure these records were accurate, each Chapel service was categorized and confirmed by listening to Chapel archives available online whenever possible. Certain Chapel services were not recorded – such as Praise and Worship days, some communion Chapels, and all but a very few Time Outs – and these Chapels and Time Outs were categorized based solely on the speaker description information given by Spiritual Development.

Data Clean Up

For the Chapel scan data to be usable, it was reviewed to ensure each student had at most two scans for each Chapel or Time Out. Scans were flagged if there were more than two for a single student on a particular Chapel or Time Out. The earliest scan “in” and the latest scan “out” were kept in scenarios where more than two scans were present. Instances of single scans for a student on a particular Chapel or Time Out were kept. A customized macro was used to read the scans and create a single row for each Chapel or Time Out attended for each student. Each row

included the faux ID, Chapel number, scan in hour, scan out hour, scan in minute, scan out minute, and duration. Duration was calculated based on the scan times. The durations for single scans were left blank at this time. To ensure data integrity, thirty students were selected randomly and their rows for Chapel and Time Out scans were manually checked against the original scans. This verified that the correct scans were kept and the duration was calculated properly.

In order to gather all of the data acquired, a single Excel sheet was created that pulled information from other Excel sheets. This master sheet listed the faux ID of each student that was enrolled in PLNU at some point from Fall 2006 to Spring 2011 in the first column. The gender of each student was then added and flagged male, female, or unknown accordingly. There were some occurrences where the gender of a student was not recorded. See Appendix F for further information about students with unrecorded genders.

Next, for each semester, the academic year of each student was read in and flagged accordingly. Freshmen were indicated by “FR,” Sophomores by “SO,” Juniors by “JR,” and Seniors by “SR.” These were determined based on units earned at PLNU. A Freshman is defined as having 0-24 units, a Sophomore has 25-56 units, a Junior has 57-88 units, and a Senior has more than 89 units (Academic Policies, 2012). The original data included the student’s academic year based on units earned at the end of the semester. The data was altered to reflect the student’s status during the semester, not at the end, by rolling the class standing back by a semester’s worth of units.

The Chapel requirement for each student was also included. Data was read in to indicate if the student had a Chapel petition approved for that semester. There is also data that includes the number of Chapels the student scanned into, the number of one-way scans (one scan on a two

scan day) the student had, the number of manual scans (manually enter ID number instead of scanning ID card), the number of excused Chapels, and the unmet portion of the Chapel requirement. A comment section is also included to provide the reason for a lowered Chapel requirement although the vast majority of these had already been cleared for confidentiality reasons.

The next section for each semester included each Chapel and Time Out listed horizontally by Chapel number. If the student attended that Chapel or Time Out, the duration the student was present was read in accordingly. If the Chapel or Time Out was a single scan service and the student scanned in or out, a “999” was placed accordingly. If the Chapel or Time Out was not a single scan service, but the student only scanned once, a “1” was placed accordingly. If the student did not scan at all for a Chapel or Time Out, a “0” was placed accordingly.

Each Chapel number was categorized by the day of the week it occurred on or if it was a Time Out as well as the type of Chapel or Time Out. The recorded types are Communion, Spiritual Renewal Week, Creation Care Week, Writer’s Symposium, Student Led, male speaker, female speaker, both, and praise and worship. More than one of these categories could apply to any given Chapel or Time Out.

Anomalies

Within the Chapel scans data, there were anomalies. The data pulled for Fall 2006 to Spring 2011 included all of the Chapel scans for January 9, 2006. This date does not fall within the scope of the project, therefore it was removed. Also, there were three people with scan out times between 13:00 and 14:00 hours. These were removed from the data set because they could not have been accurate scan times.

For Chapel number 544, there were many instances where the duration for students was above 700 minutes. This Chapel number corresponded to a time out service. Some of the scan-in times were in the 9:00 hour and the scan out times were in the 21:00 or 22:00 hour. The scan in hour corresponded to Chapel and the scan out hour corresponded to Time Out. The Chapel number for some of the scans was inaccurate and some of the scans belonged to the Wednesday Chapel of the same day. To verify this, the total number of students in attendance for #544 was compared with the total number of students in attendance for the previous two Time Out services, #537 and #540, and the following Time Out, #548. The total number of students in attendance for #543, the Wednesday Chapel the same day of #544, was compared with the total number of students in attendance for the previous two Wednesday Chapels, #536 and #539, and the following Wednesday Chapel, #547.

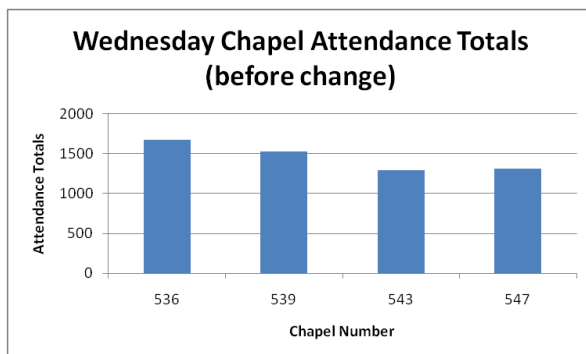


Figure 1

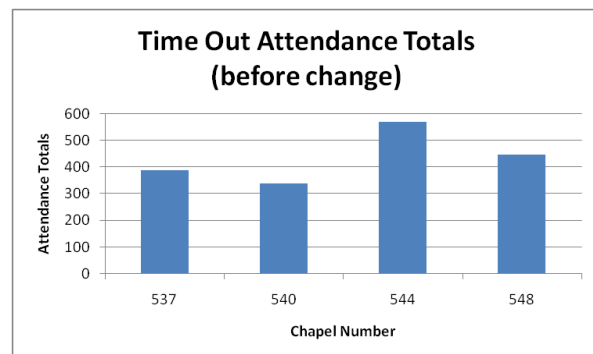


Figure 2

The number of students supposedly in attendance for Chapel number 544 was higher than expected and the number of students supposedly in attendance for Chapel number 543 was lower than expected. The original scans were examined for Chapel numbers 543 and 544 and the Chapel numbers were altered to reflect the correct Chapel number based on scan in and out times. After the changes were made, the attendance totals for the same Chapel numbers were reevaluated. The attendance totals for Chapel numbers 543 and 544 now reflect expected data.

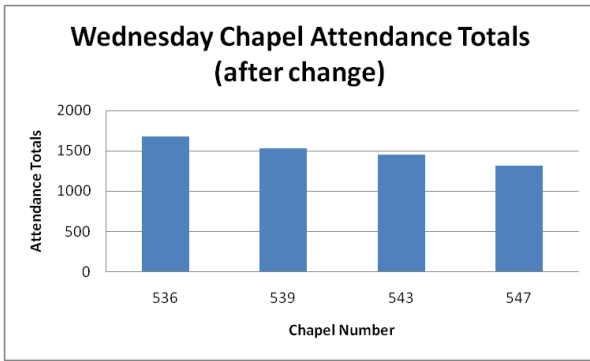


Figure 3

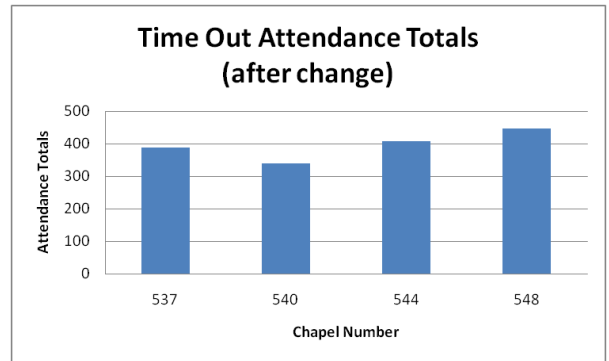


Figure 4

For Chapel number 719, a similar problem occurred and the same verification process occurred. See Appendix A for the associated charts.

Results

Attendance Totals

Figure 5 depicts the rise and fall of Chapel attendance throughout each semester. The beginning of each semester can be seen at the high points and the end of the semester can be seen at the low points.

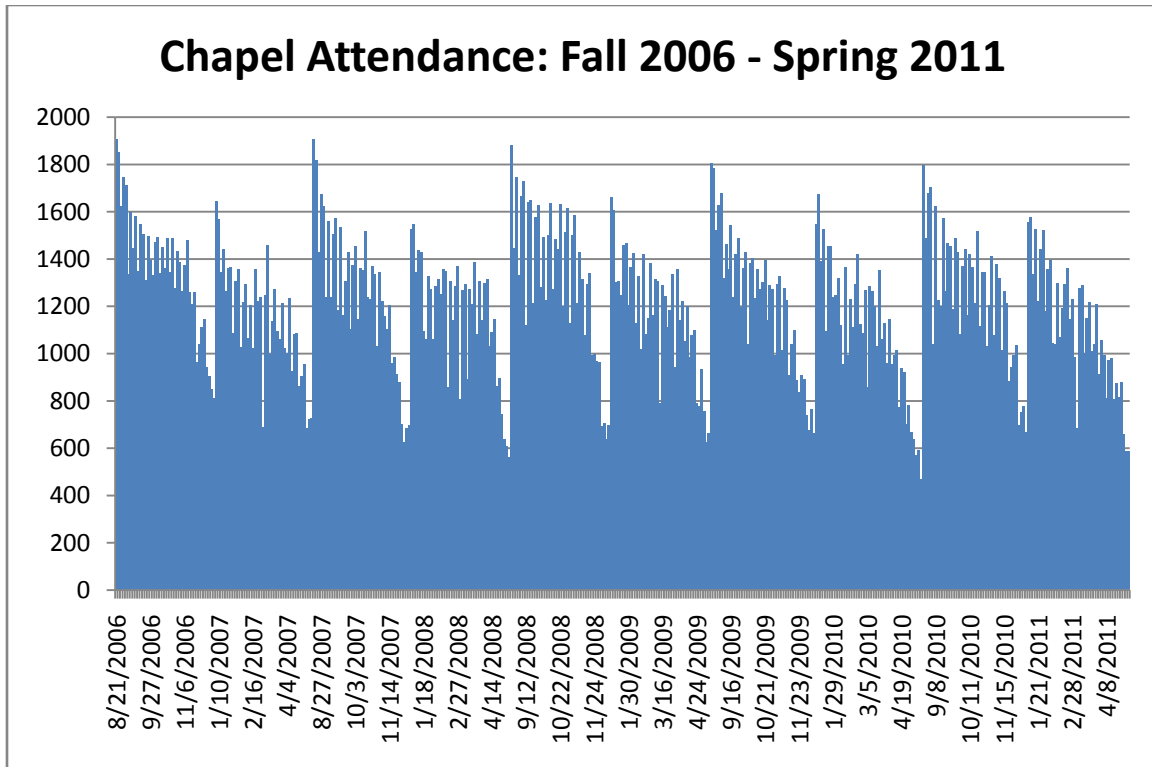


Figure 5

Figure 6 depicts Time Out attendance totals. There is not as much of a gradual decline in attendance here. From Spring 2007 to Spring 2010, Time Out was held in the Recreation Room. During the Fall 2010 to Spring 2011 year, Time Out was held in Brown Chapel. Attendance maintained higher totals throughout the semester after it moved to a larger location. See Appendix B for charts detailing the congregation attendance for each school year.

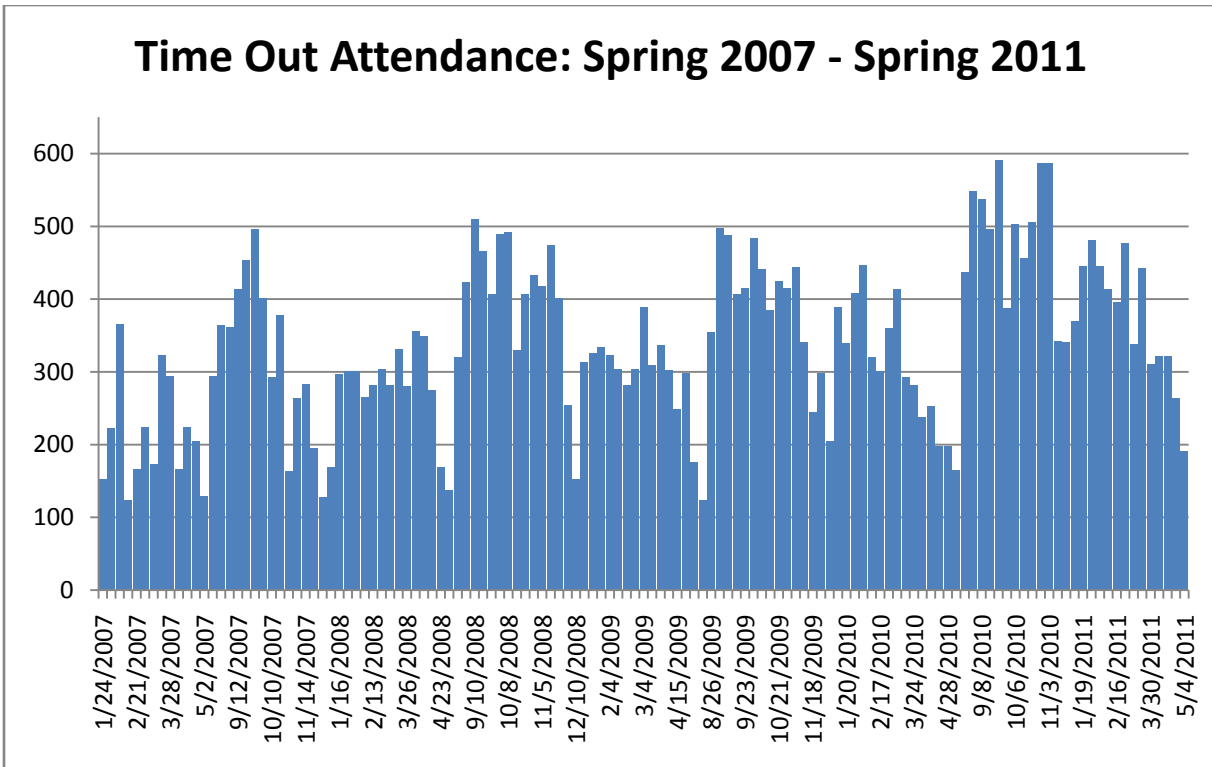


Figure 6

Daily Attendance

After adding the total number of students in attendance on any given Monday, Wednesday, or Friday Chapel and Time Out over the entire scope of this project, it is observed that Wednesday is the highest attended Chapel service as seen in Figure 7.

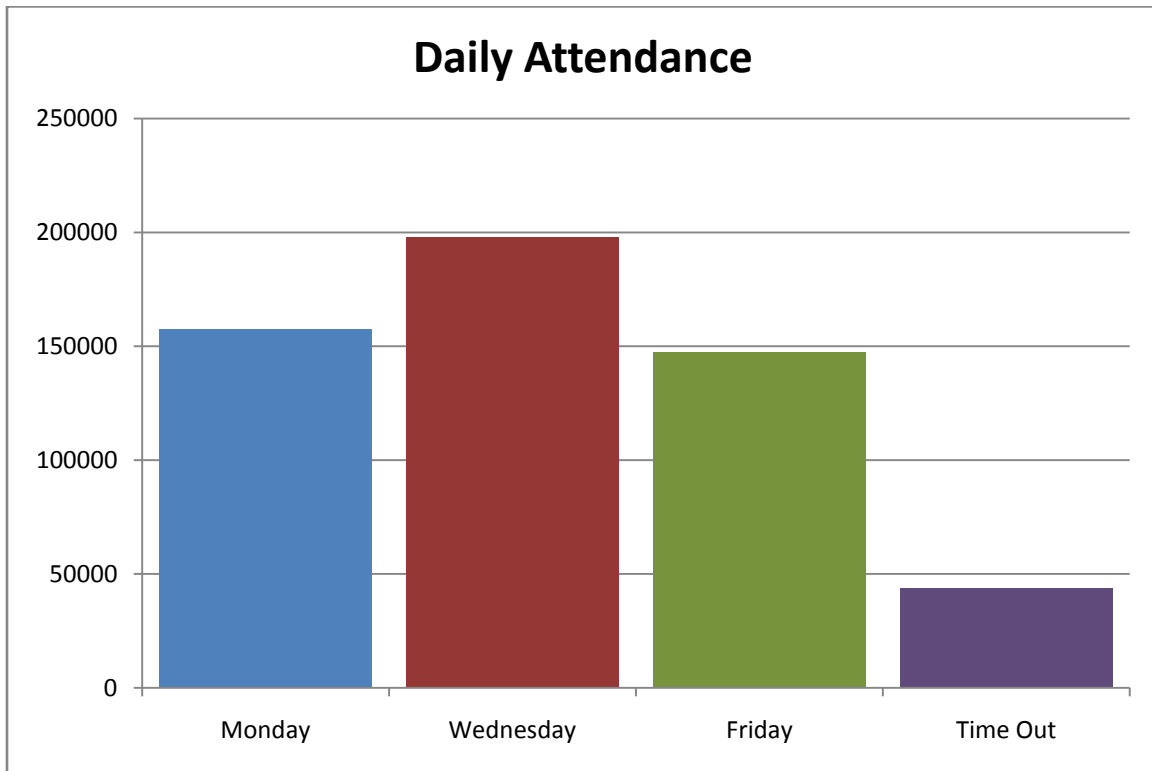


Figure 7

When broken down by semester, it can be seen in Figure 8 that Time Out is attended more in the Fall semesters than in the Spring semesters which could be due to required attendance of Love Works meetings during Spring semesters. Time Out attendance has increased overall over the last four and half years. During Fall semesters, Monday has higher attendance totals than Fridays. During the Spring semesters, Monday and Friday attendance totals are closer to each other.

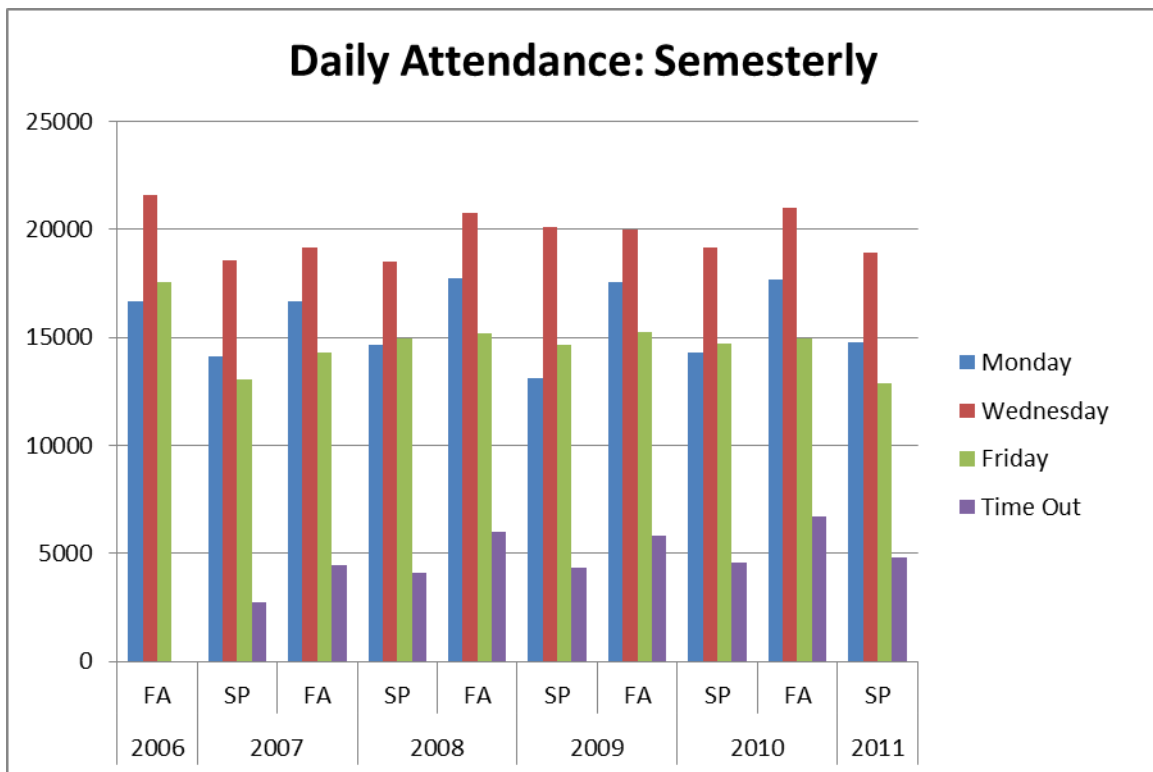


Figure 8

Gender Analysis: Congregation Attendance

Figure 9 gives an example of the ratio of males to females in Chapel attendance. Red shows the percentage of the Chapel congregation that was female and blue shows the percentage of the Chapel congregation that was male. The line drawn at 39% reflects the actual student body ratio between males and females during that semester. Throughout most of the semester more females than males attend Chapel. During the last few weeks of Chapel males make up more of the Chapel congregation than the ratio would suggest. This trend in congregation attendance proposes that females meet their Chapel requirement before the last few weeks of the semester and therefore stop attending. Figure 1C in Appendix C displays the female and male population numbers as well as the corresponding percentages. Appendix C also contains all figures depicting the gender ratio in Chapel and Time Out attendance. Figure 10 gives an example of the gender ratio in Time Out. Males tend to attend Time Out more than their representation in the population would suggest throughout the semester.

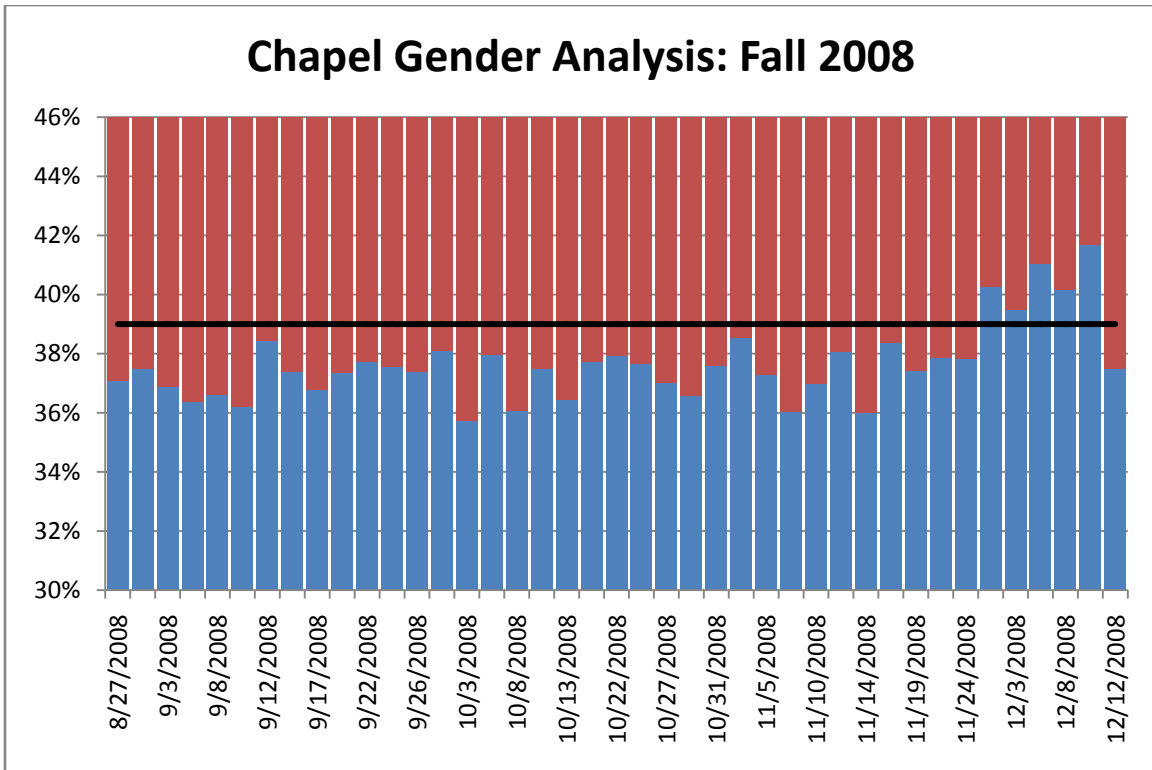


Figure 9

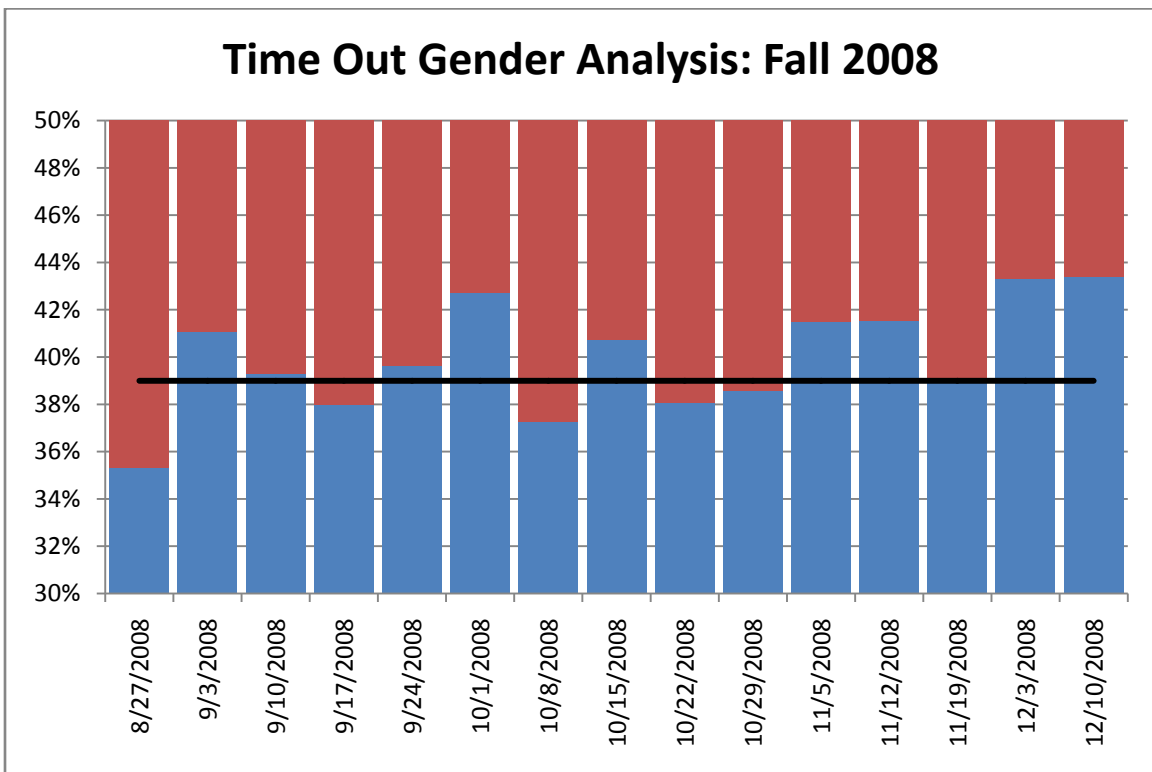


Figure 10

Gender Analysis: Type of Chapel and Time Out

Using Chapel speaker analysis it is observed in Figure 11 that a particular type of Chapel does not draw one gender over the other to Chapel. It should be noted that Writer's Symposium Chapels only occur during Spring semesters and Creation Care week Chapels do not happen every semester. This table shows that the average attendance of each gender for a particular type of Chapel corresponds with the student population gender ratio.

Using Chapel speaker analysis for Fall 2009 through Spring 2011 for Time Out it can be seen that there are no Time Outs recorded as being part of the Writer's Symposium week during Spring semesters and there are no Time Outs recorded as being solely Praise and Worship. There are also no Time Outs recorded as having served communion. Figure 12 shows that there is no correlation between type of Time Out and the gender ratio in the congregation.

	Chapel Average Attendance by Gender Ratio									
	Fall 2006		Spring 2007		Fall 2007		Spring 2008		Fall 2008	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Communion	37%	63%	38%	62%	38%	62%	40%	60%	37%	63%
Spiritual Renewal Week	37%	63%	37%	63%	37%	63%	37%	63%	38%	62%
Creation Care Week	37%	63%	39%	61%	36%	64%	0%	0%	37%	63%
Writer's Symposium	0%	0%	37%	63%	0%	0%	36%	64%	0%	0%
Student Led	38%	62%	39%	61%	38%	62%	38%	62%	37%	63%
Male Speaker	38%	62%	38%	62%	38%	62%	37%	63%	37%	63%
Female Speaker	38%	62%	50%	50%	37%	63%	38%	62%	38%	62%
Both Genders	38%	62%	38%	62%	37%	63%	37%	63%	38%	62%
Praise & Worship	37%	63%	39%	61%	37%	63%	37%	63%	37%	63%
	Spring 2009		Fall 2009		Spring 2010		Fall 2010		Spring 2011	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Communion	38%	62%	37%	63%	37%	63%	38%	62%	37%	63%
Spiritual Renewal Week	38%	62%	35%	65%	36%	64%	38%	62%	37%	63%
Creation Care Week	0%	0%	0%	0%	0%	0%	37%	63%	0%	0%
Writer's Symposium	38%	62%	0%	0%	0%	0%	0%	0%	37%	63%
Student Led	39%	61%	36%	64%	37%	63%	37%	63%	37%	63%
Male Speaker	37%	63%	36%	64%	36%	64%	38%	62%	38%	62%
Female Speaker	39%	61%	36%	64%	42%	58%	38%	62%	38%	62%
Both Genders	39%	61%	36%	64%	37%	63%	39%	61%	38%	62%
Praise & Worship	37%	63%	36%	64%	36%	64%	38%	62%	36%	64%

Figure 11

Time Out Average Attendance by Gender Ratio								
	Fall 2009		Spring 2010		Fall 2010		Spring 2011	
	Male	Female	Male	Female	Male	Female	Male	Female
Communion	0%	0%	0%	0%	0%	0%	0%	0%
Spiritual Renewal Week	38%	62%	37%	63%	35%	65%	31%	69%
Creation Care Week	0%	0%	0%	0%	39%	61%	0%	0%
Writer's Symposium	0%	0%	0%	0%	0%	0%	0%	0%
Student Led	37%	63%	39%	61%	37%	63%	38%	62%
Male Speaker	37%	63%	39%	61%	37%	63%	39%	61%
Female Speaker	38%	62%	39%	61%	37%	63%	35%	65%
Both Genders	42%	58%	35%	65%	38%	62%	35%	65%
Praise & Worship	0%	0%	0%	0%	0%	0%	0%	0%

Figure 12

Cohort Analysis: Congregation Attendance

The overall cohort makeup of the Chapel congregation at the beginning of each semester is almost even among Freshmen, Sophomores, Juniors, and Seniors as seen in Figure 13. Throughout the semester, the percentage of Sophomores in the congregation tends to increase and the percentage of Juniors in the congregation tends to decrease. This suggests that Sophomores and Juniors are committed to meeting their Chapel requirement before the end of the semester. The drop in Juniors before the end of the semester can be attributed to the smaller Chapel requirement than Sophomores. The percentage of Seniors in the congregation increases during the last few weeks of the semester which suggests that Seniors wait until the very end of the semester to meet their Chapel requirement. It can be noted that the percentage of Freshmen in the Chapel congregation remains fairly steady throughout the semester. Cohort analysis charts broken down by semester and cohort can be found in Appendix E.

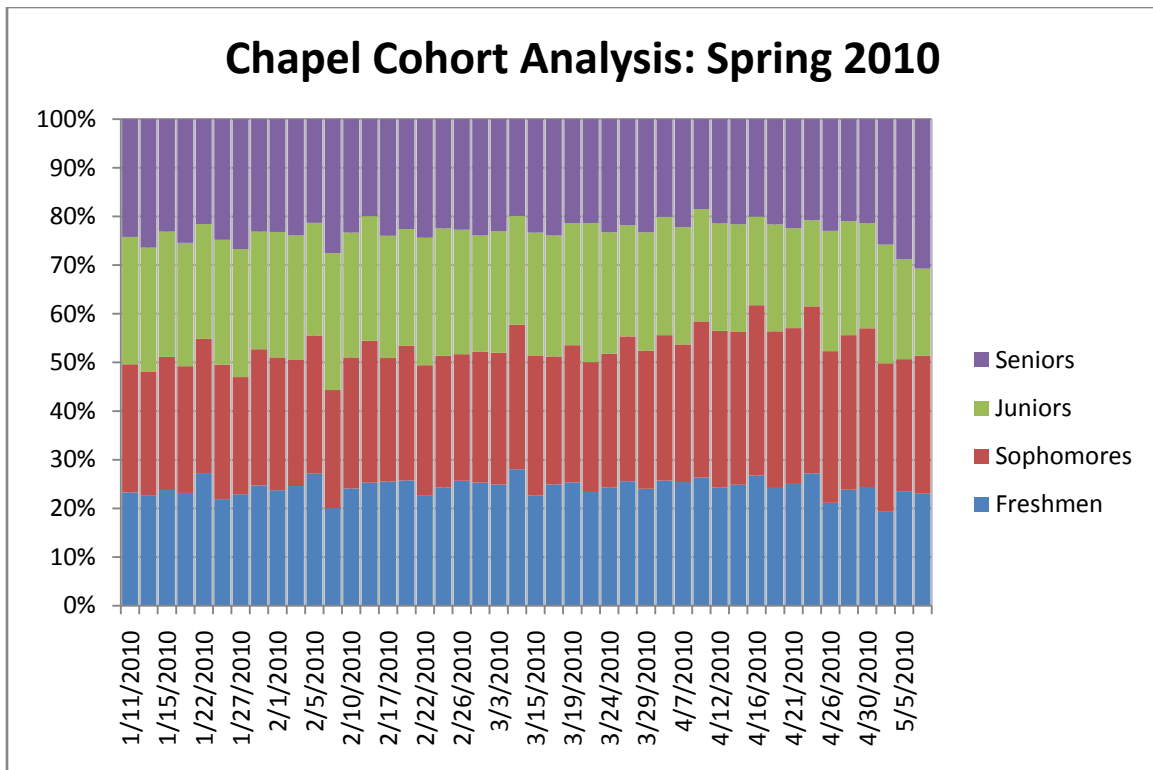


Figure 13

Figure 14 reflects the percentage of Freshmen, Sophomores, Juniors, and Seniors in Time Out throughout the Spring 2010 semester. Freshmen and Sophomores make up a majority of the congregation throughout every semester. The percentage of Seniors in the congregation increases towards the end of the semester. This illustrates that underclassmen use Time Out more than upperclassmen to meet their Chapel requirement. It also shows that some Seniors utilize Time Out at the end of the semester to meet their requirement.

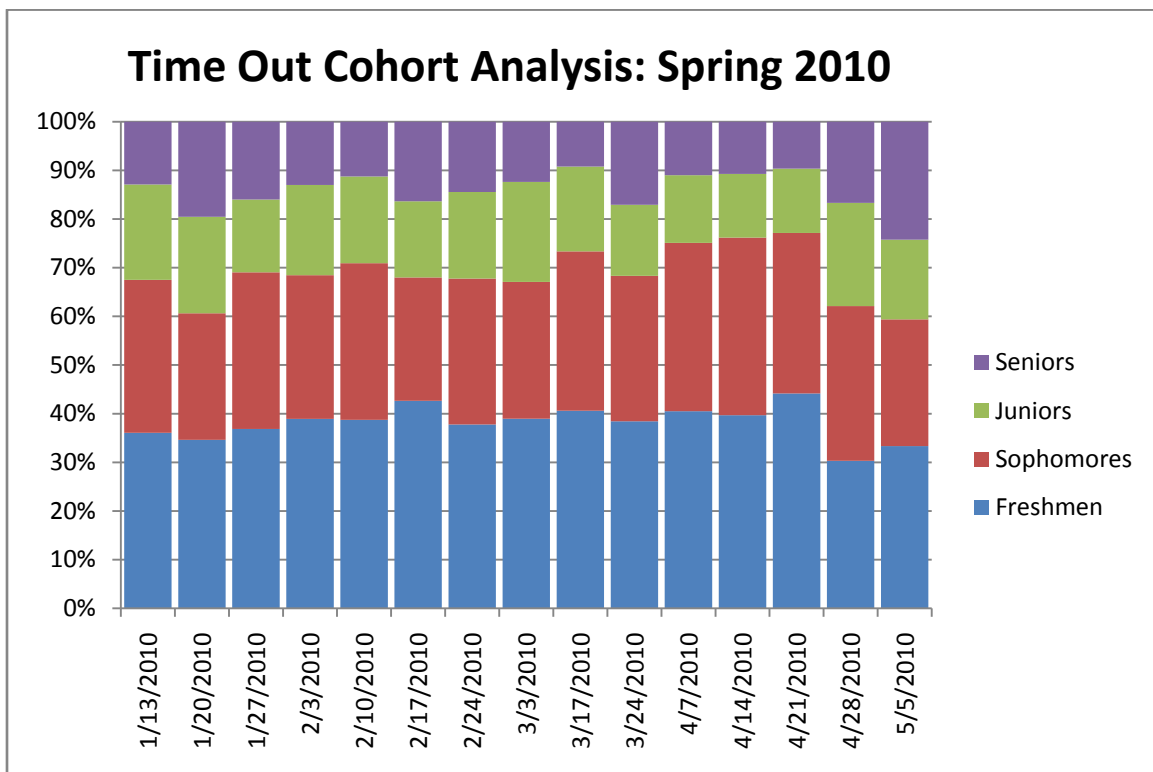


Figure 14

Cohort Analysis: Type of Chapel and Time Out

Using Chapel speaker analysis it can be noted that the type of Chapel does not draw a particular cohort more than any other to the congregation as seen in Figure 15. The same trend is apparent for Time Out as seen in Figure 16.

	Chapel Average Attendance by Cohort Ratio																			
	Fall 2006				Spring 2007				Fall 2007				Spring 2008				Fall 2008			
	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors
Communion	25%	34%	23%	18%	26%	29%	22%	23%	27%	35%	22%	16%	27%	28%	21%	24%	25%	34%	23%	18%
Spiritual Renewal Week	25%	34%	24%	18%	24%	27%	25%	24%	26%	32%	24%	18%	28%	26%	23%	23%	23%	34%	23%	20%
Creation Care Week	26%	34%	22%	17%	26%	28%	23%	24%	27%	32%	24%	17%	0%	0%	0%	0%	24%	34%	23%	20%
Writer's Symposium	0%	0%	0%	0%	24%	27%	25%	24%	0%	0%	0%	0%	26%	27%	24%	24%	0%	0%	0%	0%
Student Led	26%	35%	23%	17%	25%	30%	22%	24%	27%	33%	22%	18%	27%	28%	22%	23%	24%	35%	22%	19%
Male Speaker	25%	34%	23%	18%	24%	28%	24%	24%	27%	33%	23%	17%	27%	27%	23%	23%	24%	34%	22%	19%
Female Speaker	24%	35%	23%	18%	25%	29%	23%	23%	27%	32%	24%	17%	27%	27%	22%	23%	25%	35%	21%	19%
Both Genders	27%	40%	18%	14%	25%	30%	21%	24%	27%	34%	23%	17%	26%	27%	23%	24%	24%	34%	22%	20%
Praise & Worship	24%	35%	22%	18%	24%	28%	23%	24%	27%	33%	23%	17%	26%	27%	23%	24%	25%	35%	21%	20%
	Spring 2009				Fall 2009				Spring 2010				Fall 2010				Spring 2011			
	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors
Communion	23%	26%	23%	27%	27%	36%	20%	18%	25%	26%	23%	26%	28%	35%	21%	17%	25%	28%	23%	24%
Spiritual Renewal Week	23%	28%	24%	25%	25%	34%	23%	18%	23%	26%	26%	25%	28%	33%	22%	17%	25%	27%	24%	24%
Creation Care Week	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	27%	33%	23%	17%	0%	0%	0%	0%
Writer's Symposium	24%	28%	23%	26%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	26%	27%	23%	23%
Student Led	25%	30%	20%	25%	26%	35%	22%	17%	25%	29%	23%	23%	27%	32%	23%	18%	26%	29%	22%	23%
Male Speaker	24%	29%	22%	25%	25%	35%	22%	18%	24%	28%	24%	23%	27%	33%	22%	18%	26%	29%	21%	23%
Female Speaker	25%	30%	22%	24%	26%	34%	22%	17%	24%	32%	23%	21%	28%	34%	21%	17%	26%	27%	23%	23%
Both Genders	24%	29%	21%	25%	26%	36%	21%	17%	25%	28%	24%	23%	27%	33%	22%	18%	25%	29%	22%	24%
Praise & Worship	25%	29%	22%	24%	26%	35%	22%	17%	26%	32%	22%	20%	29%	33%	21%	16%	26%	28%	23%	24%

Figure 15

Time Out Average Attendance by Cohort Ratio																
	Fall 2009				Spring 2010				Fall 2010				Spring 2011			
	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors
Communion	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Spiritual Renewal Week	31%	42%	20%	8%	37%	32%	15%	16%	43%	35%	13%	9%	41%	31%	15%	12%
Creation Care Week	0%	0%	0%	0%	0%	0%	0%	0%	38%	38%	15%	9%	0%	0%	0%	0%
Writer's Symposium	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Student Led	33%	38%	17%	12%	38%	31%	17%	14%	38%	36%	16%	10%	40%	29%	15%	15%
Male Speaker	35%	37%	16%	12%	38%	32%	17%	13%	37%	37%	15%	10%	40%	29%	16%	15%
Female Speaker	33%	39%	17%	11%	31%	25%	14%	30%	40%	35%	15%	10%	42%	29%	15%	14%
Both Genders	35%	35%	17%	13%	41%	27%	19%	14%	37%	37%	16%	10%	40%	30%	17%	13%
Praise & Worship	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Figure 16

Chapel Requirement Completed

The first year Time Out was offered for credit, more students met their Chapel requirement in the 9-12 week range as seen in Figure 17. The next two years, students had the possibility of acquiring four Chapel credits per week but a larger percentage of students met their requirement in the last four weeks of the semester or not at all as pictured in Figure 18. Additional Chapel requirement completed charts broken down by semester can be found in Appendix G.

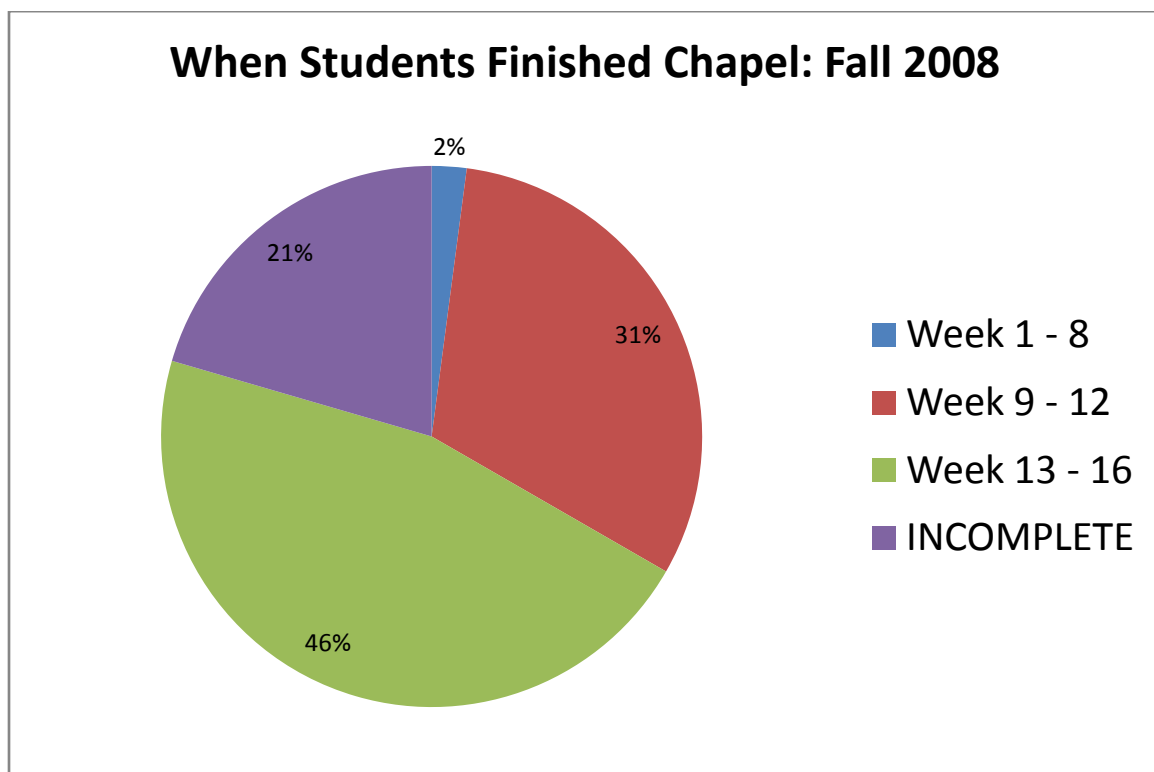


Figure 17

When Students Finished Chapel: Fall 2009

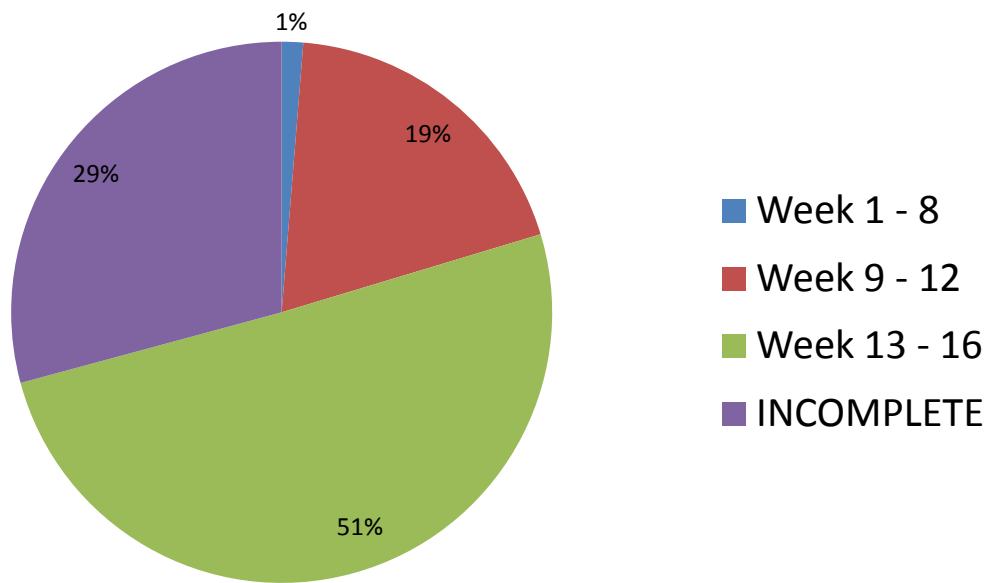


Figure 18

Gender Analysis: Chapel Requirement Not Met

Each semester (except for one, see Appendix H, Figures 17H and 18H), the percentage of females who did not meet their Chapel requirement by 1-4 Chapels is greater than the percentage of males who are off by 1-4 Chapels as pictured here in Figures 19 and 20. This suggests that females who do not meet their requirement are generally closer to meeting their requirement than their male counterparts. For charts showing how far all students were from meeting their Chapel requirement each semester, not broken down by gender, see Appendix I.

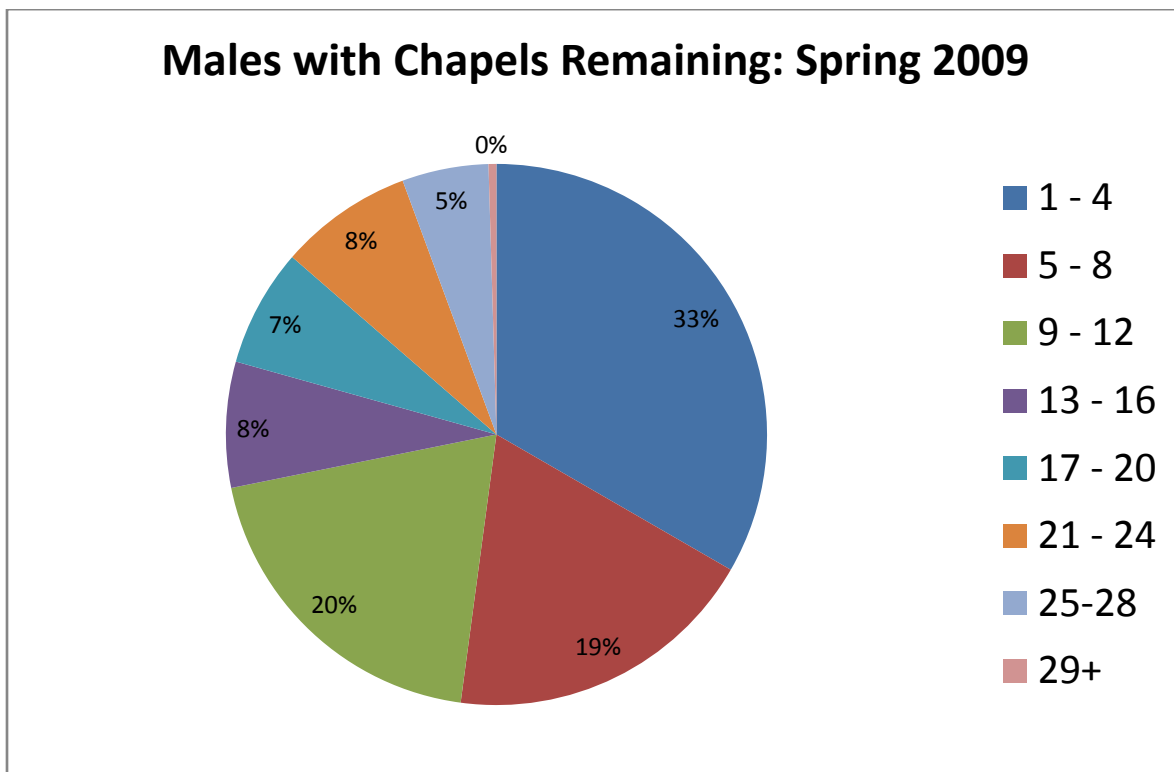


Figure 19

Females with Chapels Remaining: Spring 2009

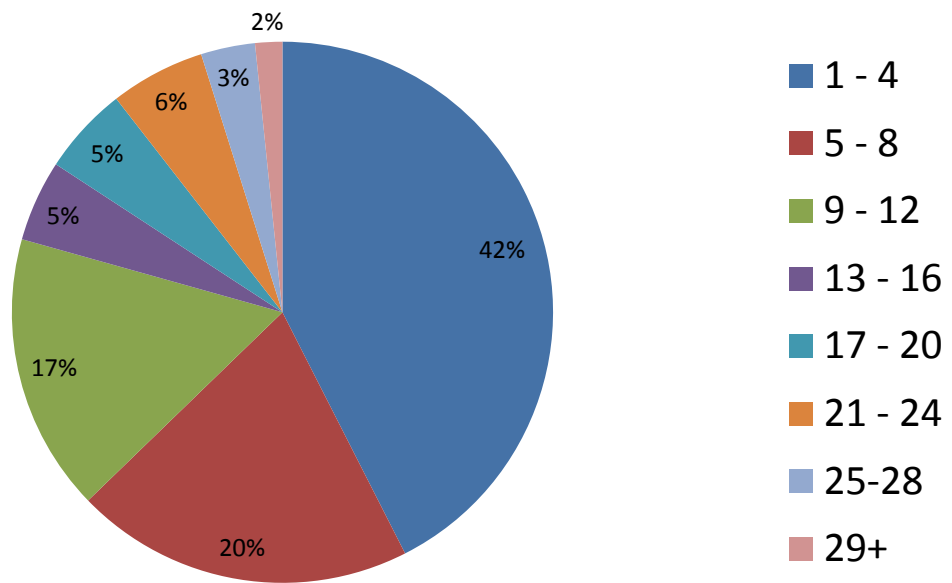


Figure 20

Cohort Analysis: Chapel Requirement Not Met

Over the five years studied, on average 63.8% of the students who did not finish their Chapel requirement were upper classmen. Senior students made up the largest cohort group of students who did not meet their Chapel requirement each semester as pictured in Figure 21.

Appendix J contains charts displaying this information for each semester.

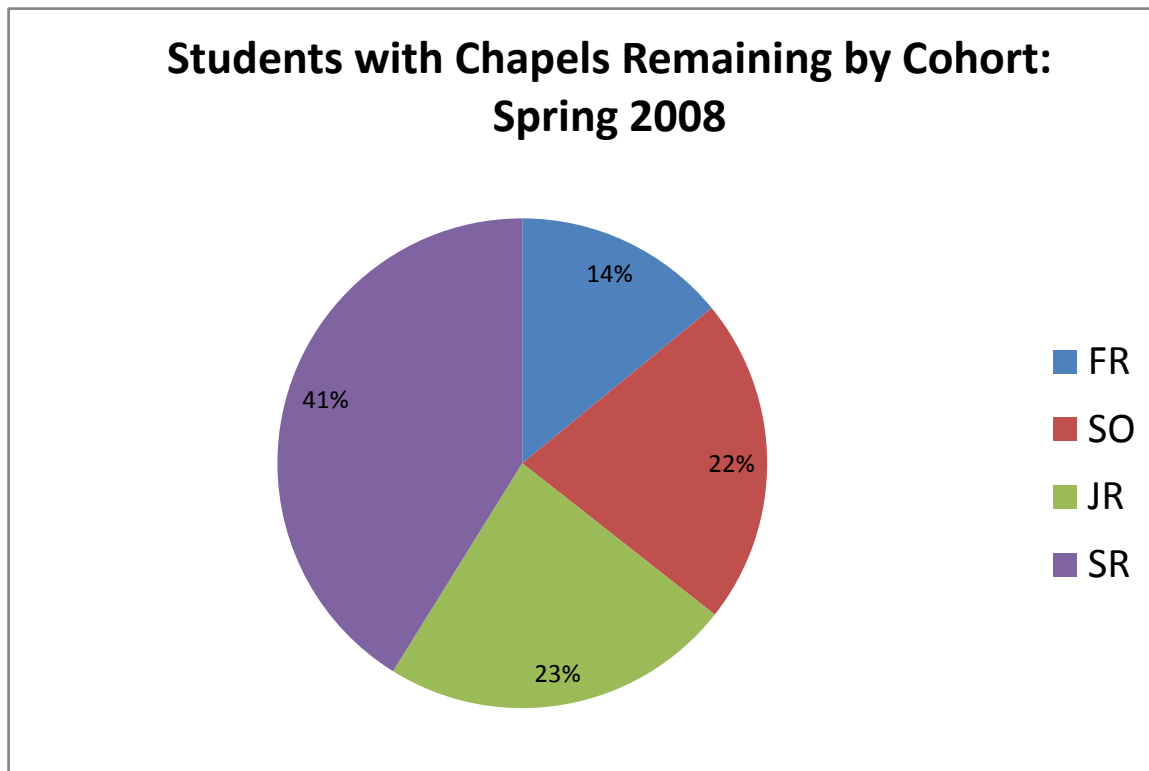


Figure 21

During the five year study, Freshmen and Sophomores students were required to attend 36 Chapels each semester while Juniors and Seniors only needed to attend 28. This example of Fall 2006 in Figures 22, 23, 24, and 25 shows that the Senior cohort contains the greatest percentage of students who do not seem to attend any Chapels. This trend was consistent throughout each semester studied. Additional charts showing the number of Chapels remaining by individual cohorts broken down by semester can be found in Appendix K.

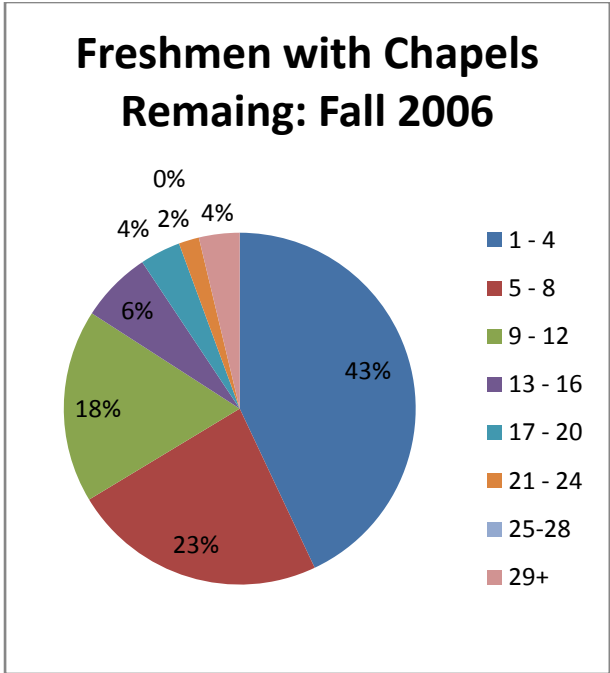


Figure 22

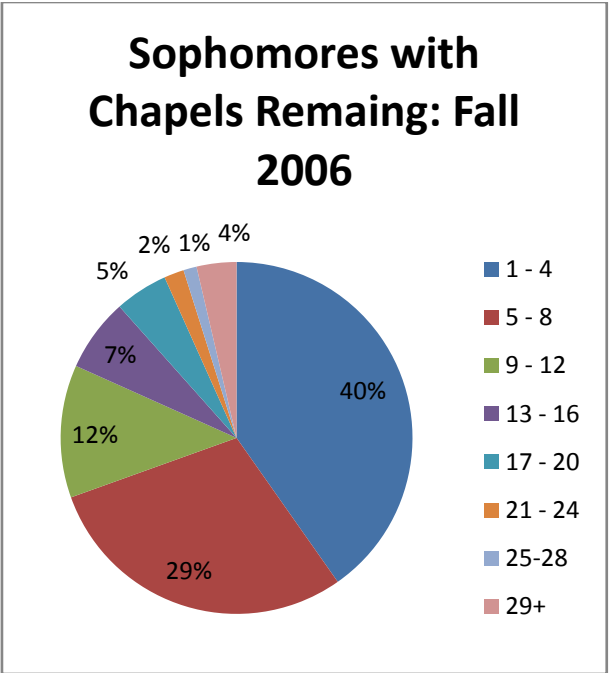


Figure 23

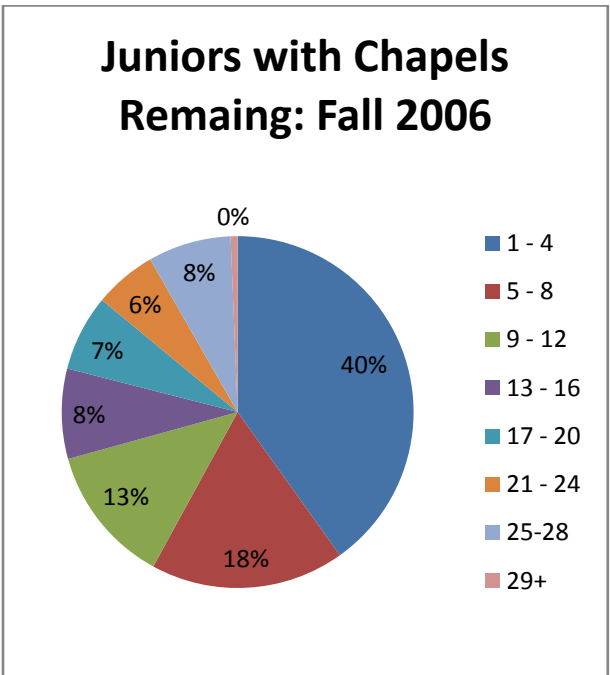


Figure 24

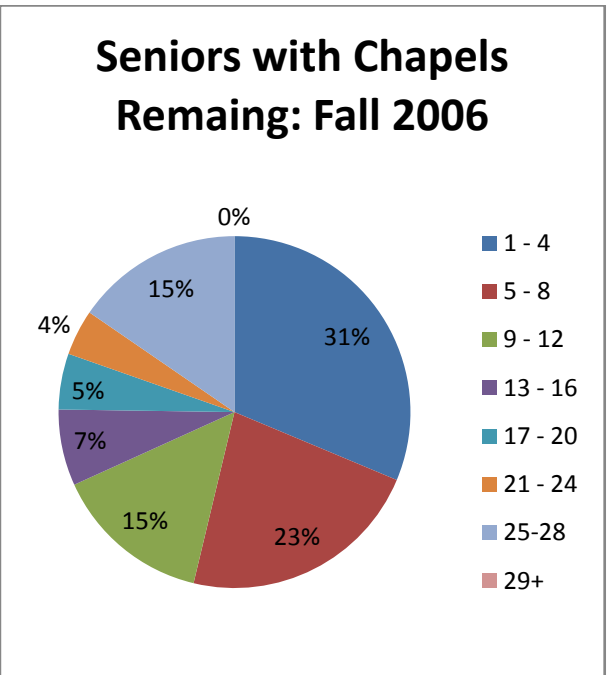


Figure 25

Future Research

More data that could provide further understanding about the Chapel congregation throughout the semester was obtained regarding the demographics of each student than was utilized in this research due to time constraints. Further pieces of information to examine for each student include their grade point average (GPA), class schedule, and major. The GPA of the students present in the congregation could illustrate if people dedicated to their studies are also dedicated to meeting their Chapel requirements. The class schedule of the students could also indicate whether or not they will attend Chapel. If a student has a class before Chapel Monday, Wednesday, or Friday are they more likely to attend than someone who does not have a class until after Chapel? The student's major could also be considered to indicate if a particular department has students who are more likely to attend Chapel or meet their requirement at a particular point in the semester. The additional demographic information of Love Works participation in a given Spring semester might resolve the Fall and Spring semester Time Out attendance disparity.

Data Storage Suggestions

The Chapel and Time Out scans should all be stored in a single file with dates that correspond to the actual date of the Chapel or Time Out, not the date the data was inputted. The description of each Chapel and Time Out should be stored in a file so future research can be done without having to listen to archived Chapel recordings.

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Appendix A

Anomalies

This appendix shows the number of people in attendance for the Chapel and Time Out services occurring before and after the Chapel numbers 719 and 696. The Chapel service number 696 occurred on the same day as the Time Out service numbered 719. The attendance total for Chapel number 719 was higher than expected and the attendance total for Chapel number 696 was lower than expected. Some of the scan times for Chapel number 719 corresponded to a morning Chapel service instead of an evening Time Out service. Some of the scans were fixed to reflect attendance at the proper service based on scan in and out times. The congregation attendance totals after changes were made reflect attendance trends.

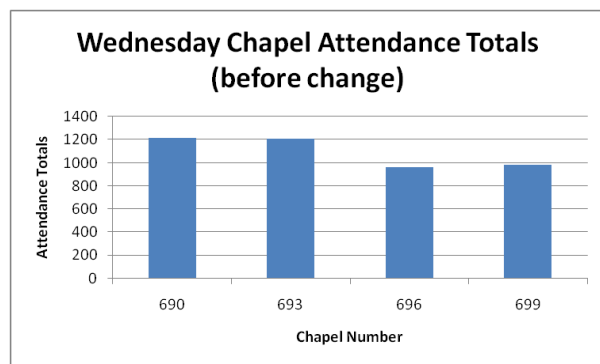


Figure 1A

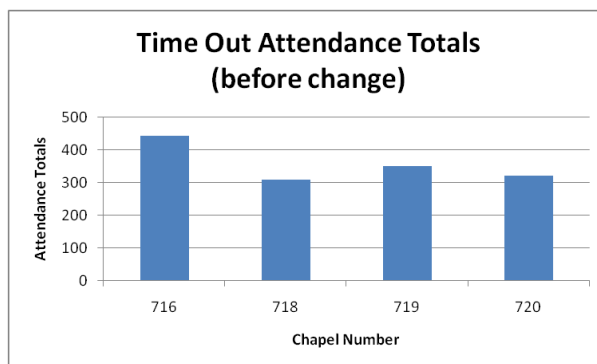


Figure 2A

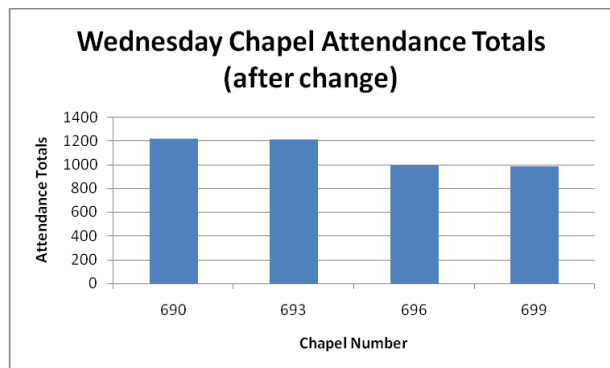


Figure 3A

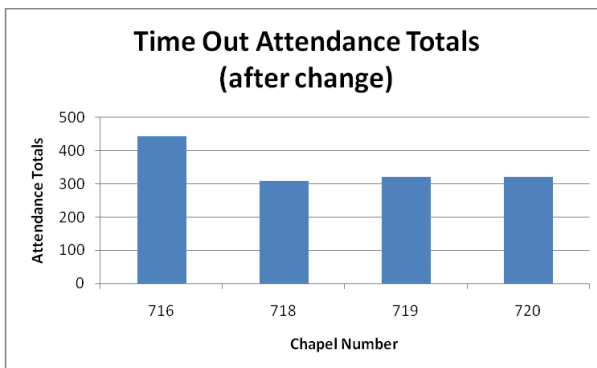


Figure 4A

Appendix B

Congregation Attendance Totals

This appendix shows the rise and fall in attendance totals for each Chapel and Time Out over the scope of this project. Note that there are no Time Out records prior to Spring 2007.

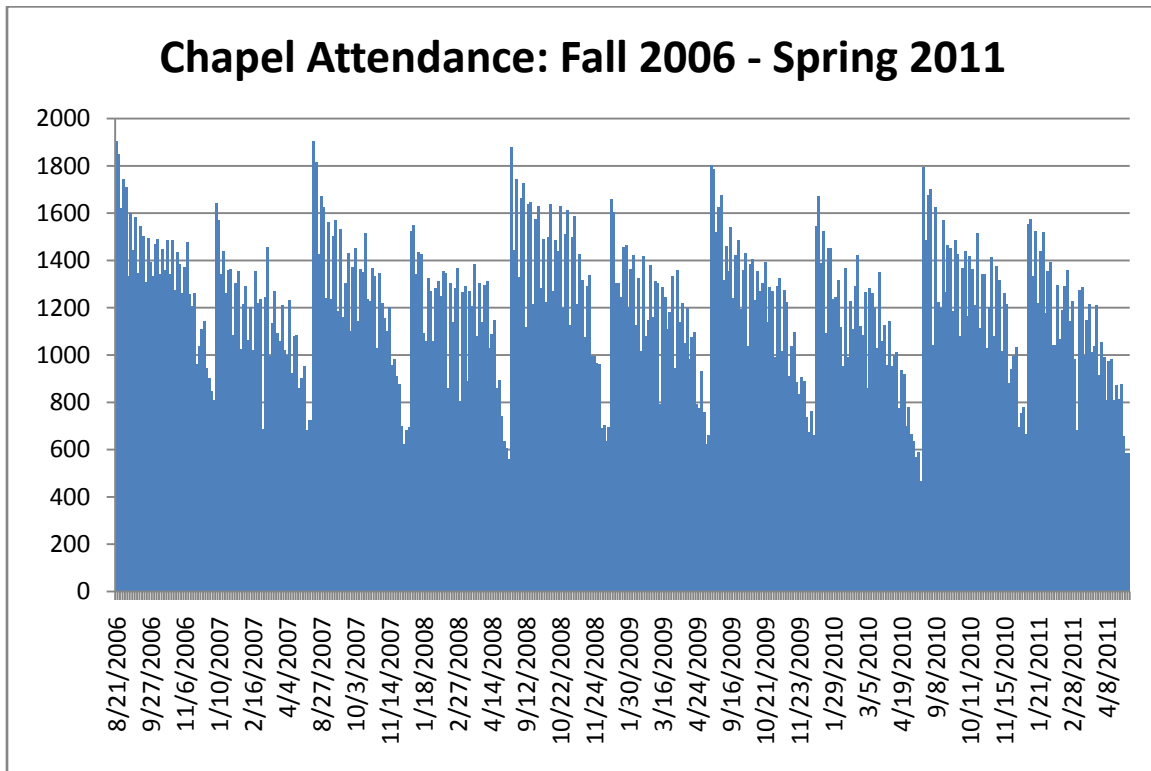


Figure 1B

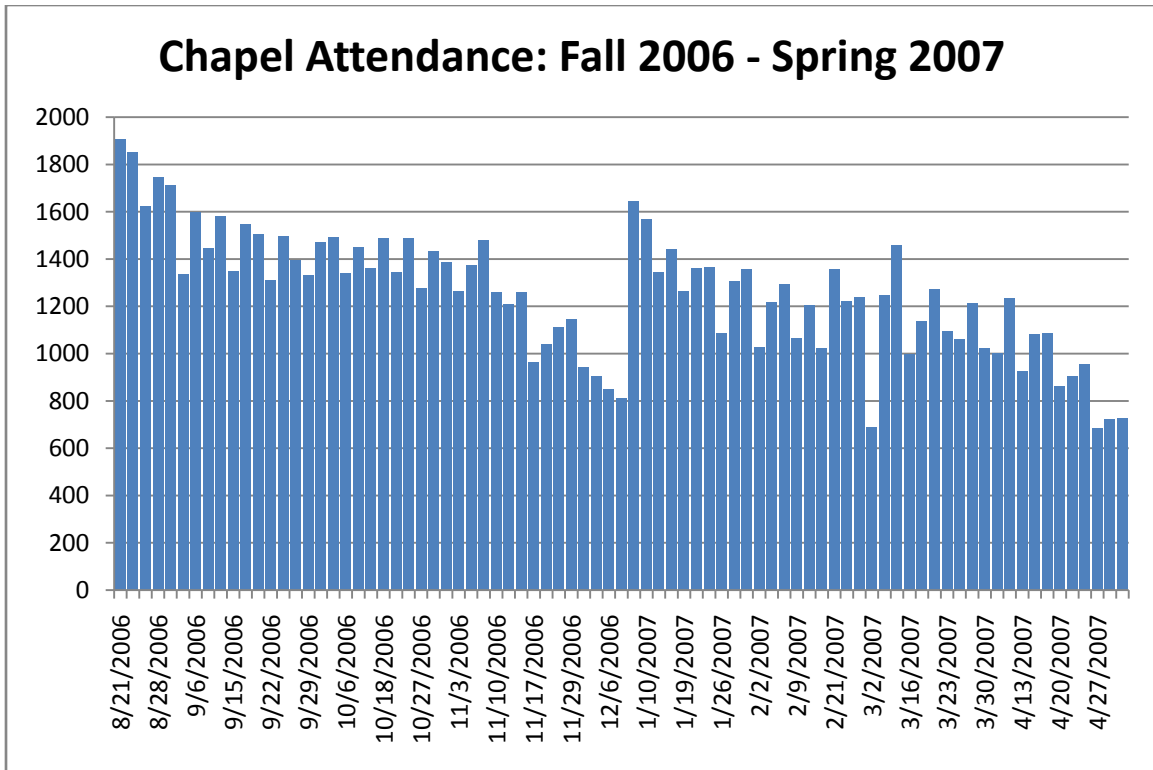


Figure 2B

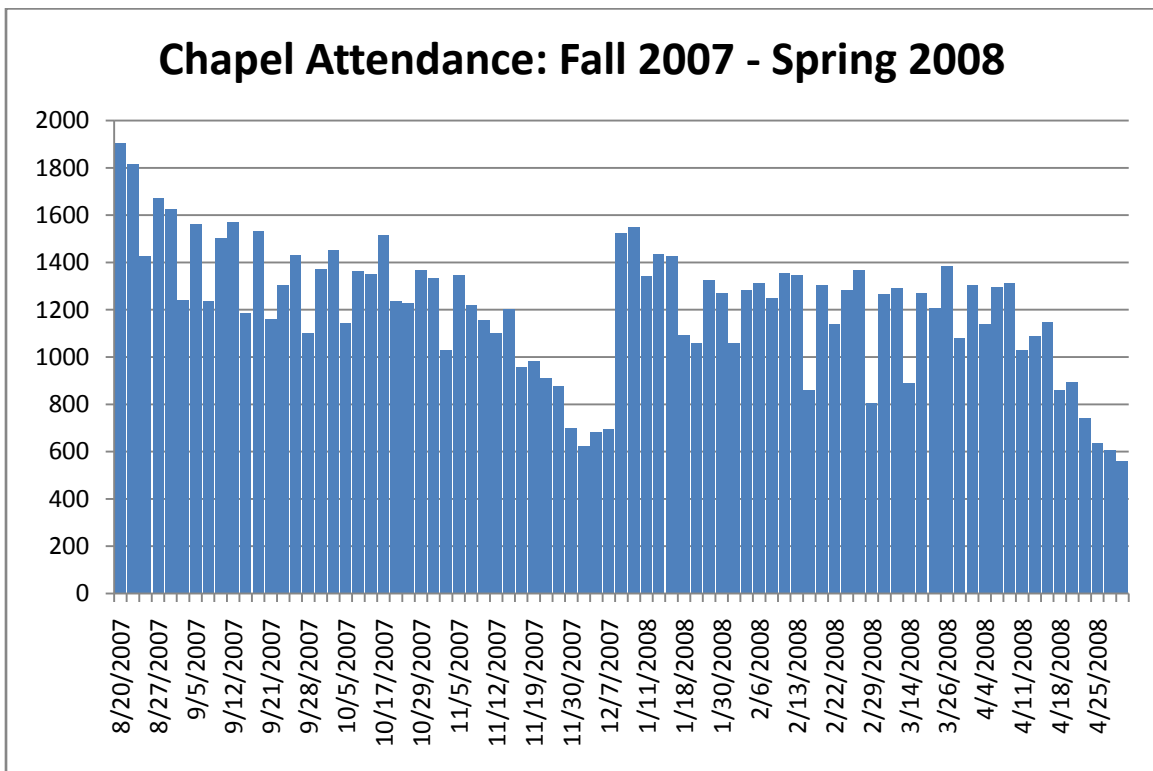


Figure 3B

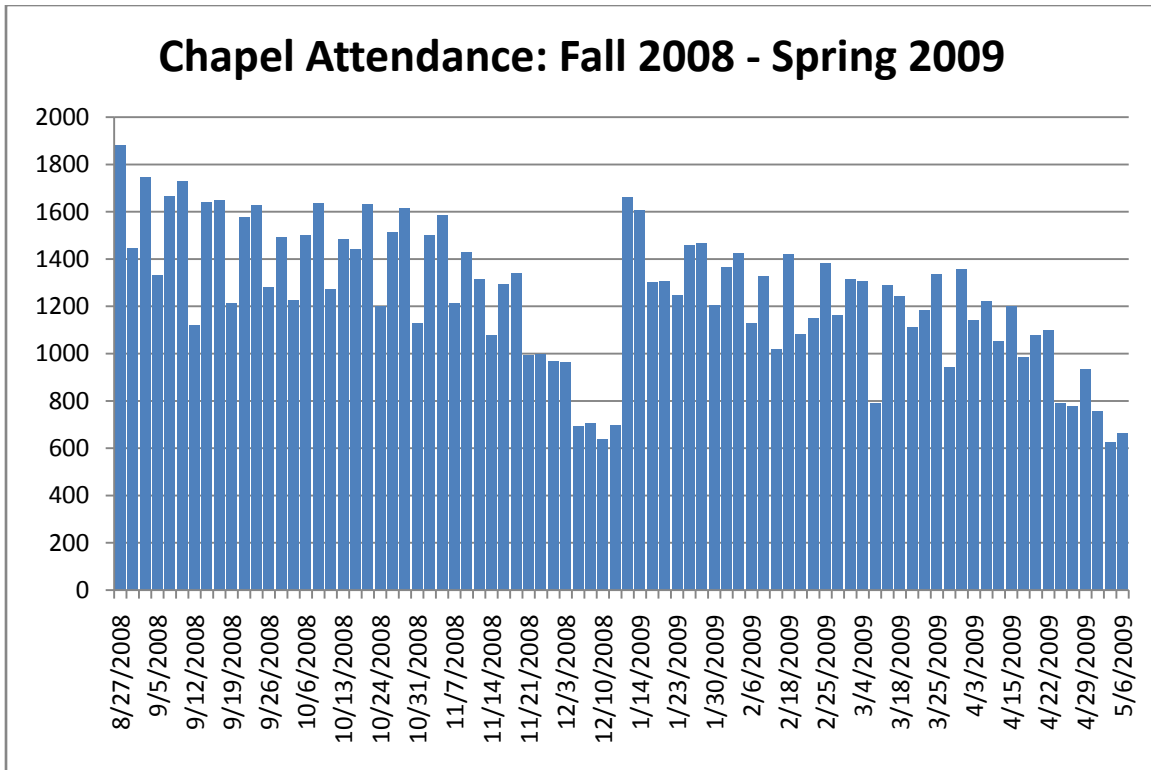


Figure 4B

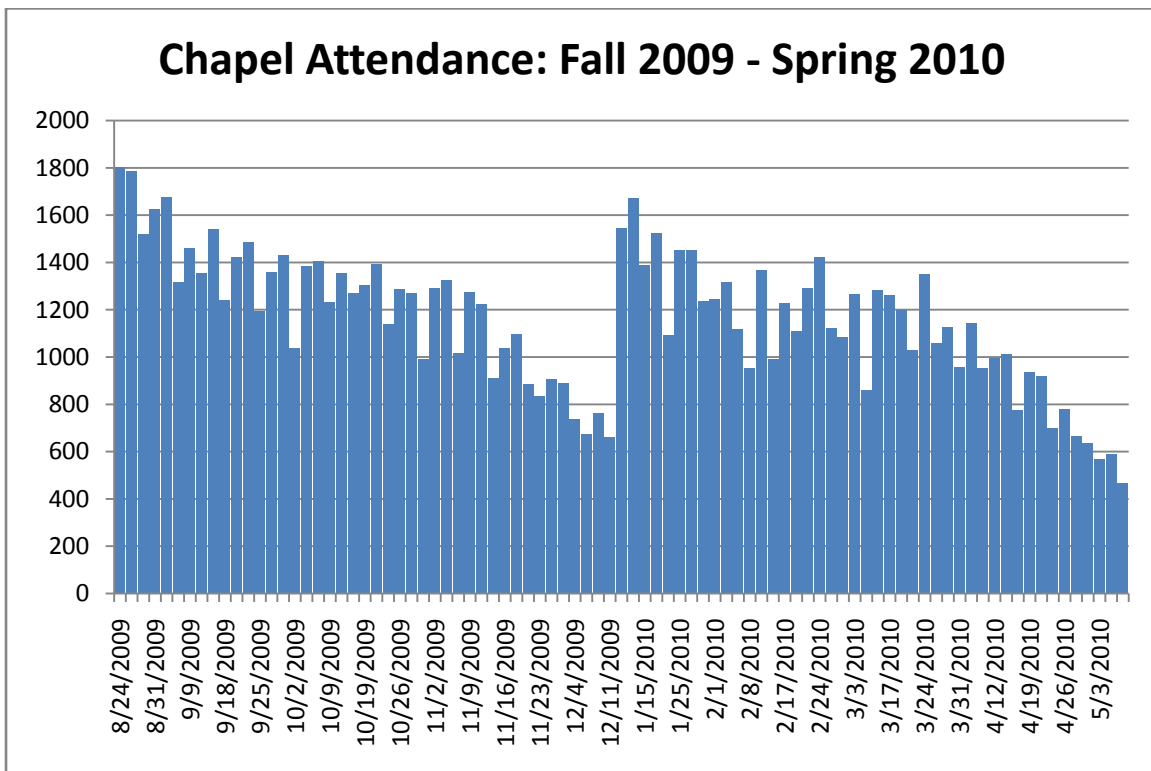


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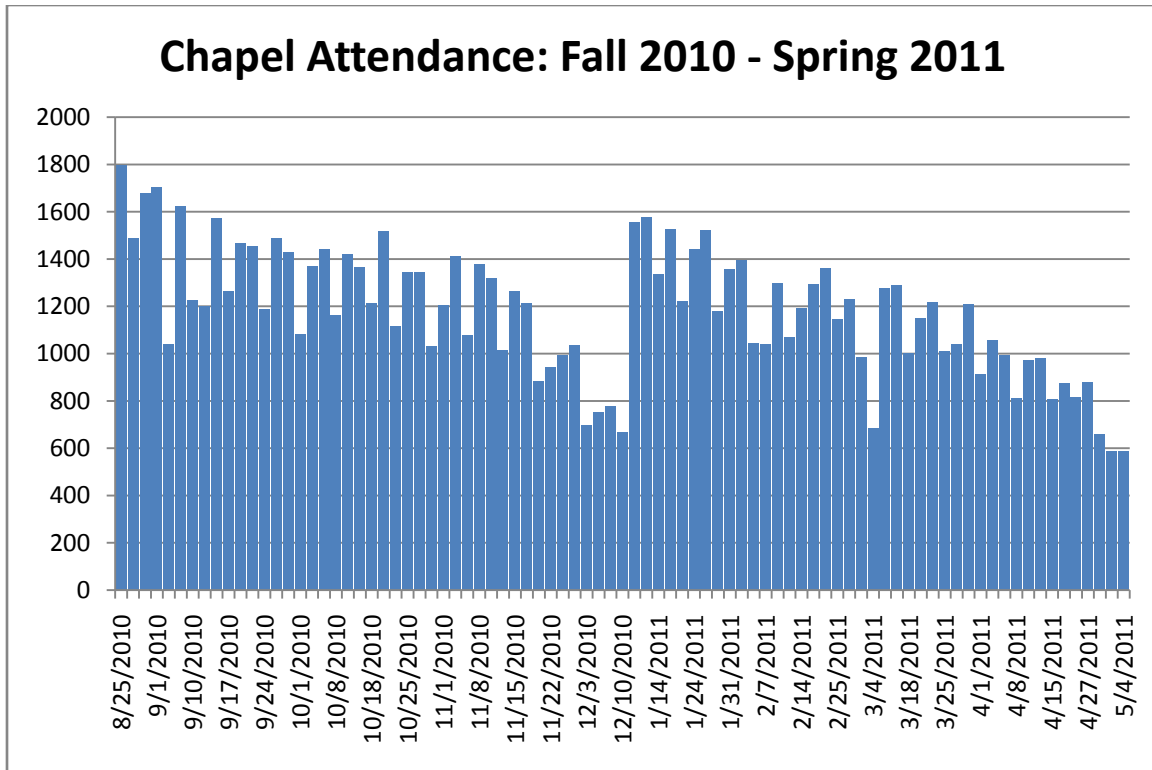


Figure 6B

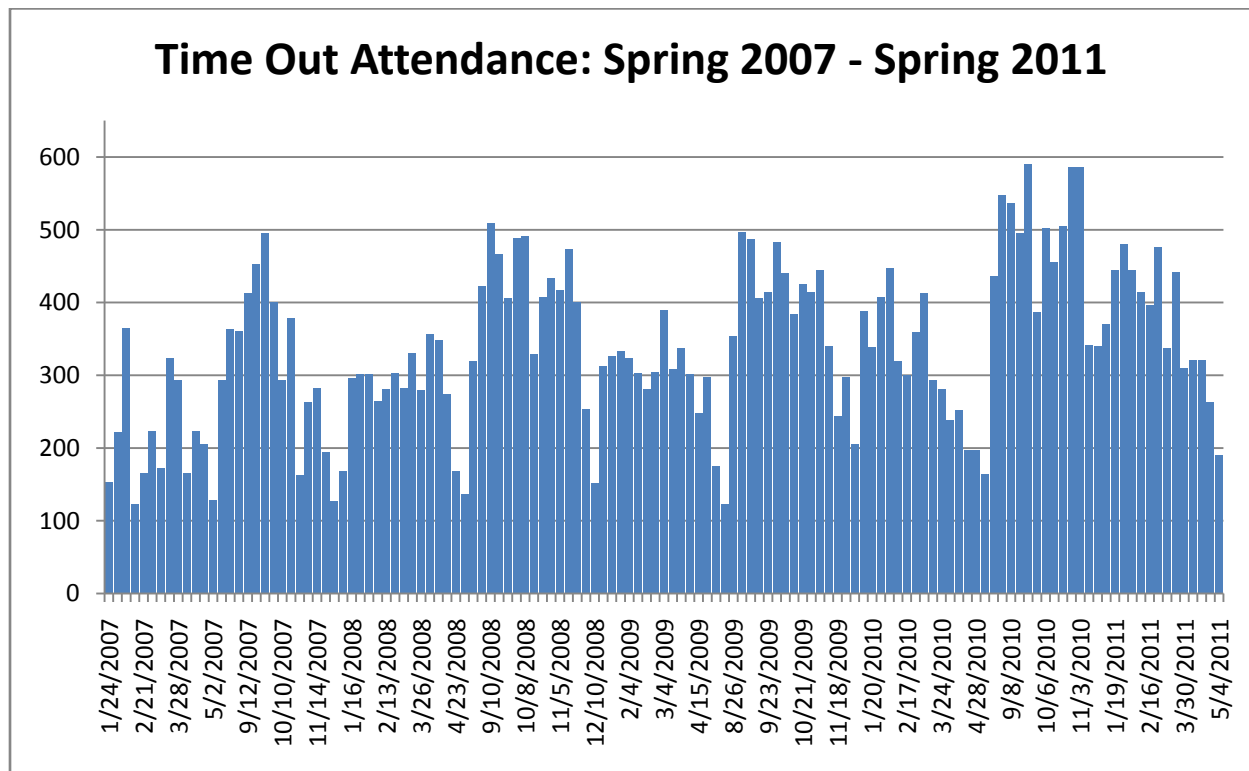


Figure 7B

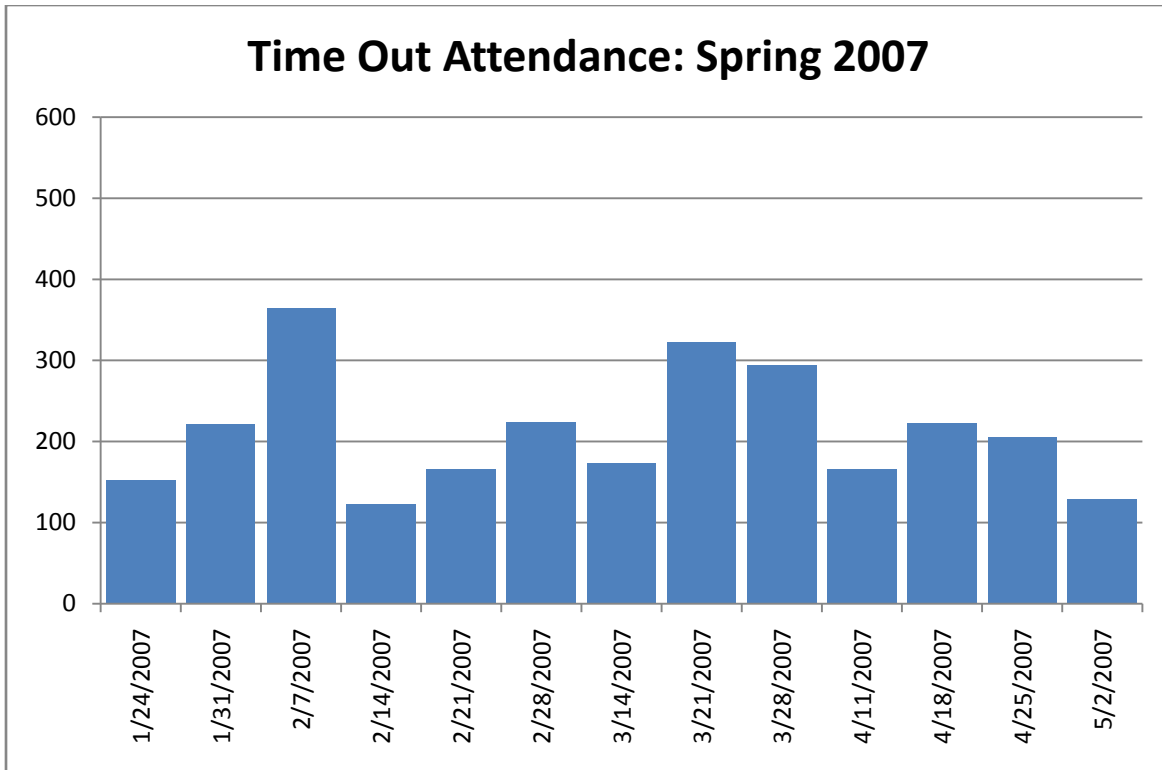


Figure 8B

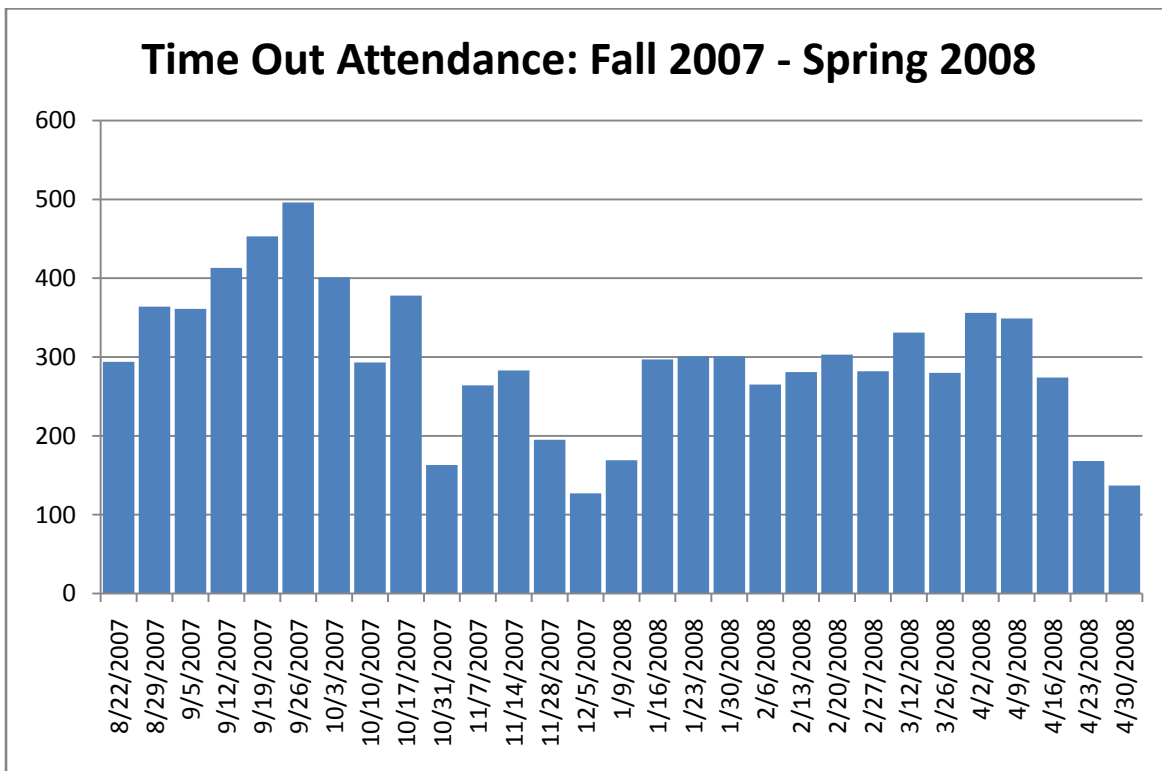


Figure 9B

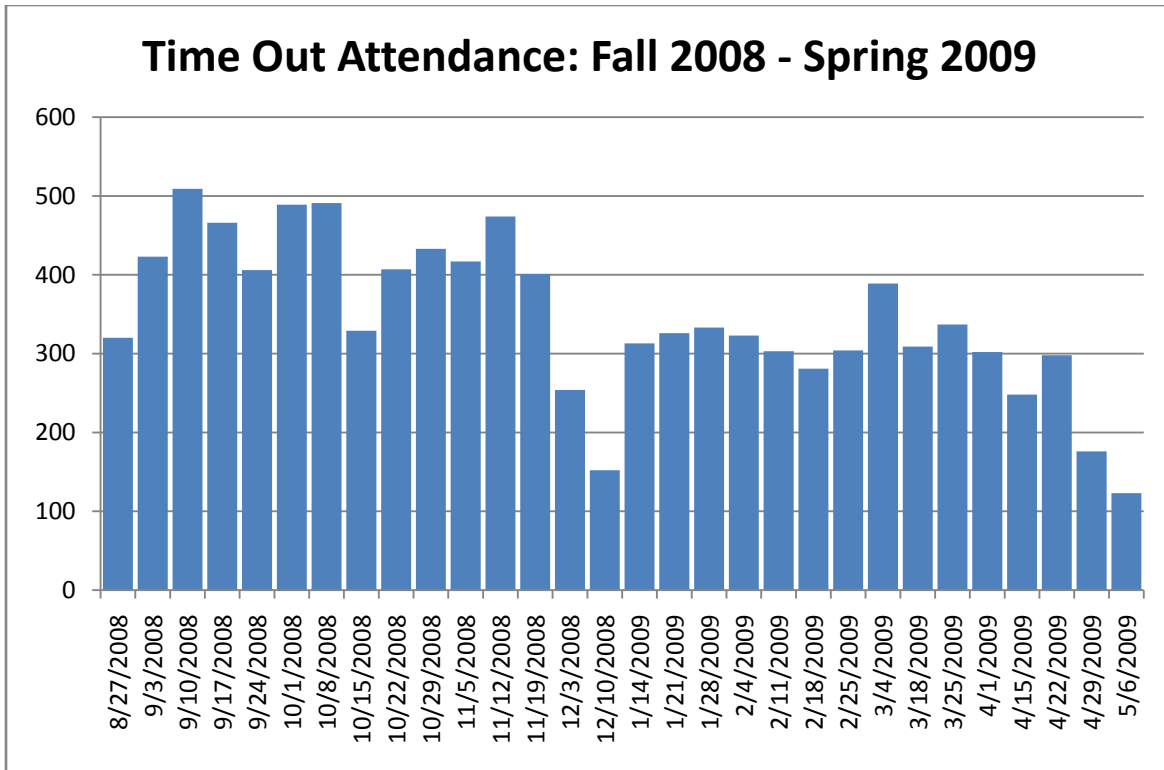


Figure 10B

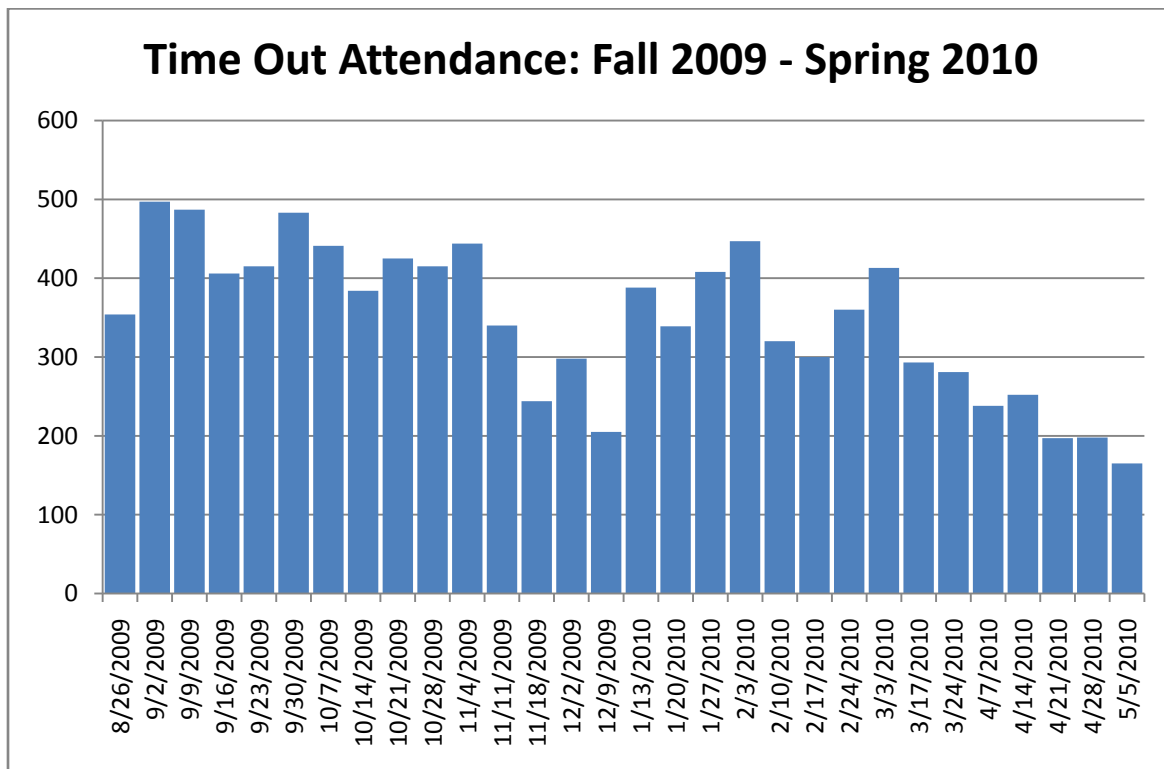


Figure 11B

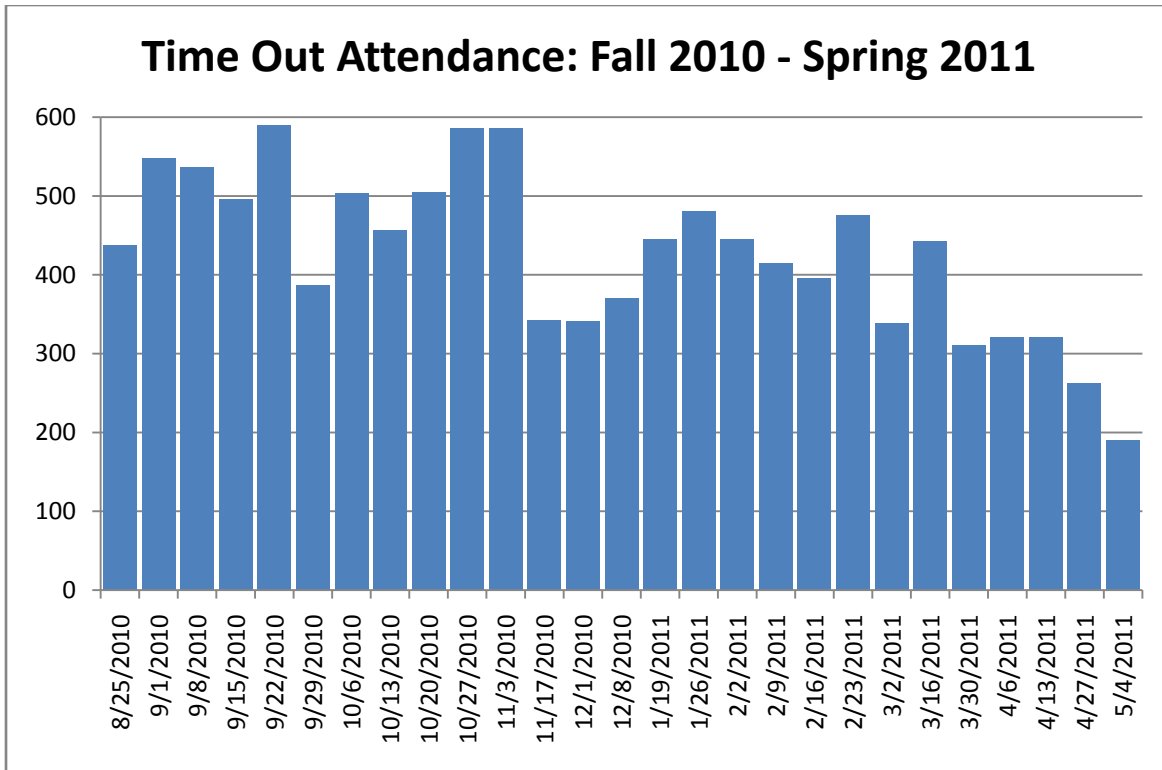


Figure 12B

Appendix C

Gender Analysis

This appendix illustrates the ratios between male and female attendance in Chapel and Time Out. The black line drawn on each chart indicates the actual population ratio of males to females. Red indicates females and blue indicates males.

	Fall 2006 - Spring 2007	Fall 2007 - Spring 2008	Fall 2008 - Spring 2009	Fall 2009 - Spring 2010	Fall 2010 - Spring 2011
Female	1408	1403	1421	1429	1433
Male	902	874	895	872	906
% Female	61%	62%	61%	62%	61%
% Male	39%	38%	39%	38%	39%

Figure 1C

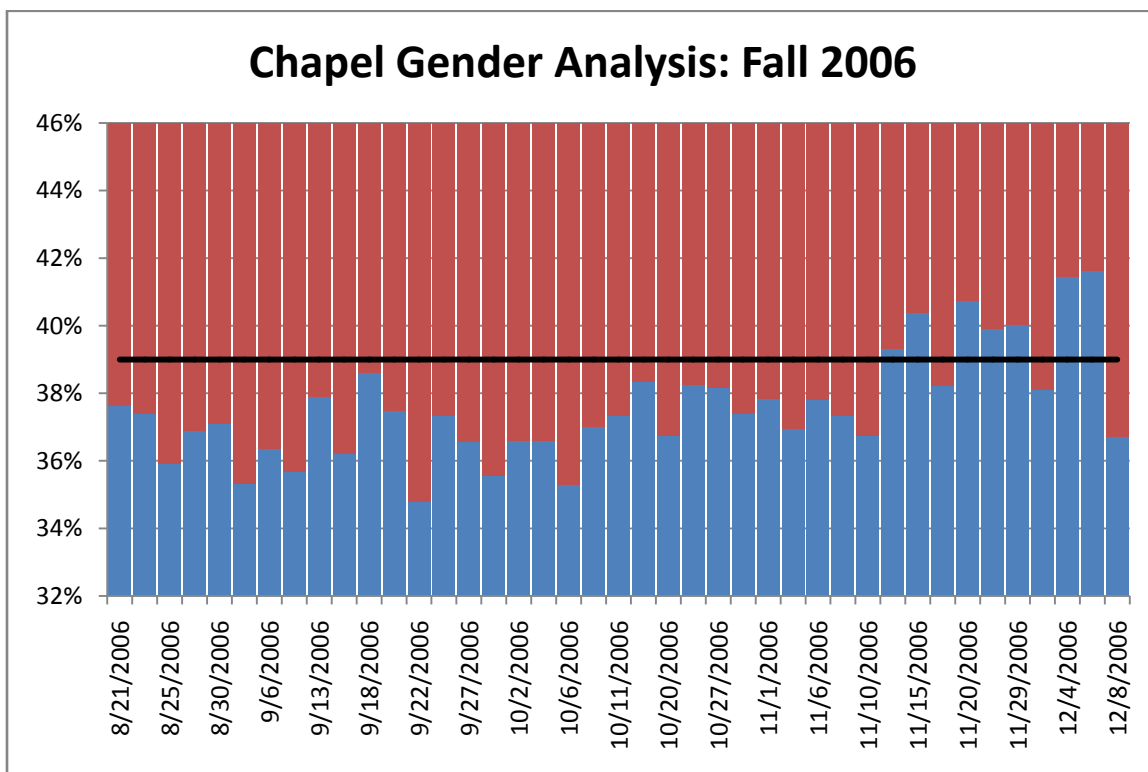


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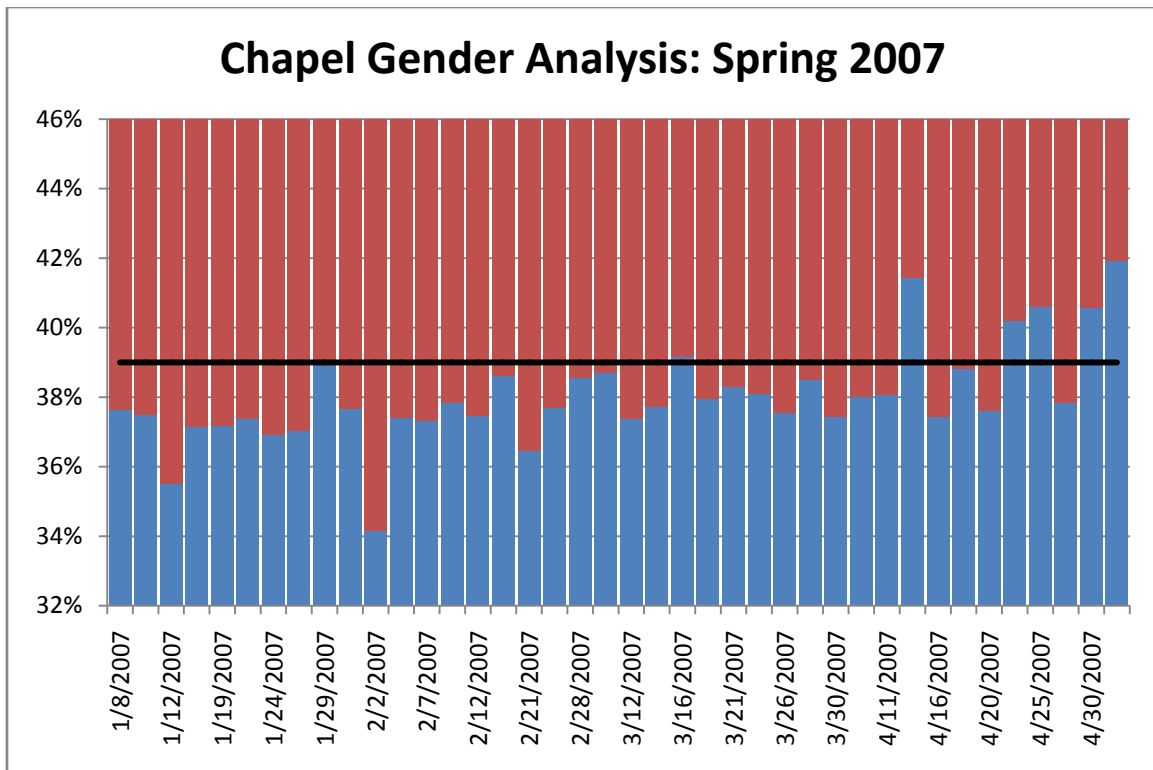


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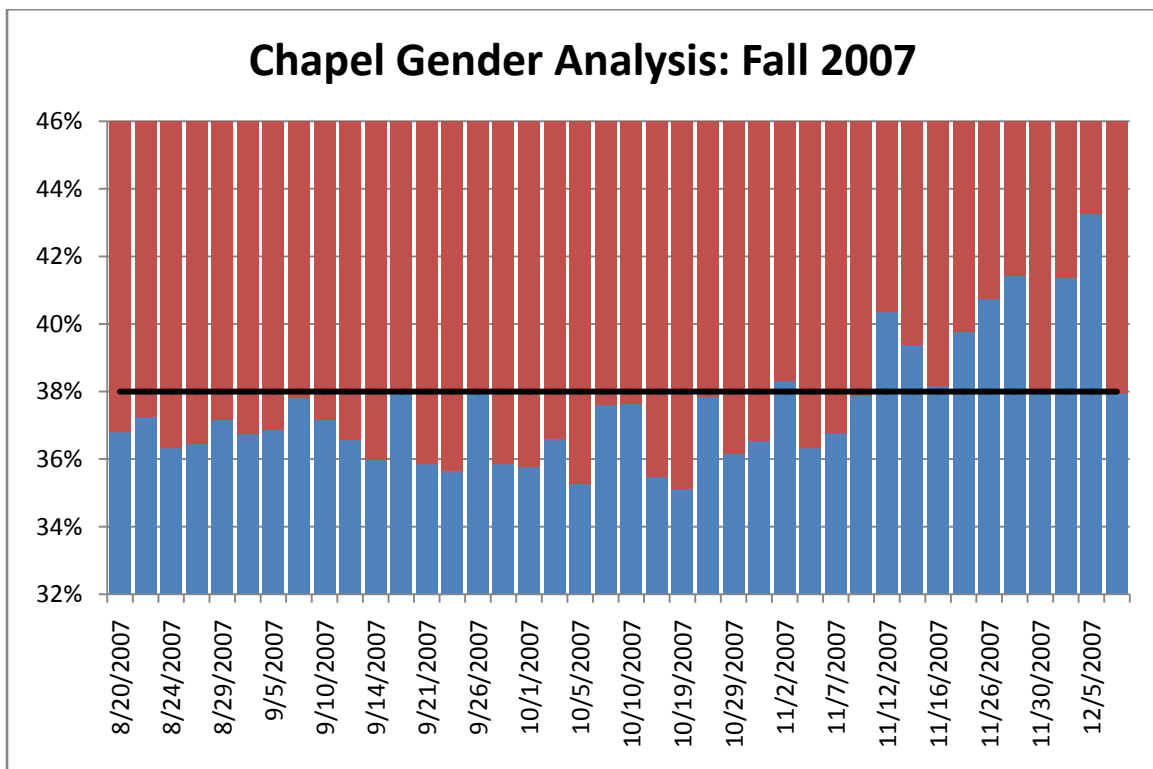


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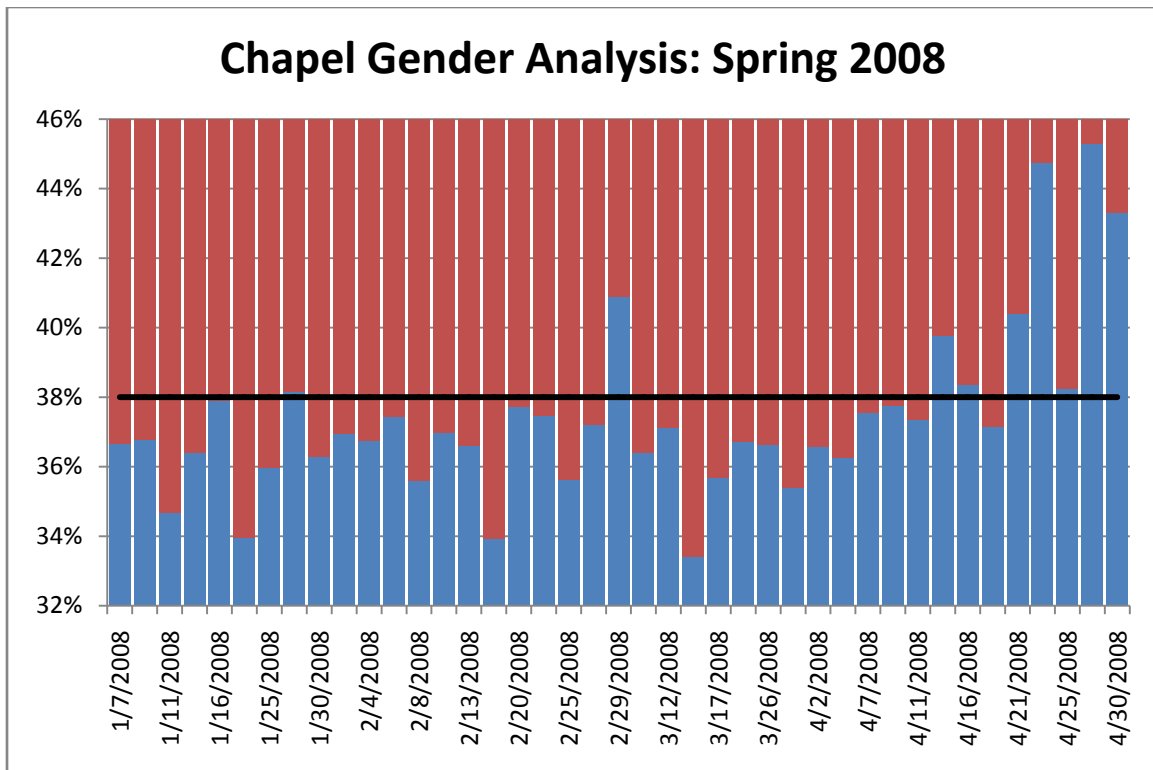


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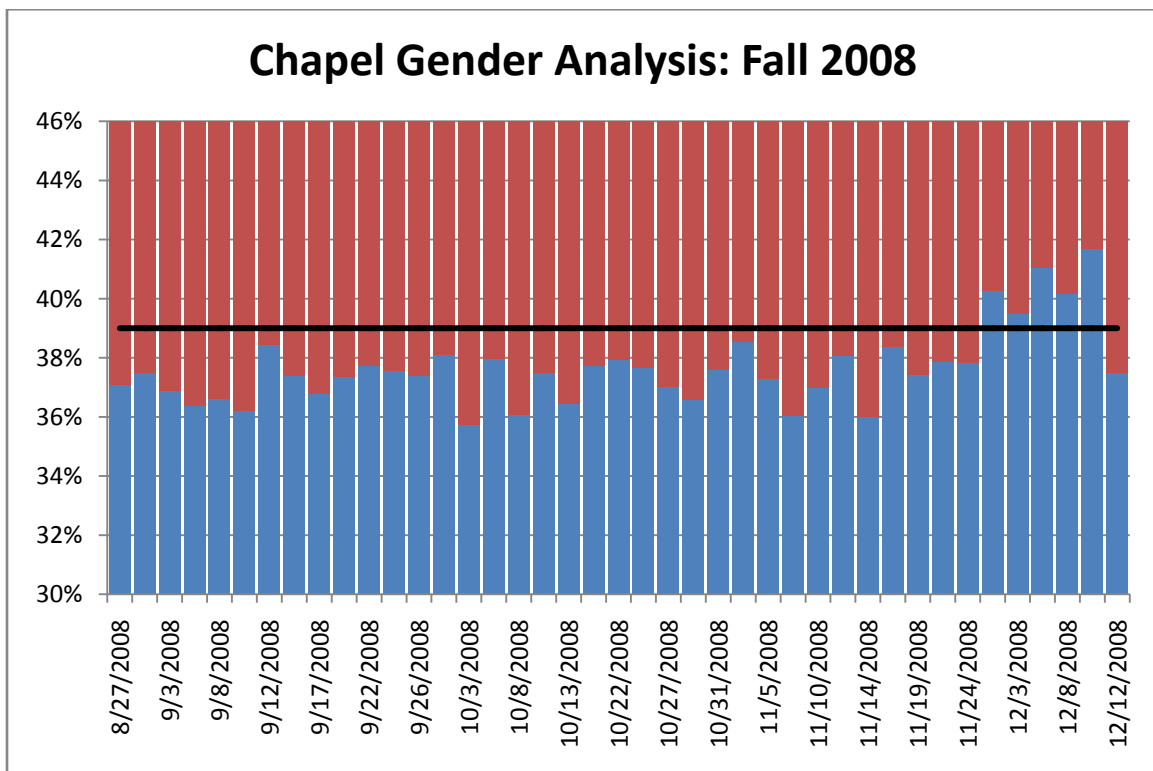


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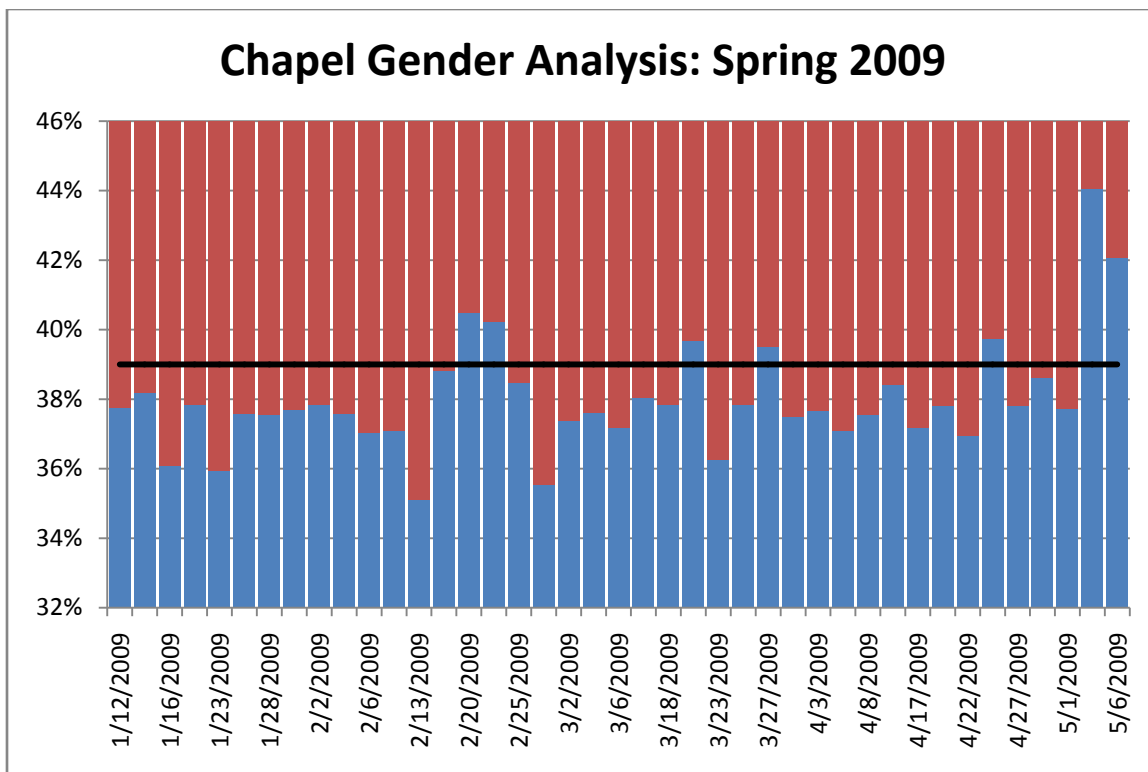


Figure76C

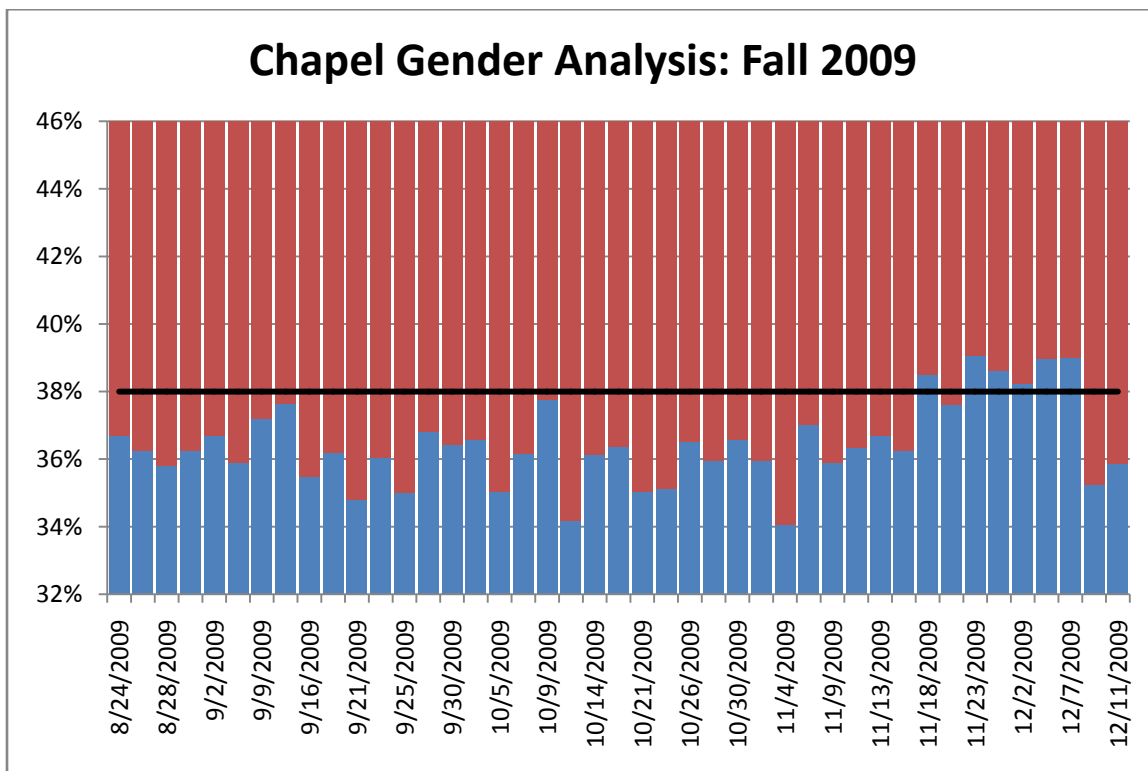


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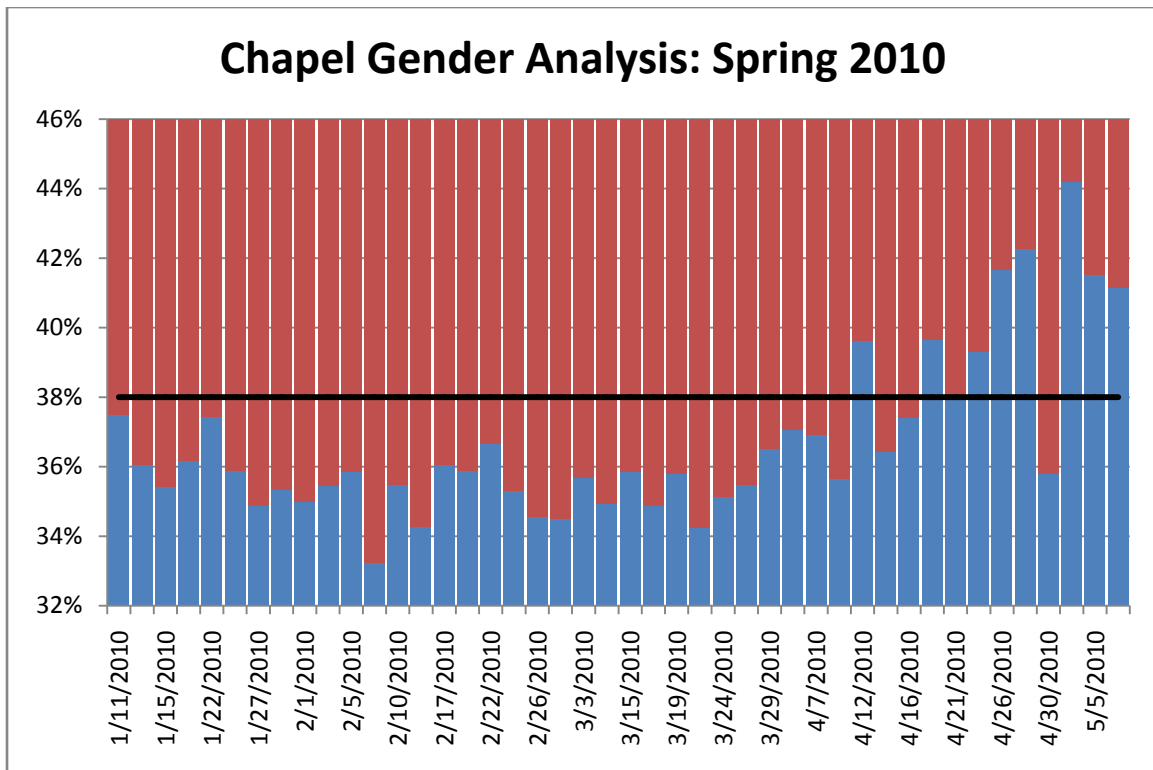


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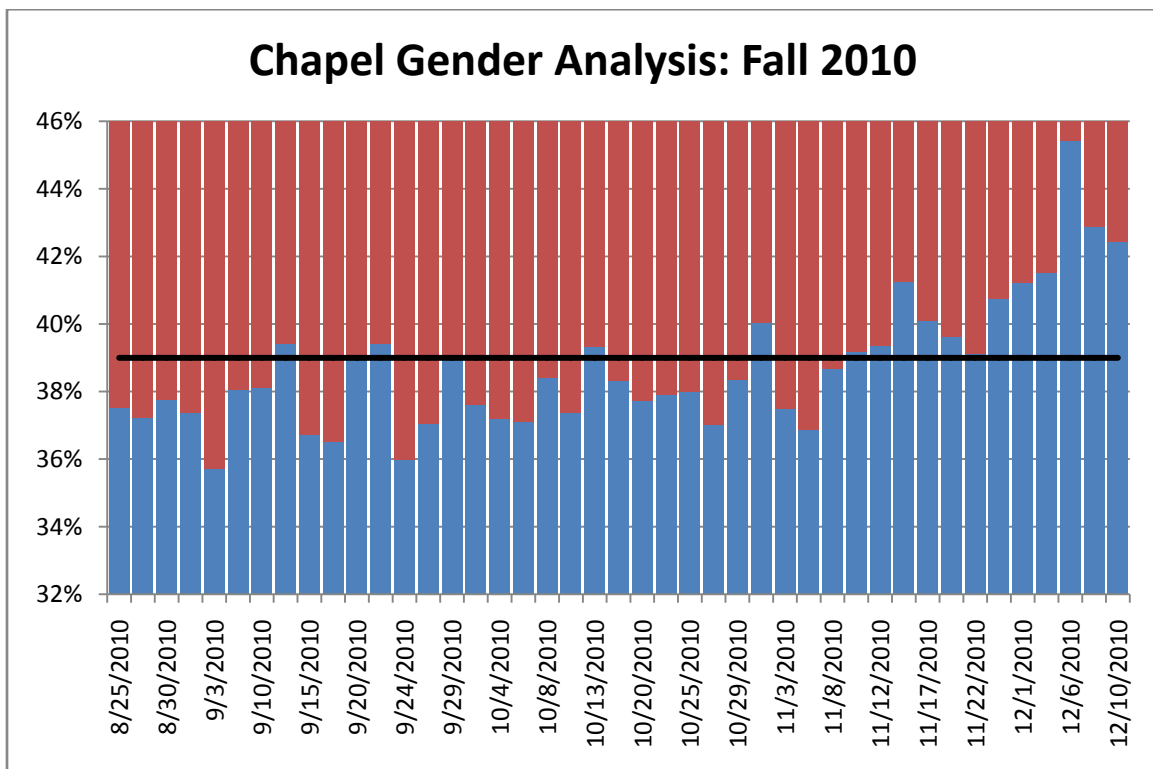


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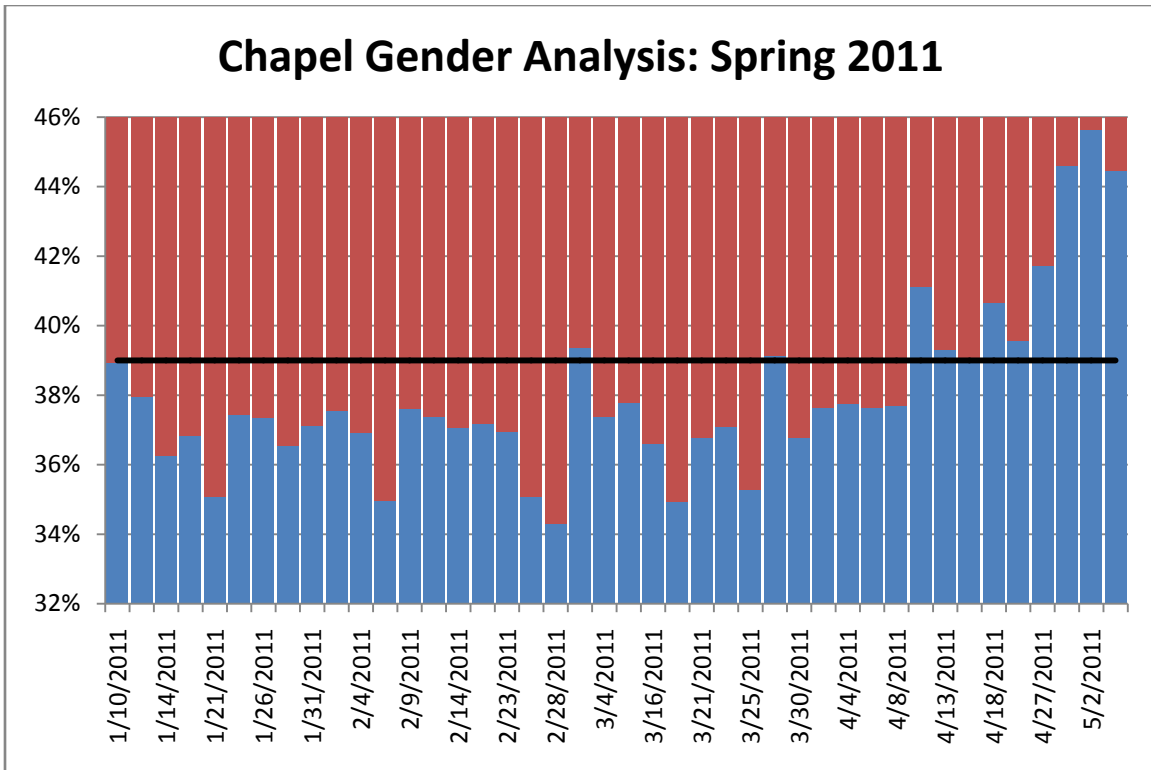


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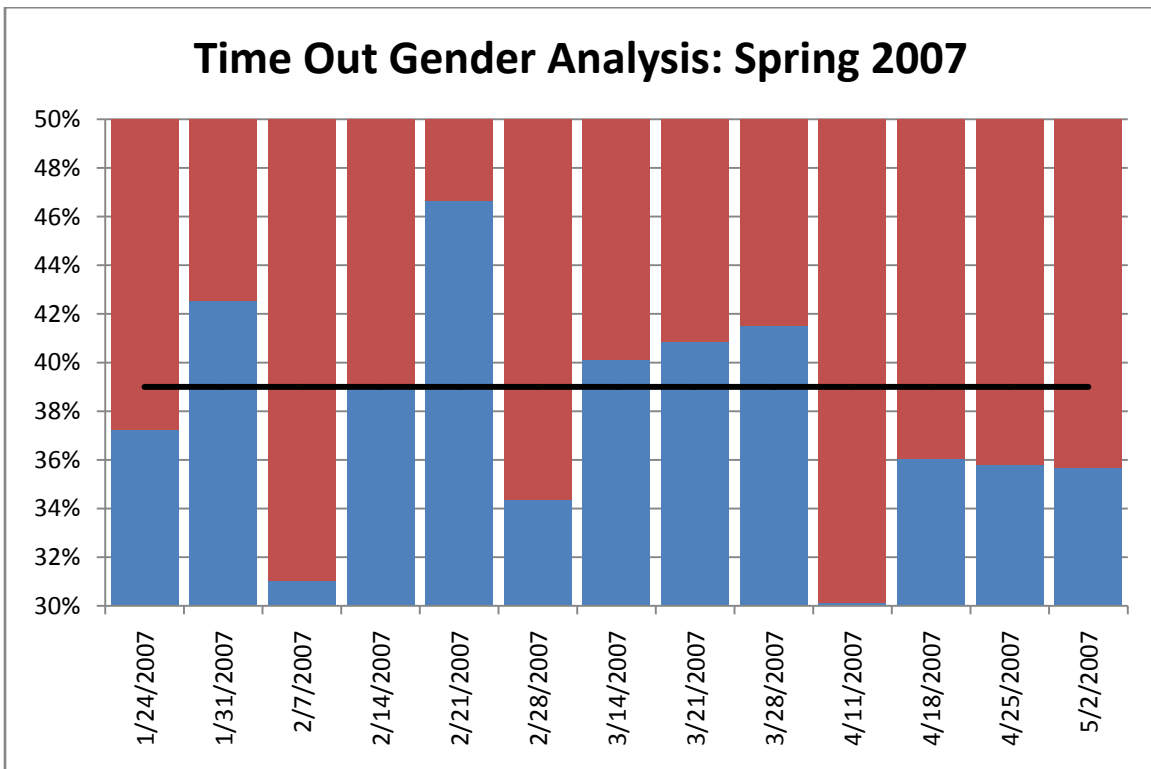


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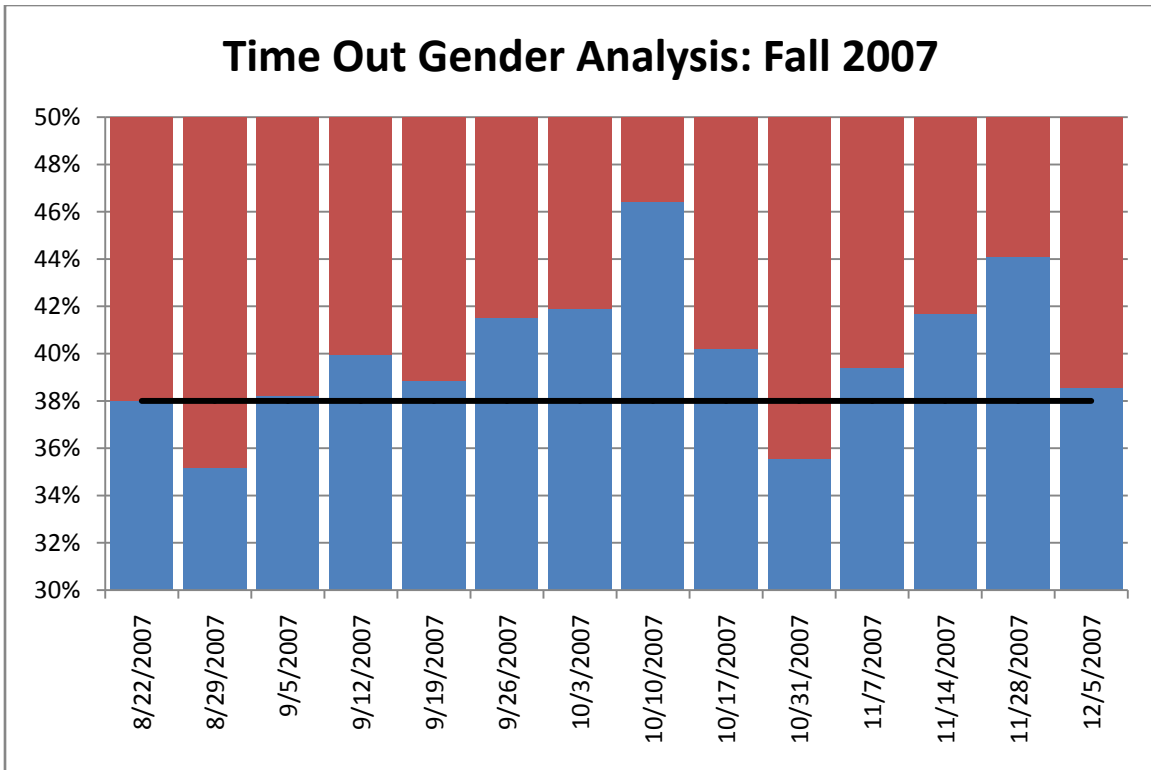


Figure 13C

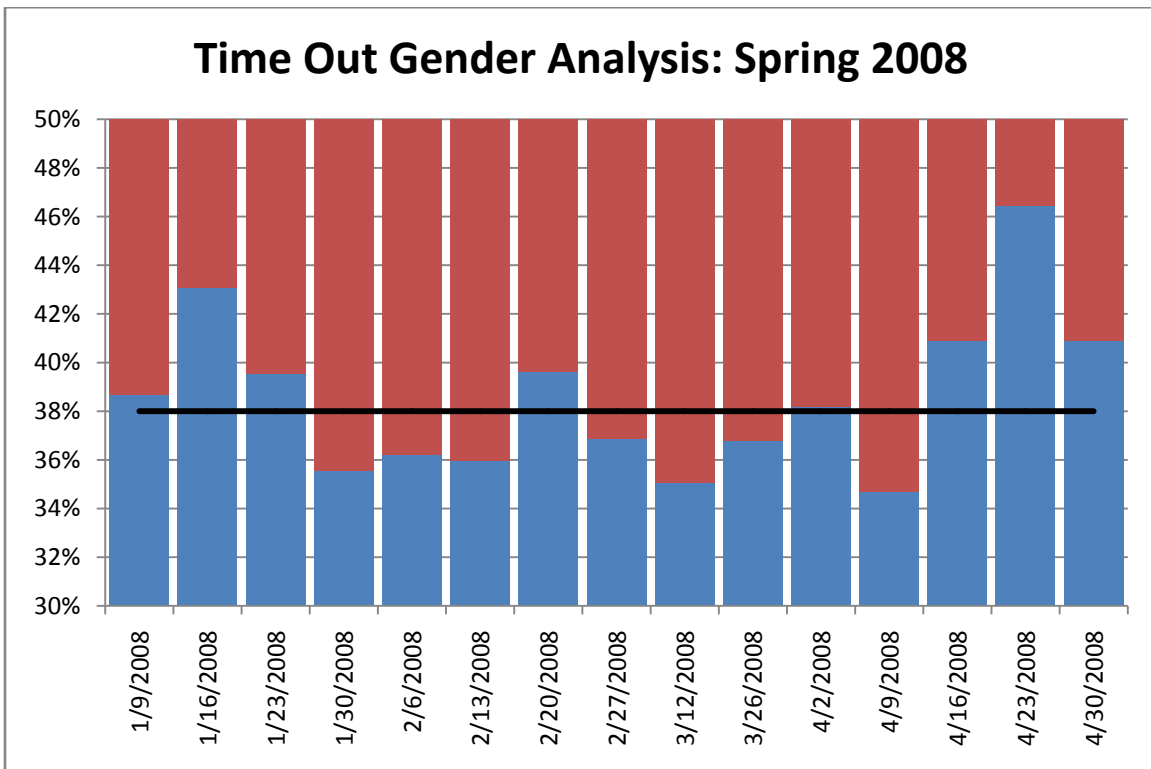


Figure 14C

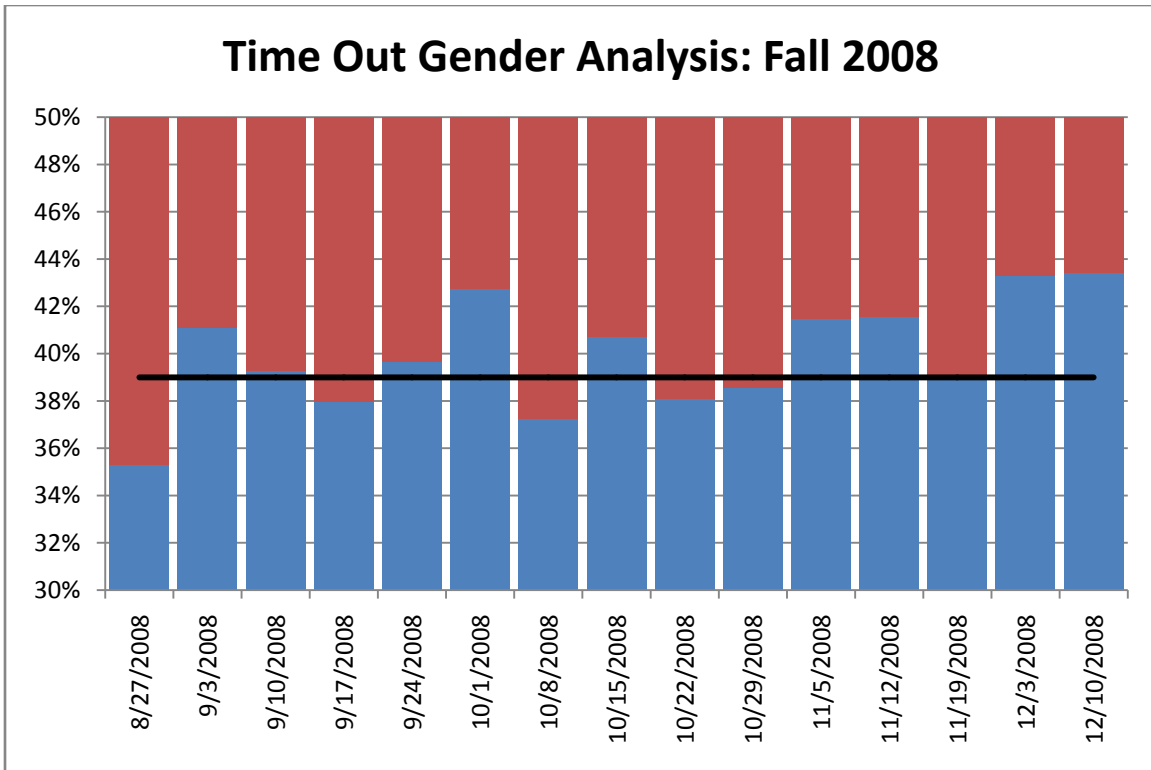


Figure 15C

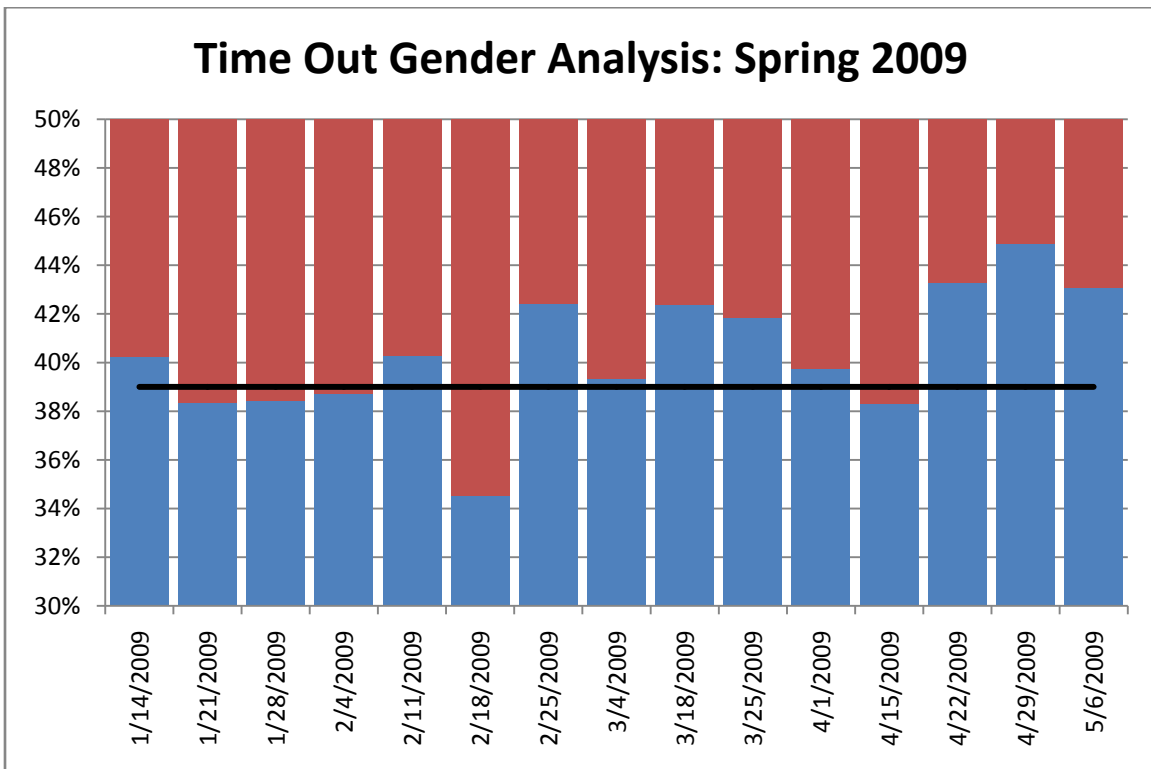


Figure 16C

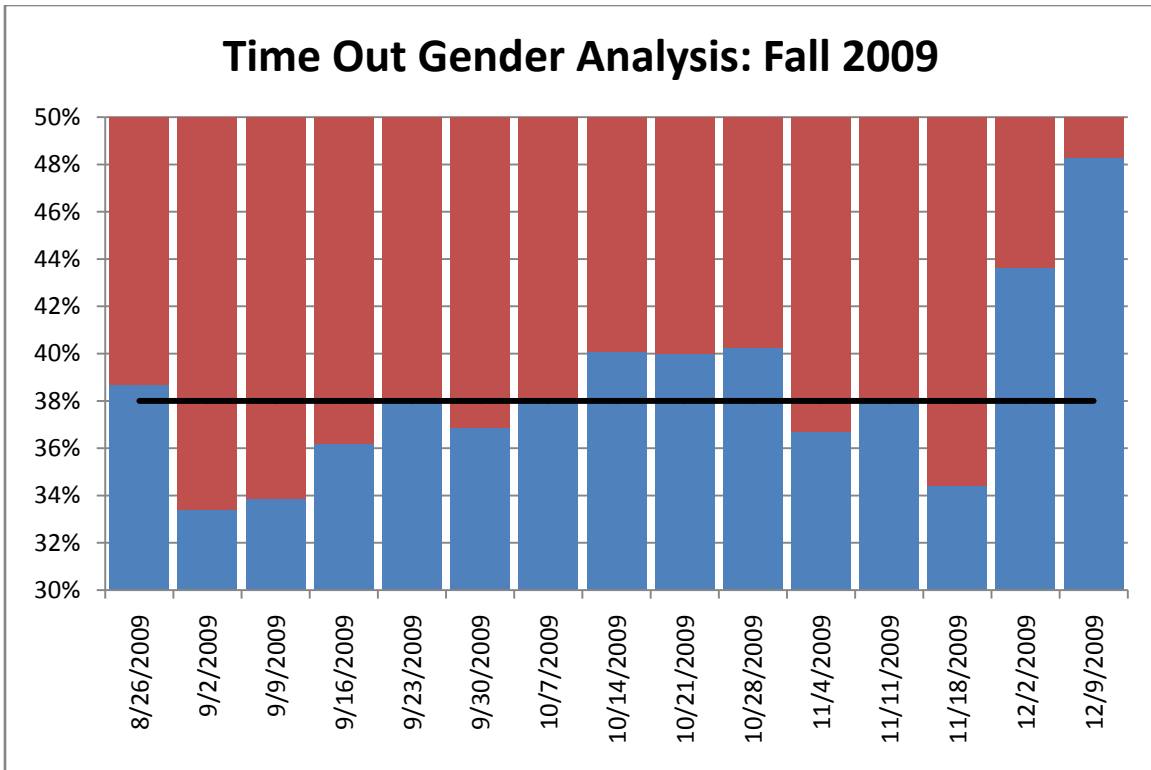


Figure 17C

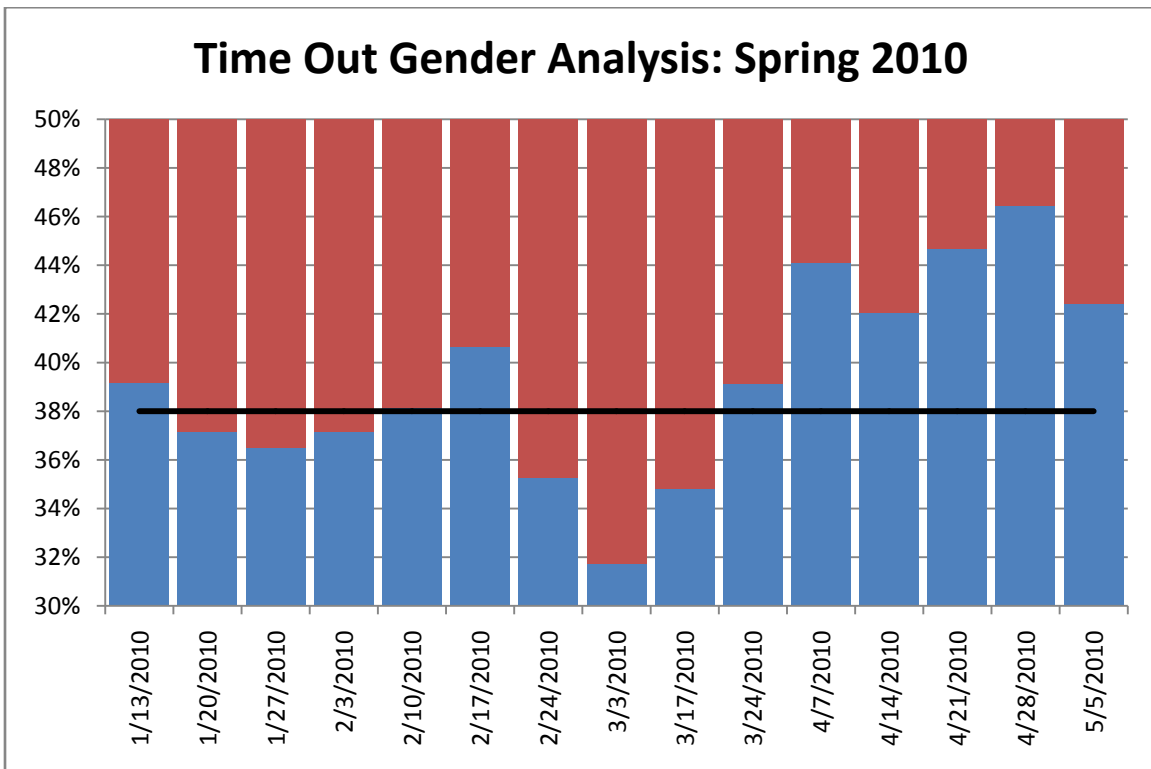


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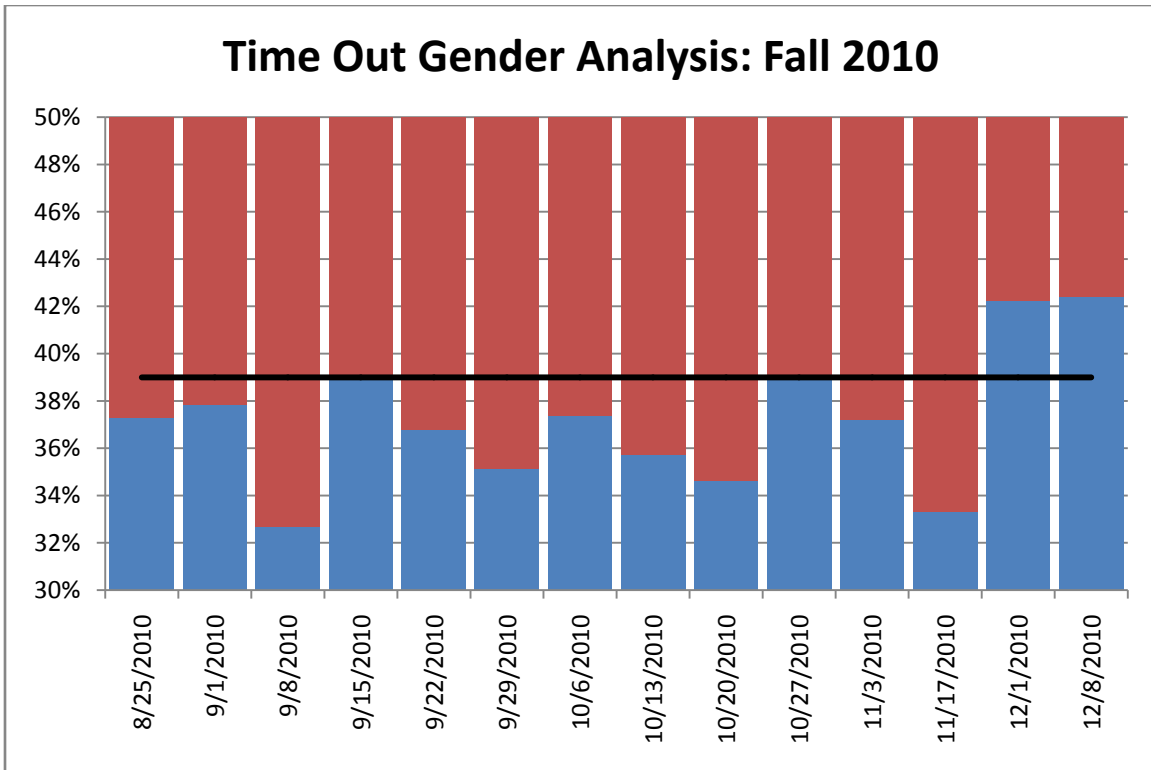


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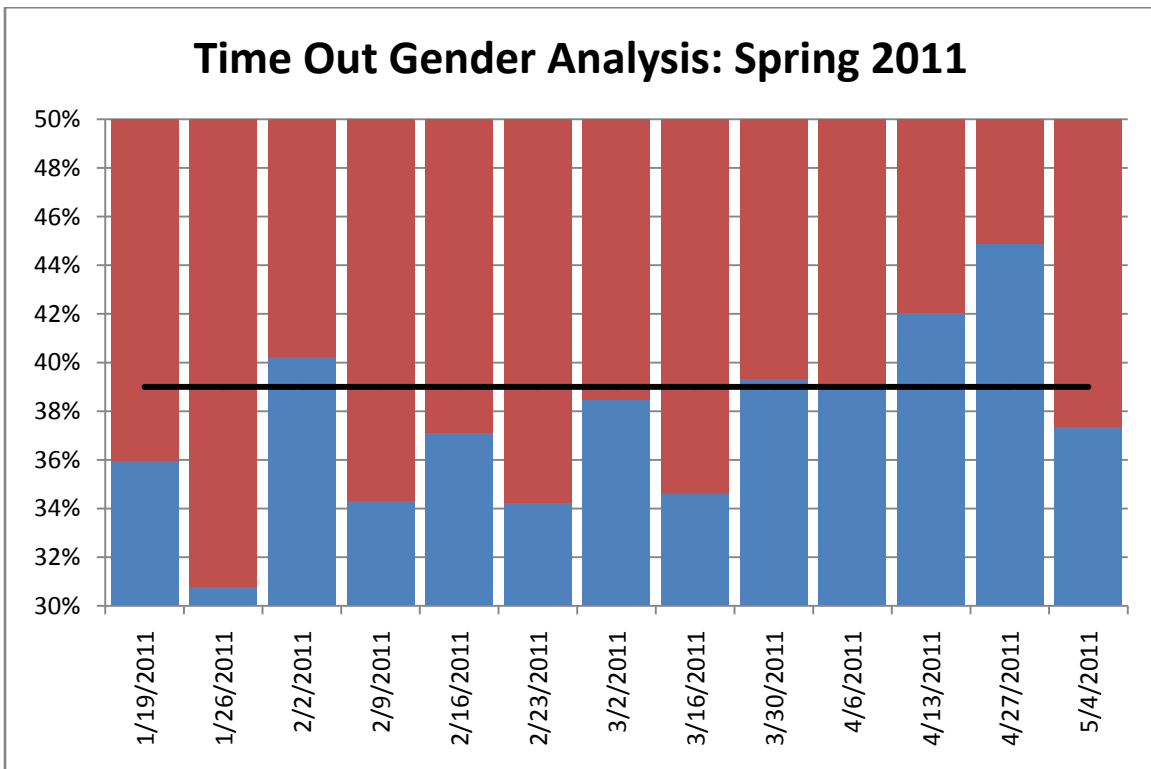


Figure 20C

Appendix D

Type of Chapel and Time Out Analysis

This appendix shows the average total number of people in attendance at any given type of Chapel or Time Out. These averages are broken down by gender and cohort and also shown as percentages of the attendance. It can be seen that a particular type of Chapel or Time Out does not draw one gender or cohort over another to attend the service.

Chapel Average Total Attendance					
	Fall 2006	Spring 2007	Fall 2007	Spring 2008	Fall 2008
Communion	1471	1000	1066	1033	1214
Spiritual Renewal Week	1452	1270	1420	1220	1496
Creation Care Week	1394	1213	1323	0	1455
Writer's Symposium	0	1355	0	1267	0
Student Led	1341	1024	1357	1082	1340
Male Speaker	1405	1183	1250	1211	1397
Female Speaker	1412	1195	1314	1120	1308
Both Genders	953	894	1148	1092	1294
Praise & Worship	1280	1094	1189	1069	1087
	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011
Communion	1607	913	849	990	1314
Spiritual Renewal Week	1377	1368	1423	1332	1381
Creation Care Week	0	0	0	1419	0
Writer's Symposium	1306	0	0	0	1291
Student Led	1032	1203	1006	1573	1097
Male Speaker	1230	1289	1150	1357	1049
Female Speaker	1066	1208	667	1100	1313
Both Genders	1116	1060	1076	1136	1013
Praise & Worship	1069	1234	796	1392	1199

Figure 1D

Chapel Average Attendance by Gender										
	Fall 2006		Spring 2007		Fall 2007		Spring 2008		Fall 2008	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Communion	539	932	382	618	405	661	411	622	455	759
Spiritual Renewal Week	539	913	474	796	521	899	454	766	564	932
Creation Care Week	511	883	469	744	477	846	0	0	536	919
Writer's Symposium	0	0	496	859	0	0	459	808	0	0
Student Led	510	831	398	626	509	848	409	673	501	839
Male Speaker	528	876	446	737	471	779	449	761	523	875
Female Speaker	530	882	4	4	489	824	428	692	503	804
Both Genders	365	588	543	890	427	721	403	690	488	807
Praise & Worship	478	802	422	672	439	749	396	673	405	682
	Spring 2009		Fall 2009		Spring 2010		Fall 2010		Spring 2011	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Communion	615	992	338	575	318	531	378	612	487	827
Spiritual Renewal Week	518	858	483	885	512	912	505	827	513	868
Creation Care Week	0	0	0	0	0	0	520	899	0	0
Writer's Symposium	490	816	0	0	0	0	0	0	480	811
Student Led	399	633	436	767	371	635	587	986	411	686
Male Speaker	461	769	469	820	417	733	521	835	398	651
Female Speaker	416	650	439	769	282	385	422	677	493	820
Both Genders	433	683	387	674	396	680	445	691	389	625
Praise & Worship	397	672	445	789	284	512	528	864	427	772

Figure 2D

Chapel Average Attendance by Gender Ratio										
	Fall 2006		Spring 2007		Fall 2007		Spring 2008		Fall 2008	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Communion	37%	63%	38%	62%	38%	62%	40%	60%	37%	63%
Spiritual Renewal Week	37%	63%	37%	63%	37%	63%	37%	63%	38%	62%
Creation Care Week	37%	63%	39%	61%	36%	64%	0%	0%	37%	63%
Writer's Symposium	0%	0%	37%	63%	0%	0%	36%	64%	0%	0%
Student Led	38%	62%	39%	61%	38%	62%	38%	62%	37%	63%
Male Speaker	38%	62%	38%	62%	38%	62%	37%	63%	37%	63%
Female Speaker	38%	62%	50%	50%	37%	63%	38%	62%	38%	62%
Both Genders	38%	62%	38%	62%	37%	63%	37%	63%	38%	62%
Praise & Worship	37%	63%	39%	61%	37%	63%	37%	63%	37%	63%
	Spring 2009		Fall 2009		Spring 2010		Fall 2010		Spring 2011	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Communion	38%	62%	37%	63%	37%	63%	38%	62%	37%	63%
Spiritual Renewal Week	38%	62%	35%	65%	36%	64%	38%	62%	37%	63%
Creation Care Week	0%	0%	0%	0%	0%	0%	37%	63%	0%	0%
Writer's Symposium	38%	62%	0%	0%	0%	0%	0%	0%	37%	63%
Student Led	39%	61%	36%	64%	37%	63%	37%	63%	37%	63%
Male Speaker	37%	63%	36%	64%	36%	64%	38%	62%	38%	62%
Female Speaker	39%	61%	36%	64%	42%	58%	38%	62%	38%	62%
Both Genders	39%	61%	36%	64%	37%	63%	39%	61%	38%	62%
Praise & Worship	37%	63%	36%	64%	36%	64%	38%	62%	36%	64%

Figure 3D

	Chapel Average Attendance by Cohort																			
	Fall 2006				Spring 2007				Fall 2007				Spring 2008				Fall 2008			
	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors
Communion	362	489	335	254	260	290	219	231	284	370	236	175	278	286	219	246	307	409	275	218
Spiritual Renewal Week	360	495	341	254	300	343	311	308	375	450	337	256	338	320	276	282	343	512	343	295
Creation Care Week	364	480	309	239	310	336	280	285	359	422	310	229	0	0	0	0	346	494	328	284
Writer's Symposium	0	0	0	0	320	358	344	328	0	0	0	0	325	337	302	302	0	0	0	0
Student Led	347	468	301	222	251	304	223	243	371	442	301	240	290	300	240	251	325	463	297	253
Male Speaker	346	483	319	254	280	328	280	287	332	417	284	213	323	326	275	284	335	477	313	270
Female Speaker	345	486	323	255	296	340	275	280	354	424	311	222	306	307	249	256	328	455	278	245
Both Genders	261	382	172	138	225	266	190	212	306	389	261	190	287	293	250	260	312	440	286	254
Praise & Worship	312	451	285	229	285	334	277	286	307	382	258	195	280	290	242	254	269	377	224	216
	Spring 2009				Fall 2009				Spring 2010				Fall 2010				Spring 2011			
	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors
Communion	370	422	373	433	241	324	182	162	211	222	196	219	277	342	203	167	328	369	303	309
Spiritual Renewal Week	316	383	323	350	336	459	314	251	328	375	363	351	366	444	293	224	350	369	324	332
Creation Care Week	0	0	0	0	0	0	0	0	0	0	0	0	385	469	318	242	0	0	0	0
Writer's Symposium	308	361	297	335	0	0	0	0	0	0	0	0	0	0	0	0	340	347	302	298
Student Led	256	310	209	255	312	424	261	200	249	295	234	228	423	498	359	286	282	316	244	255
Male Speaker	295	352	276	304	327	447	280	230	280	323	279	265	368	446	301	238	275	305	224	243
Female Speaker	263	315	229	255	317	415	264	207	159	212	156	140	304	372	232	189	340	355	306	307
Both Genders	270	321	239	283	275	375	224	183	263	296	262	252	302	376	245	209	255	294	223	239
Praise & Worship	262	313	235	257	315	427	272	213	203	257	179	156	407	464	294	221	309	333	272	282

Figure 4D

	Chapel Average Attendance by Cohort Ratio																			
	Fall 2006				Spring 2007				Fall 2007				Spring 2008				Fall 2008			
	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors
Communion	25%	34%	23%	18%	26%	29%	22%	23%	27%	35%	22%	16%	27%	28%	21%	24%	25%	34%	23%	18%
Spiritual Renewal Week	25%	34%	24%	18%	24%	27%	25%	24%	26%	32%	24%	18%	28%	26%	23%	23%	23%	34%	23%	20%
Creation Care Week	26%	34%	22%	17%	26%	28%	23%	24%	27%	32%	24%	17%	0%	0%	0%	0%	24%	34%	23%	20%
Writer's Symposium	0%	0%	0%	0%	24%	27%	25%	24%	0%	0%	0%	0%	26%	27%	24%	24%	0%	0%	0%	0%
Student Led	26%	35%	23%	17%	25%	30%	22%	24%	27%	33%	22%	18%	27%	28%	22%	23%	24%	35%	22%	19%
Male Speaker	25%	34%	23%	18%	24%	28%	24%	24%	27%	33%	23%	17%	27%	27%	23%	23%	24%	34%	22%	19%
Female Speaker	24%	35%	23%	18%	25%	29%	23%	23%	27%	32%	24%	17%	27%	27%	22%	23%	25%	35%	21%	19%
Both Genders	27%	40%	18%	14%	25%	30%	21%	24%	27%	34%	23%	17%	26%	27%	23%	24%	24%	34%	22%	20%
Praise & Worship	24%	35%	22%	18%	24%	28%	23%	24%	27%	33%	23%	17%	26%	27%	23%	24%	25%	35%	21%	20%
	Spring 2009				Fall 2009				Spring 2010				Fall 2010				Spring 2011			
	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors
Communion	23%	26%	23%	27%	27%	36%	20%	18%	25%	26%	23%	26%	28%	35%	21%	17%	25%	28%	23%	24%
Spiritual Renewal Week	23%	28%	24%	25%	25%	34%	23%	18%	23%	26%	26%	25%	28%	33%	22%	17%	25%	27%	24%	24%
Creation Care Week	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	27%	33%	23%	17%	0%	0%	0%	0%
Writer's Symposium	24%	28%	23%	26%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	26%	27%	23%	23%
Student Led	25%	30%	20%	25%	26%	35%	22%	17%	25%	29%	23%	23%	27%	32%	23%	18%	26%	29%	22%	23%
Male Speaker	24%	29%	22%	25%	25%	35%	22%	18%	24%	28%	24%	23%	27%	33%	22%	18%	26%	29%	21%	23%
Female Speaker	25%	30%	22%	24%	26%	34%	22%	17%	24%	32%	23%	21%	28%	34%	21%	17%	26%	27%	23%	23%
Both Genders	24%	29%	21%	25%	26%	36%	21%	17%	25%	28%	24%	23%	27%	33%	22%	18%	25%	29%	22%	24%
Praise & Worship	25%	29%	22%	24%	26%	35%	22%	17%	26%	32%	22%	20%	29%	33%	21%	16%	26%	28%	23%	24%

Figure 5D

Time Out Average Total Attendance				
	Fall 2009	Spring 2010	Fall 2010	Spring 2011
Communion	0	0	0	0
Spiritual Renewal Week	415	408	387	481
Creation Care Week	0	0	496	0
Writer's Symposium	0	0	0	0
Student Led	404	287	476	367
Male Speaker	408	314	463	368
Female Speaker	405	275	504	400
Both Genders	280	357	548	442
Praise & Worship	0	0	0	0

Figure 6D

	Time Out Average Attendance by Gender							
	Fall 2009		Spring 2010		Fall 2010		Spring 2011	
	Male	Female	Male	Female	Male	Female	Male	Female
Communion	0	0	0	0	0	0	0	0
Spiritual Renewal Week	158	257	149	259	136	251	148	333
Creation Care Week	0	0	0	0	193	303	0	0
Writer's Symposium	0	0	0	0	0	0	0	0
Student Led	150	253	113	174	176	300	138	229
Male Speaker	149	259	122	192	170	293	145	223
Female Speaker	155	250	109	166	184	320	140	260
Both Genders	118	162	127	230	207	340	153	289
Praise & Worship	0	0	0	0	0	0	0	0

Figure 7D

	Time Out Average Attendance by Gender Ratio							
	Fall 2009		Spring 2010		Fall 2010		Spring 2011	
	Male	Female	Male	Female	Male	Female	Male	Female
Communion	0%	0%	0%	0%	0%	0%	0%	0%
Spiritual Renewal Week	38%	62%	37%	63%	35%	65%	31%	69%
Creation Care Week	0%	0%	0%	0%	39%	61%	0%	0%
Writer's Symposium	0%	0%	0%	0%	0%	0%	0%	0%
Student Led	37%	63%	39%	61%	37%	63%	38%	62%
Male Speaker	37%	63%	39%	61%	37%	63%	39%	61%
Female Speaker	38%	62%	39%	61%	37%	63%	35%	65%
Both Genders	42%	58%	35%	65%	38%	62%	35%	65%
Praise & Worship	0%	0%	0%	0%	0%	0%	0%	0%

Figure 8D

	Time Out Average Attendance by Cohort															
	Fall 2009				Spring 2010				Fall 2010				Spring 2011			
	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors
Communion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spiritual Renewal Week	126	172	83	32	150	131	61	65	167	135	51	34	198	151	72	59
Creation Care Week	0	0	0	0	0	0	0	0	185	186	76	46	0	0	0	0
Writer's Symposium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Student Led	135	152	68	48	108	89	49	41	180	171	74	49	147	108	57	56
Male Speaker	141	151	67	47	120	100	53	41	172	172	71	47	147	106	58	57
Female Speaker	132	157	70	45	102	82	48	100	200	177	77	49	167	117	60	56
Both Genders	98	98	46	36	145	96	66	50	202	199	88	55	178	131	74	59
Praise & Worship	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Figure 9D

Time Out Average Attendance by Cohort Ratio																
	Fall 2009				Spring 2010				Fall 2010				Spring 2011			
	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors	Freshmen	Sophomores	Juniors	Seniors
Communion	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Spiritual Renewal Week	31%	42%	20%	8%	37%	32%	15%	16%	43%	35%	13%	9%	41%	31%	15%	12%
Creation Care Week	0%	0%	0%	0%	0%	0%	0%	0%	38%	38%	15%	9%	0%	0%	0%	0%
Writer's Symposium	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Student Led	33%	38%	17%	12%	38%	31%	17%	14%	38%	36%	16%	10%	40%	29%	15%	15%
Male Speaker	35%	37%	16%	12%	38%	32%	17%	13%	37%	37%	15%	10%	40%	29%	16%	15%
Female Speaker	33%	39%	17%	11%	31%	25%	14%	30%	40%	35%	15%	10%	42%	29%	15%	14%
Both Genders	35%	35%	17%	13%	41%	27%	19%	14%	37%	37%	16%	10%	40%	30%	17%	13%
Praise & Worship	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Figure 10D

Appendix E

Cohort Analysis

This appendix shows the cohort ratios for each semester of Chapel and Time Out. The black line drawn on the individual cohort charts shows the actual percentage of the student population that is categorized by that cohort according to units earned (Academic Policies, 2012).

Note: In Figure 1E the data for Fall 2006 – Spring 2007 could not be located on the Point Loma Nazarene University website.

	Fall 2007 - Spring 2008	Fall 2008 - Spring 2009	Fall 2009 - Spring 2010	Fall 2010 - Spring 2011
Freshmen	564	563	549	600
Sophomore	562	587	579	581
Junior	585	578	606	575
Senior	626	652	632	645
% Freshmen	24%	24%	23%	25%
% Sophomore	24%	25%	24%	24%
% Junior	25%	24%	26%	24%
% Senior	27%	27%	27%	27%

Figure 1E

Chapel Cohort Analysis: Fall 2006 - Spring 2011

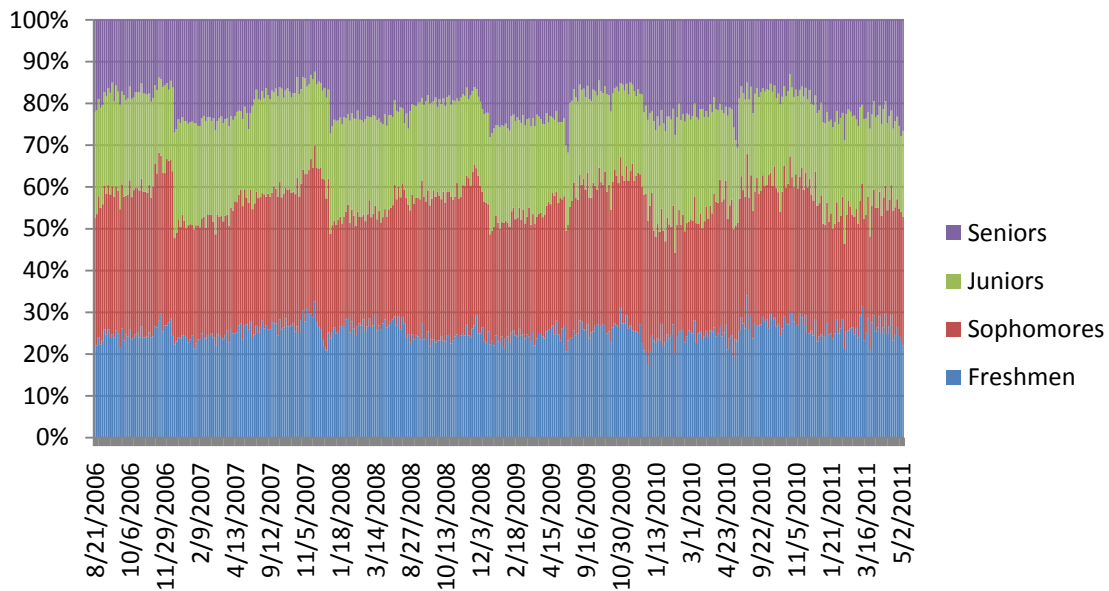


Figure 2E

Chapel Cohort Analysis: Fall 2006

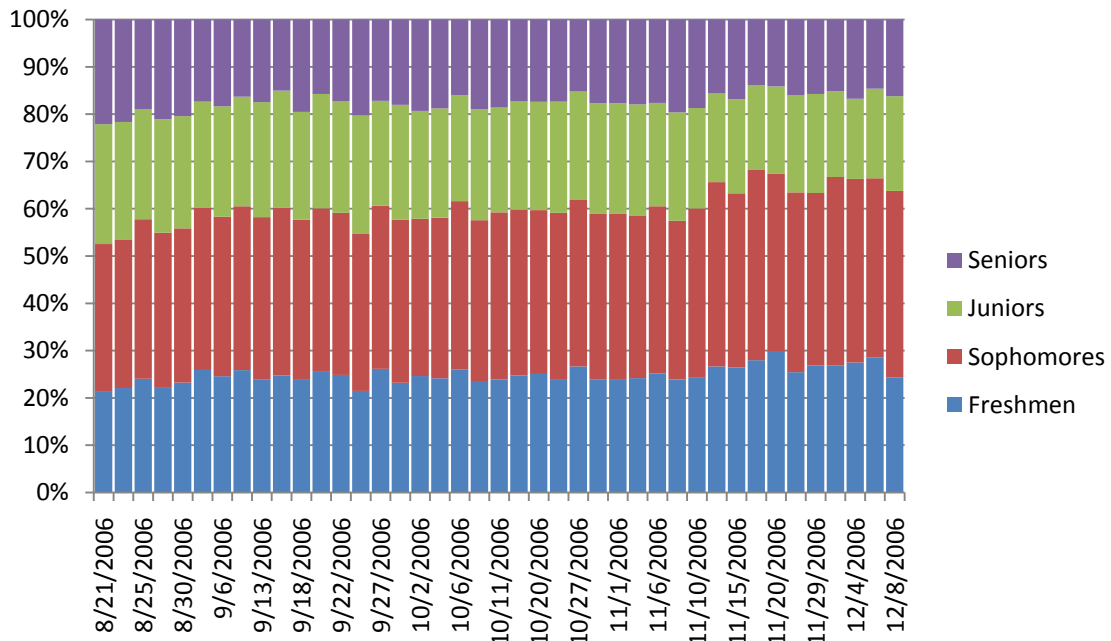


Figure 3E

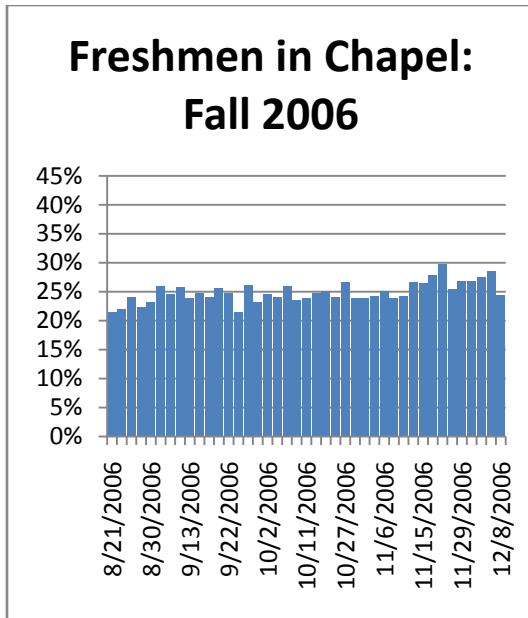


Figure 4E

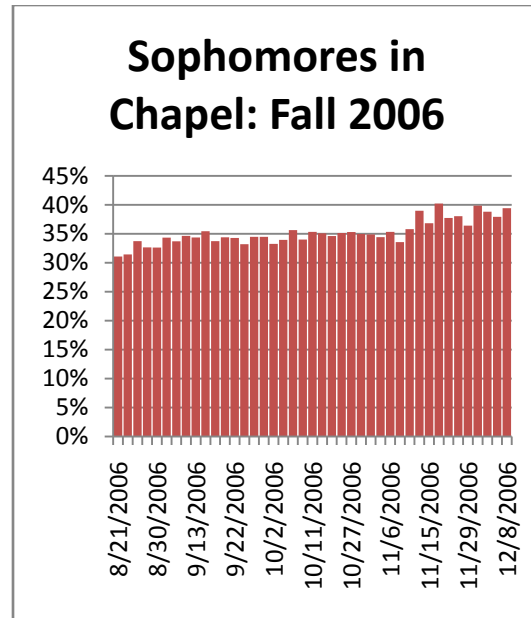


Figure 5E

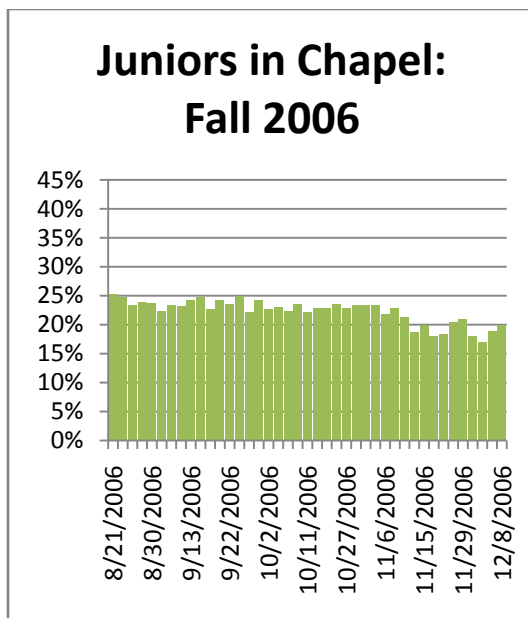


Figure 6E

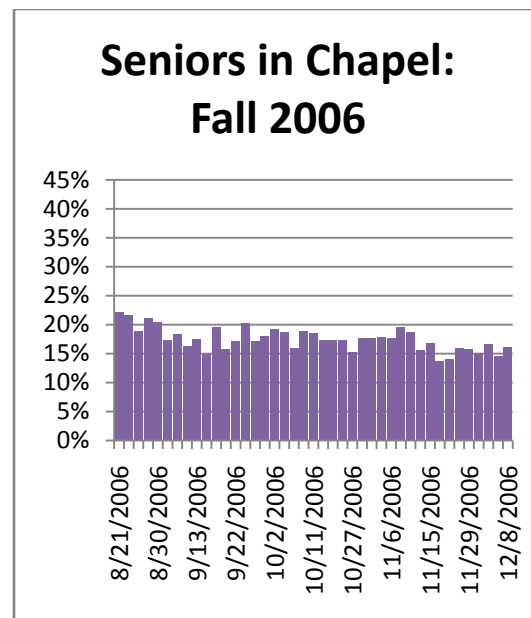


Figure 7E

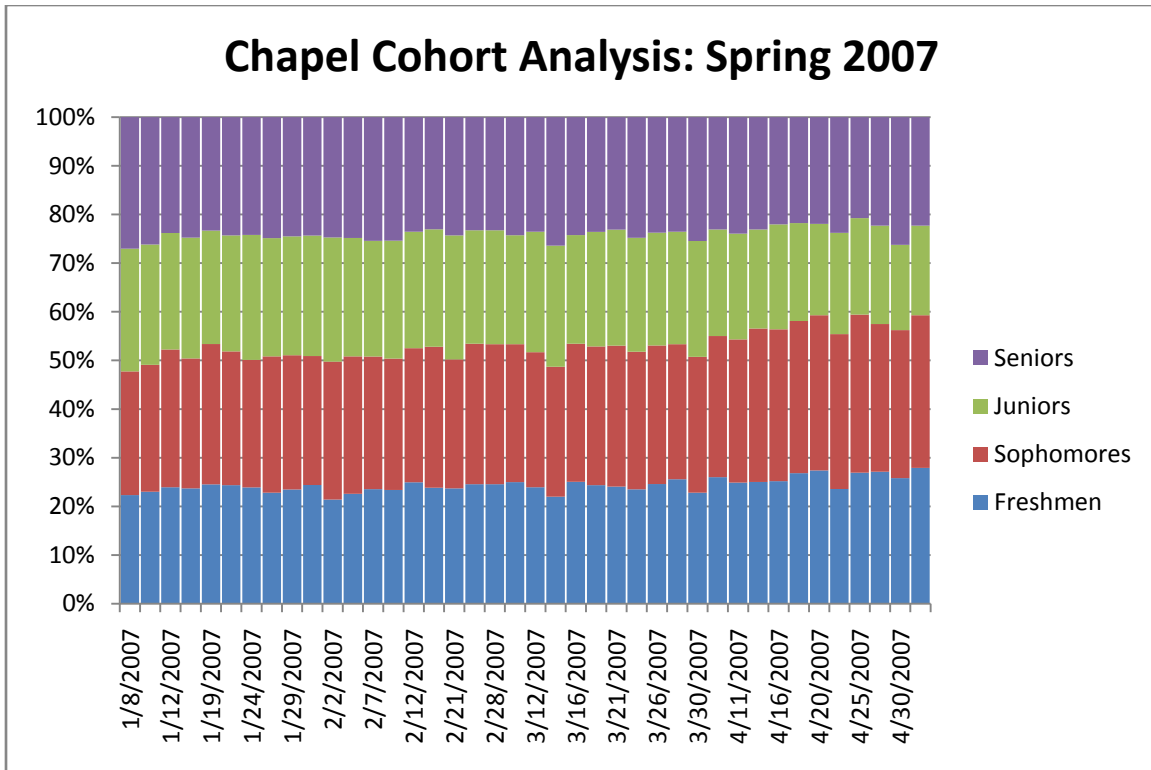


Figure 8E

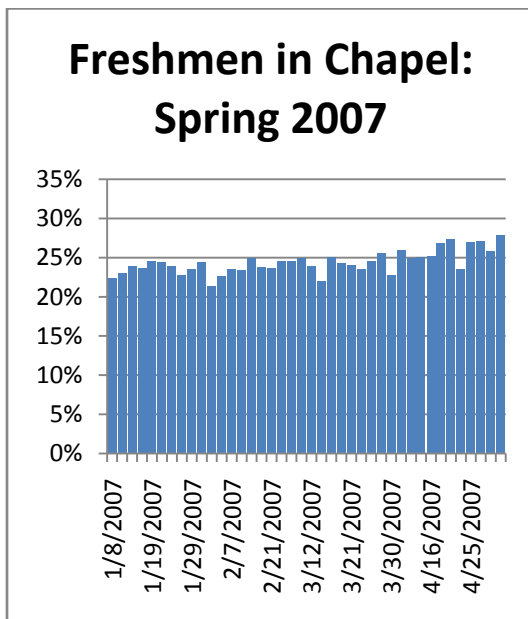


Figure 9E

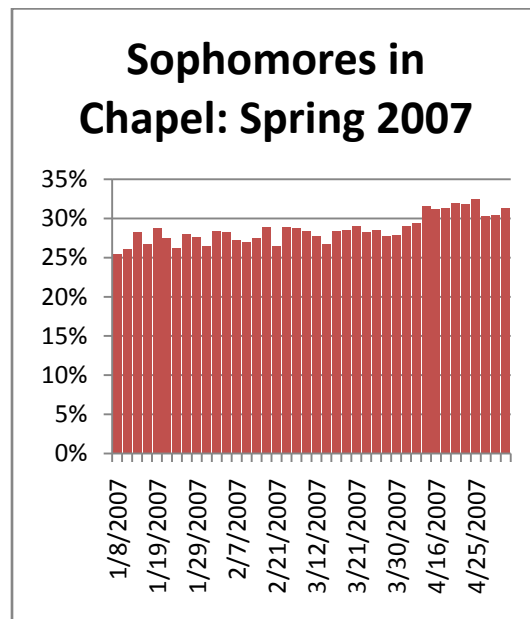


Figure 10E

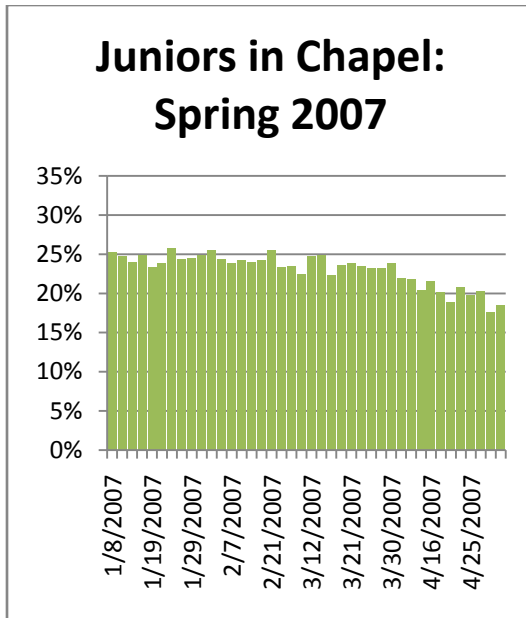


Figure 11E

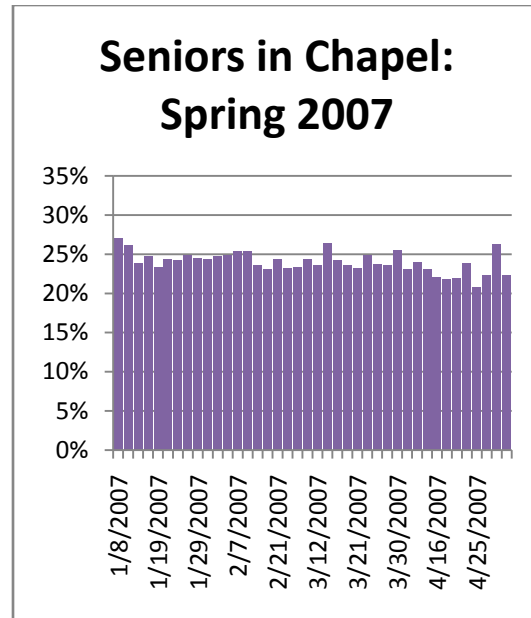


Figure 12E

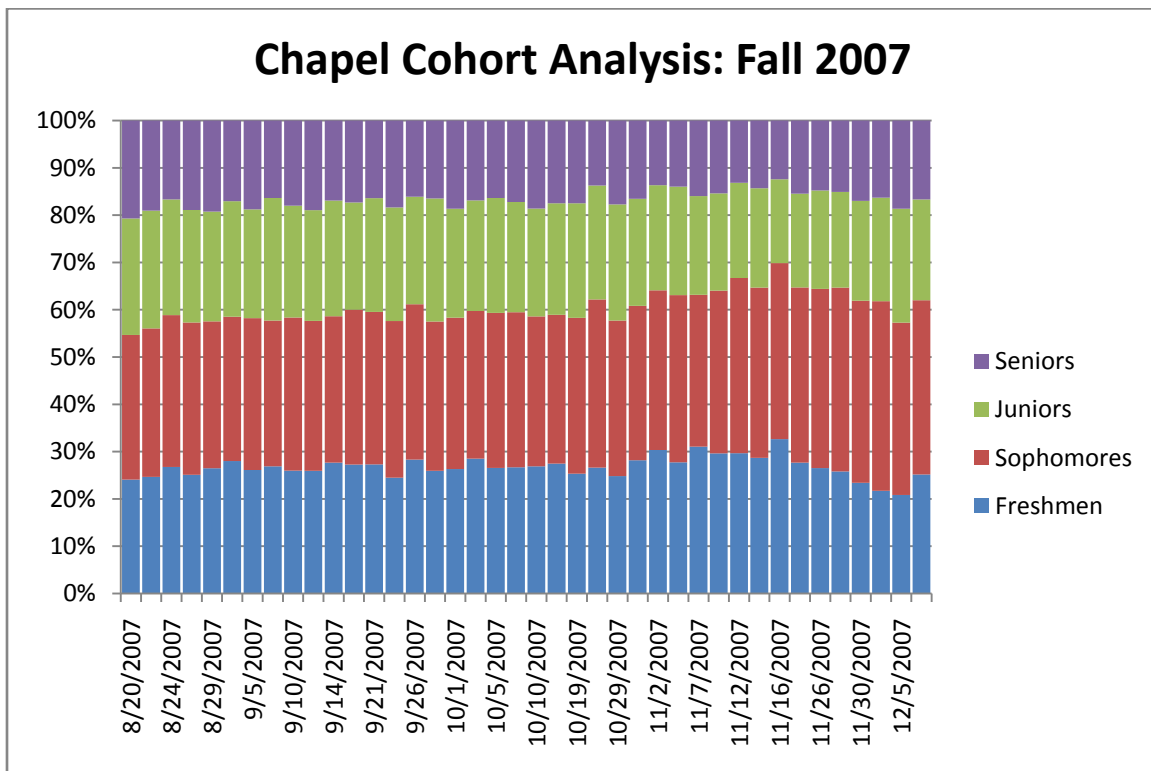


Figure 13E

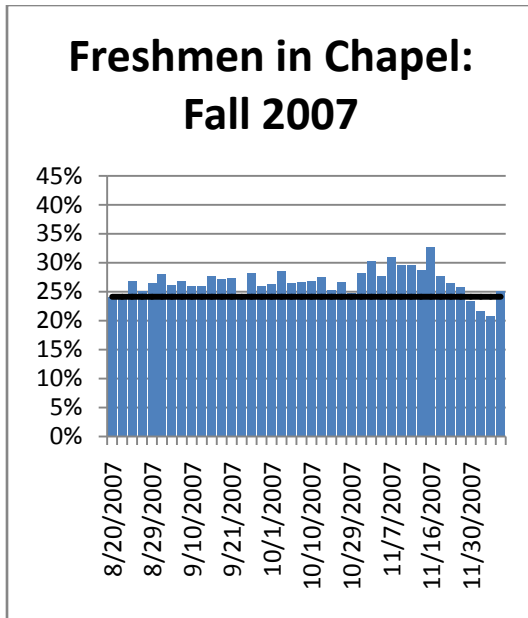


Figure 14E

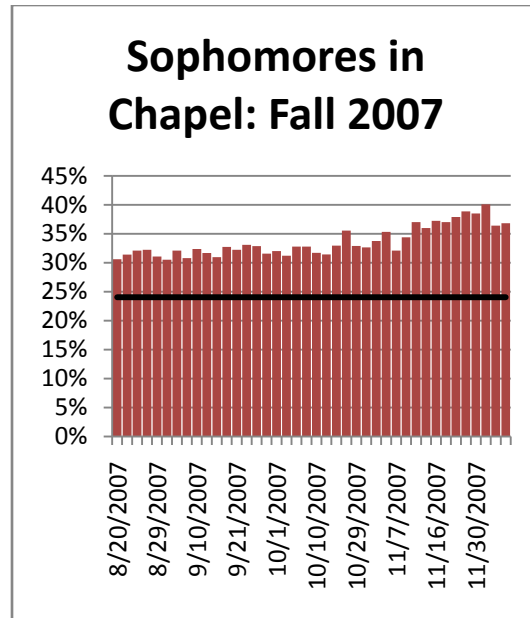


Figure 15E

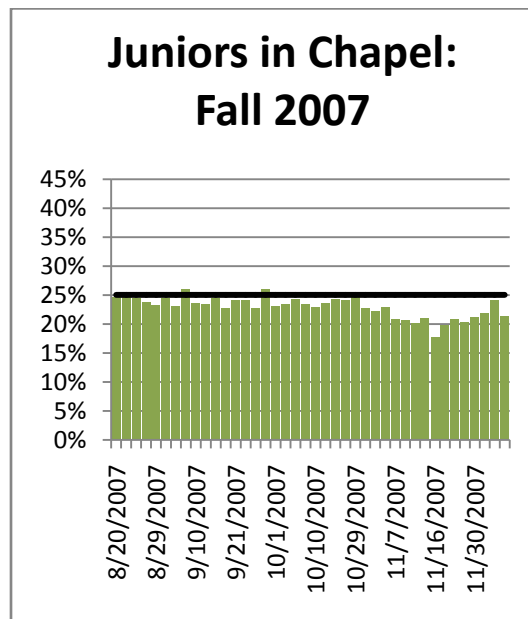


Figure 16E

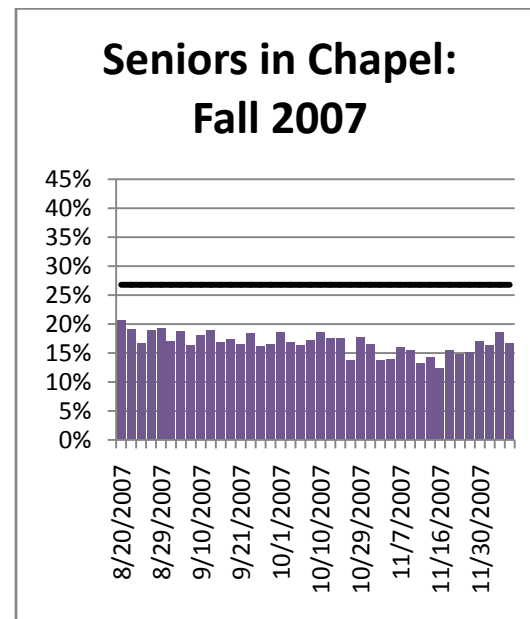


Figure 17E

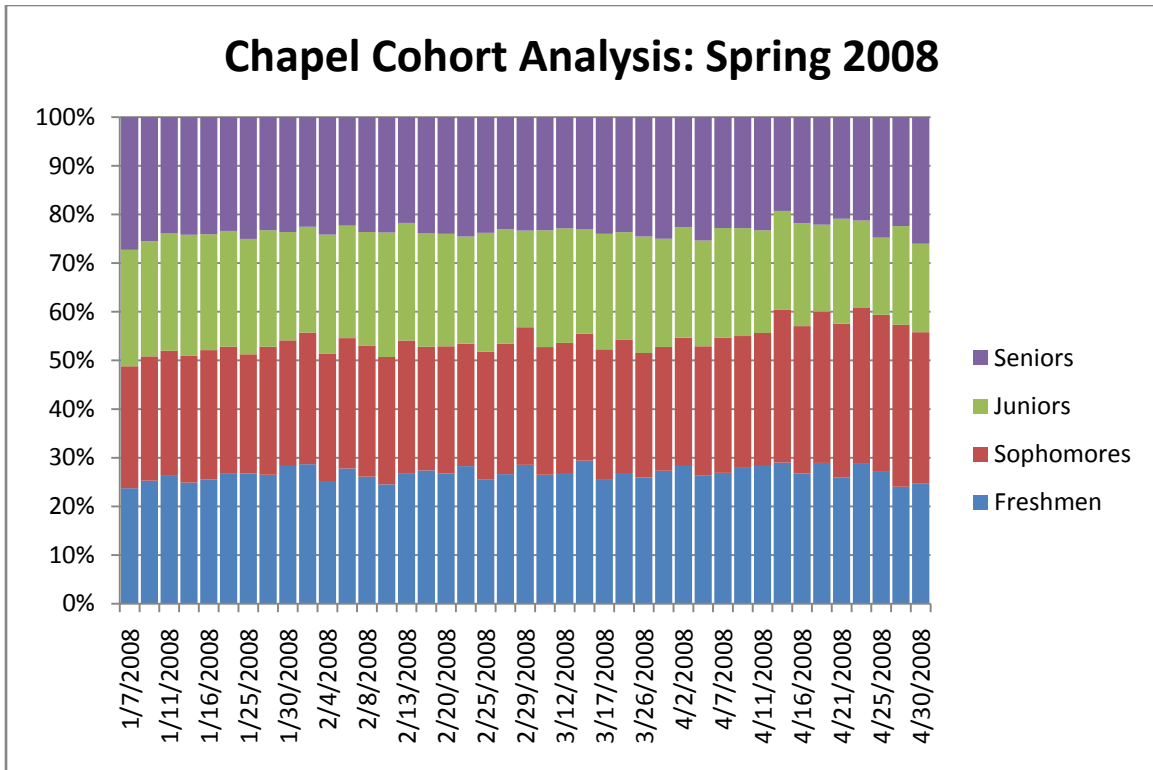


Figure 18E

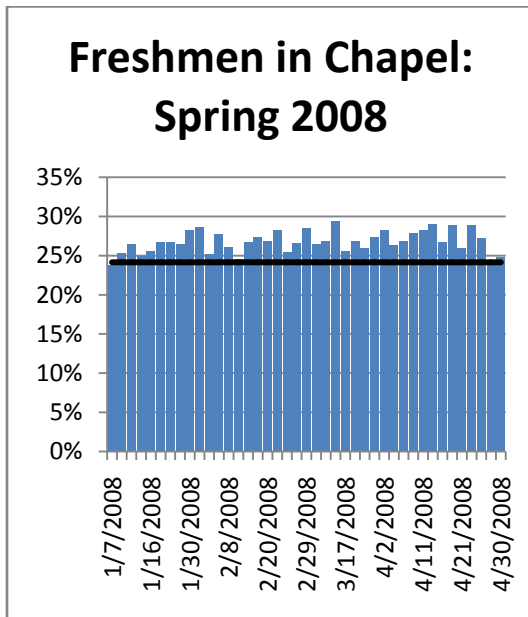


Figure 19E

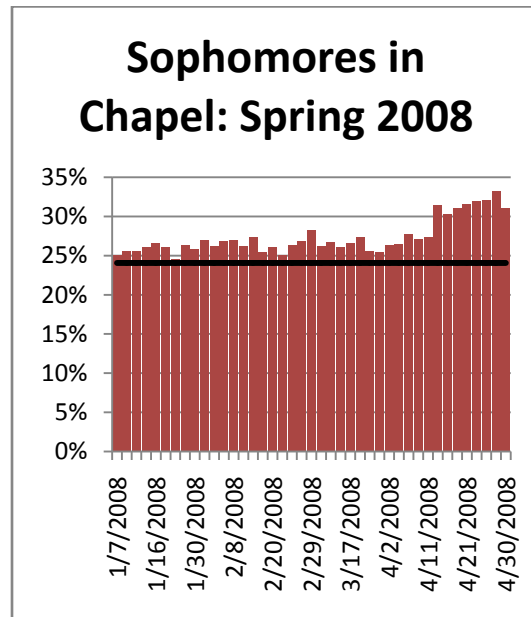


Figure 20E

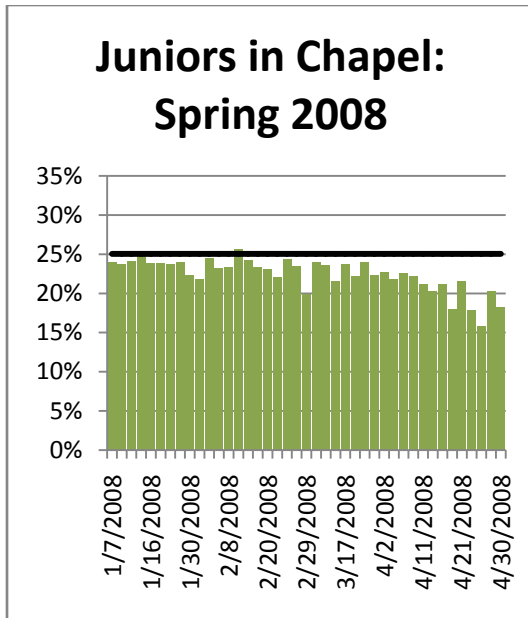


Figure 21E

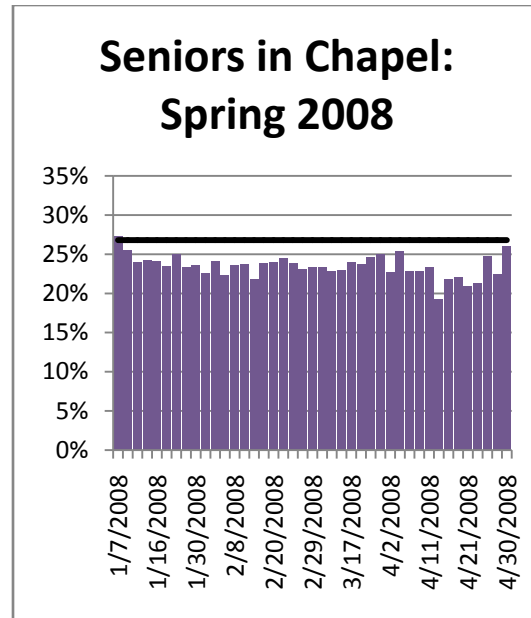


Figure 22E

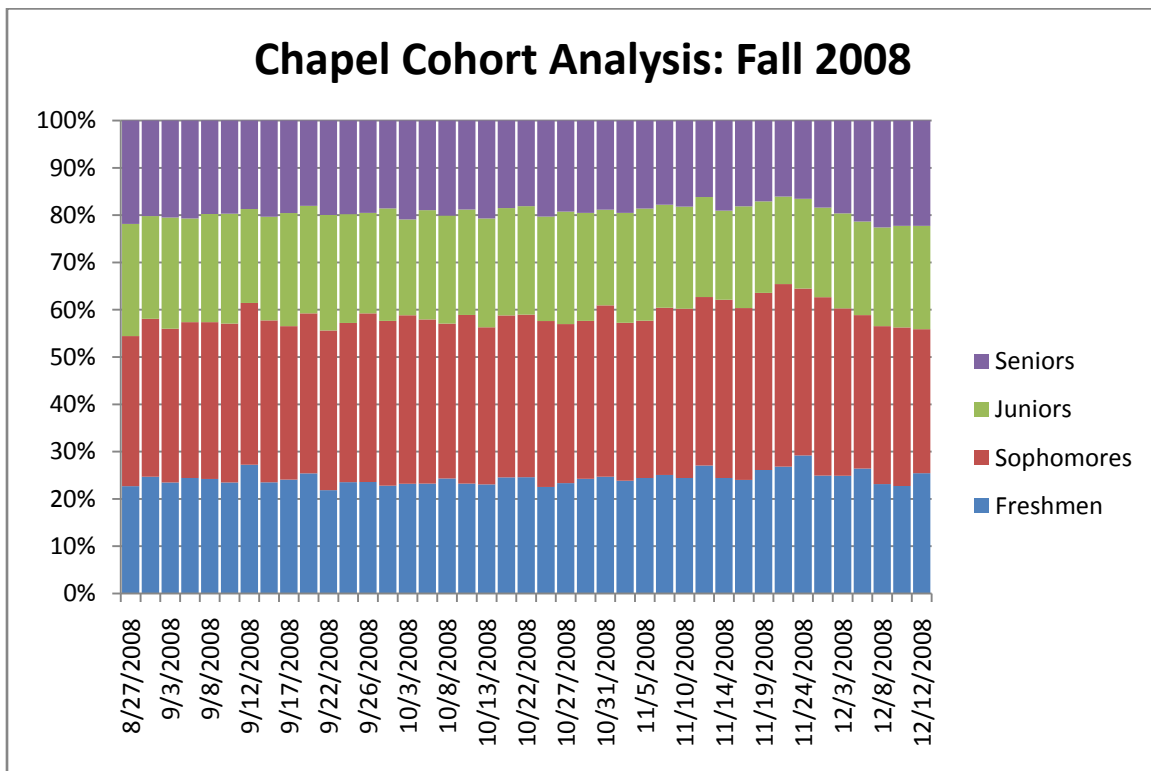


Figure 23E

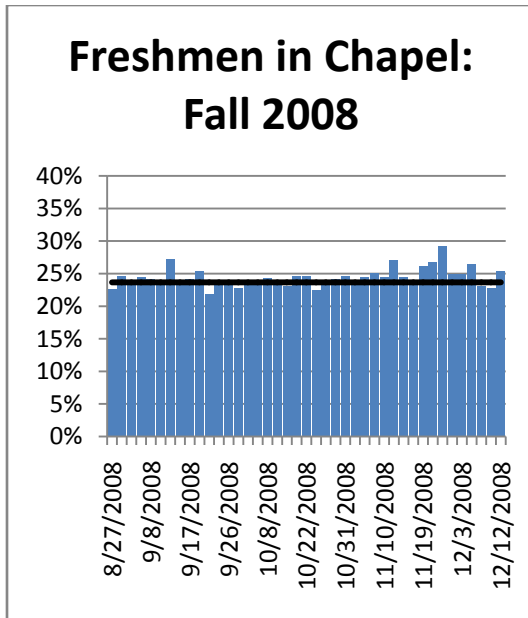


Figure 24E

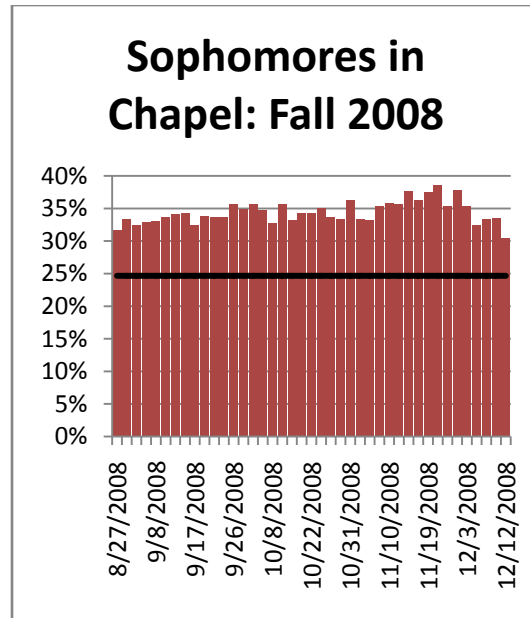


Figure 25E

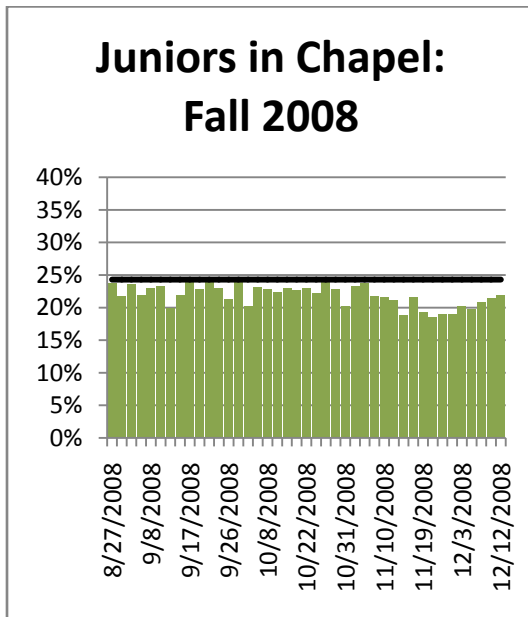


Figure 26E

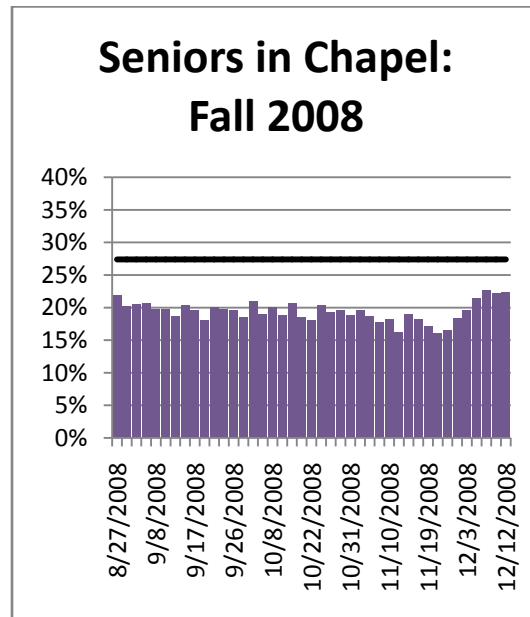


Figure 27E

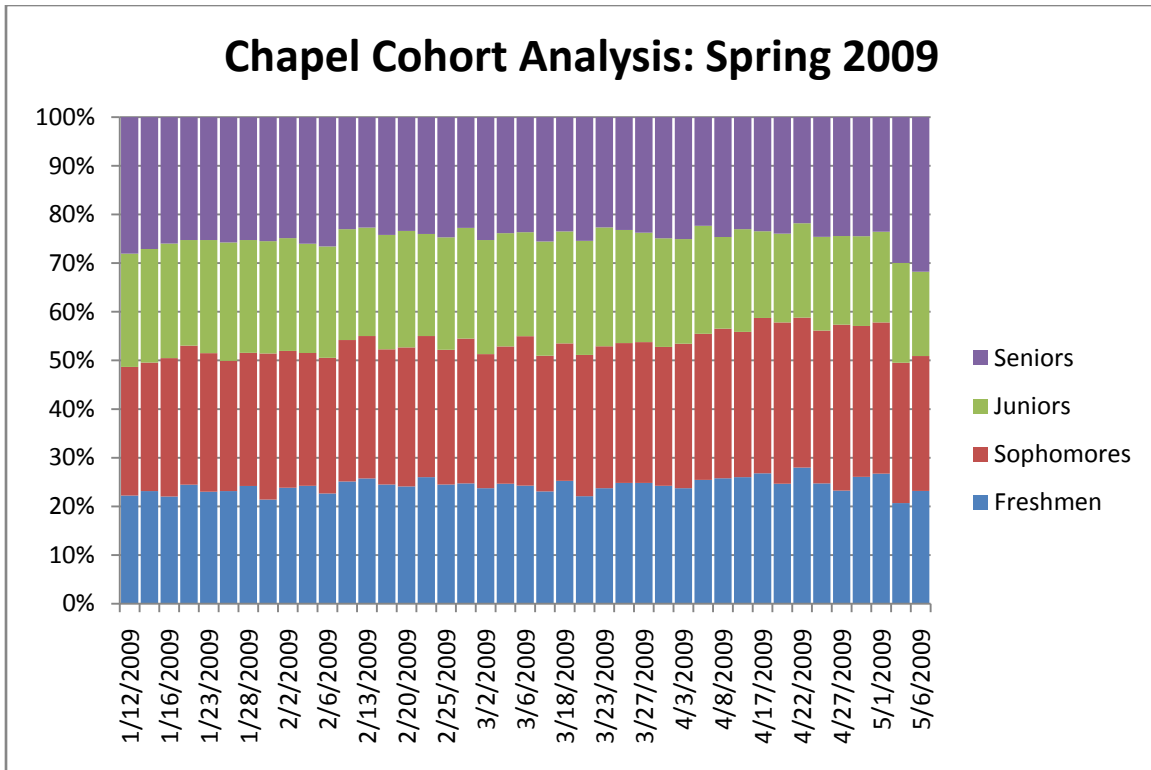


Figure 28E

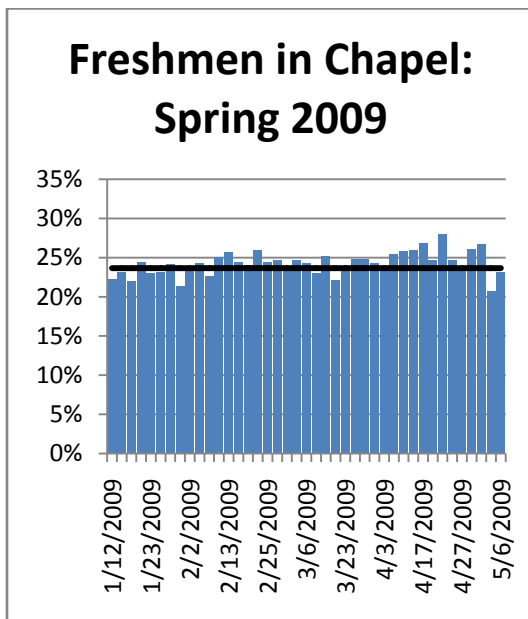


Figure 29E

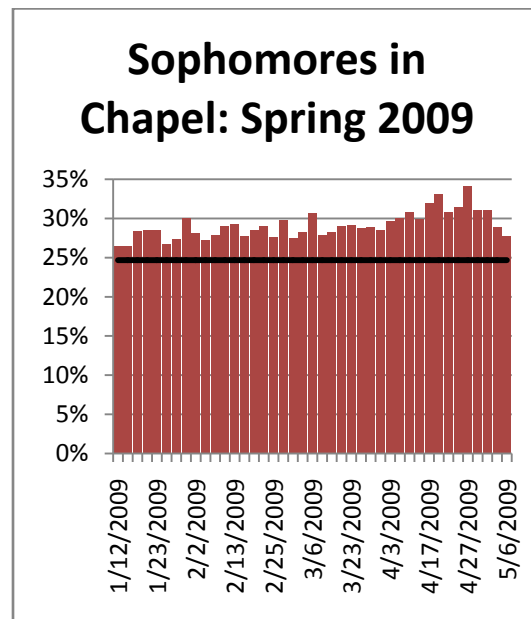


Figure 30E

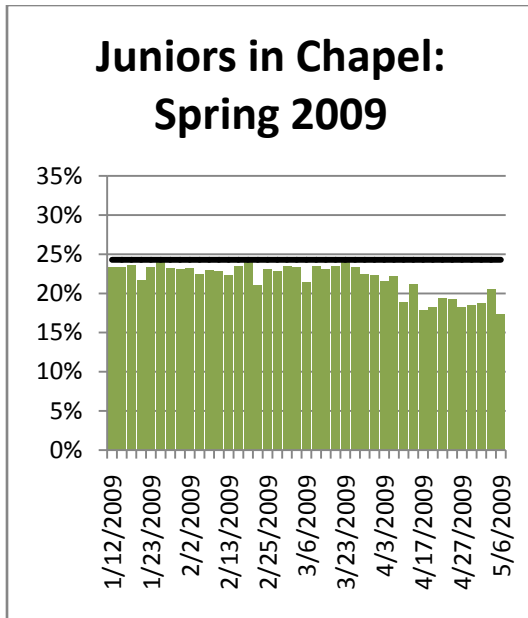


Figure 31E

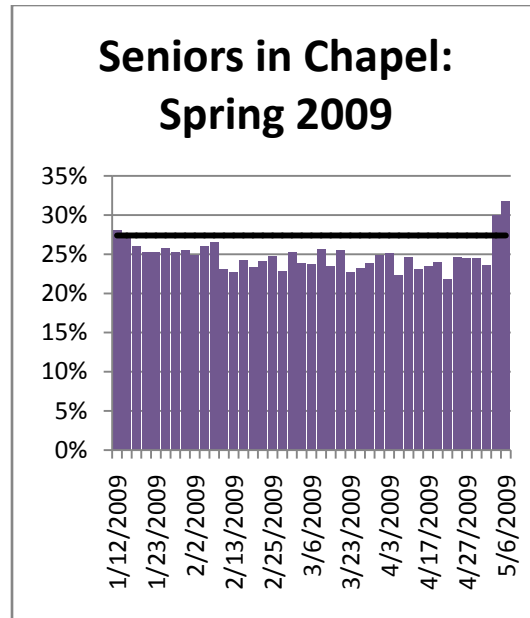


Figure 32E

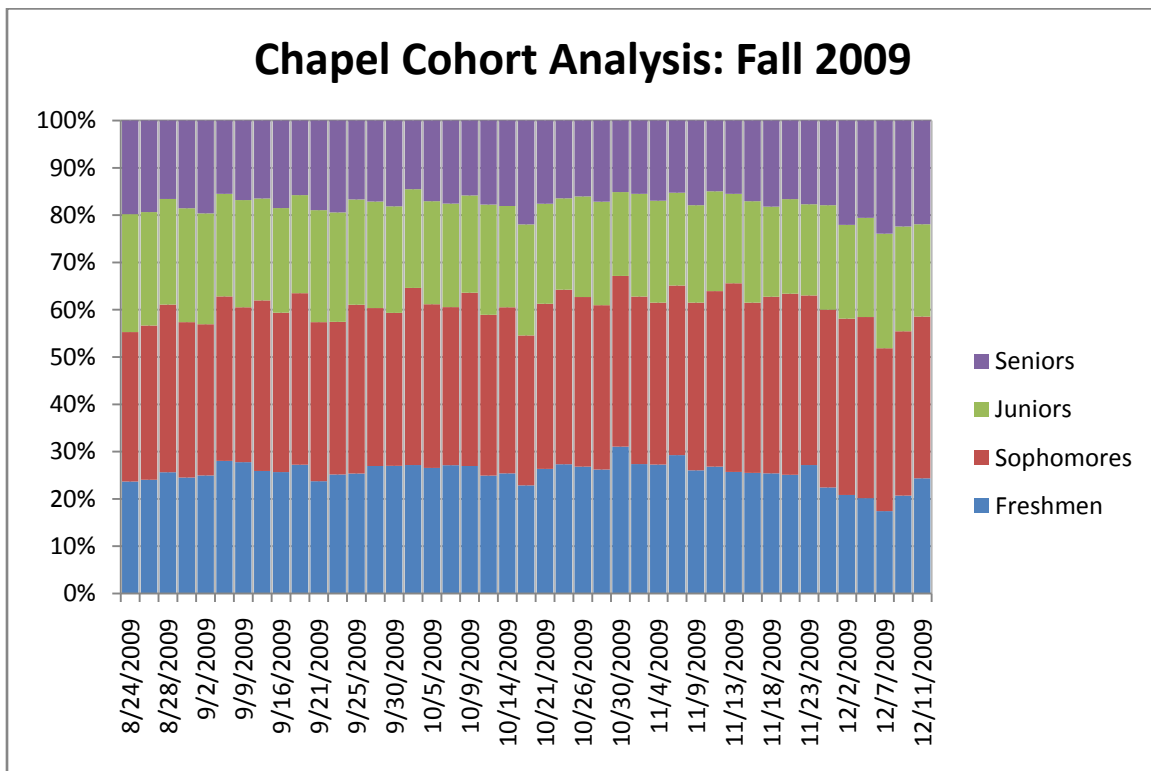


Figure 33E

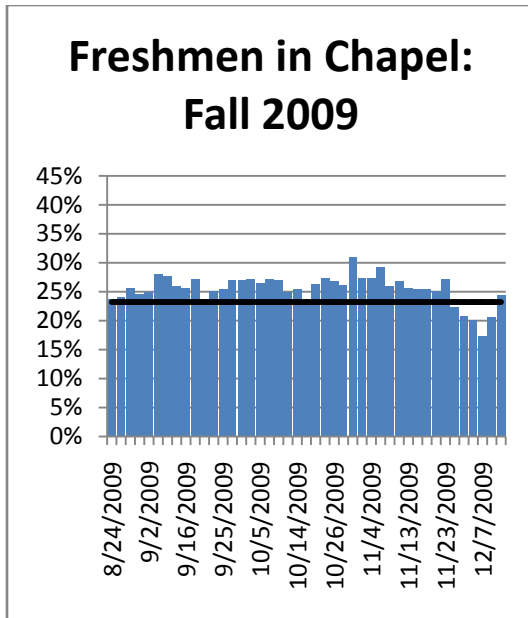


Figure 34E

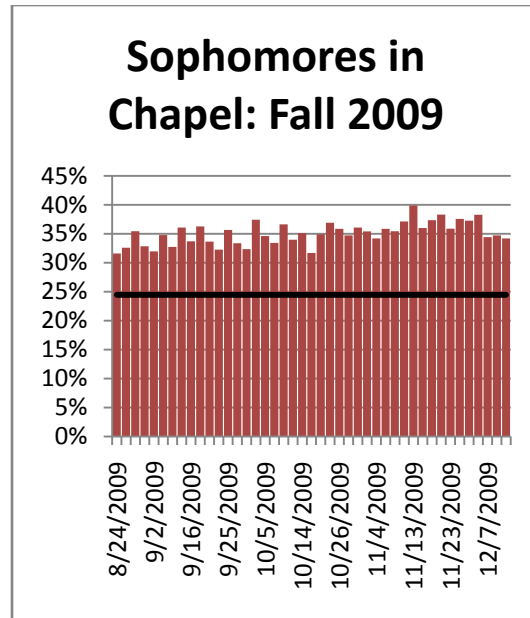


Figure 35E

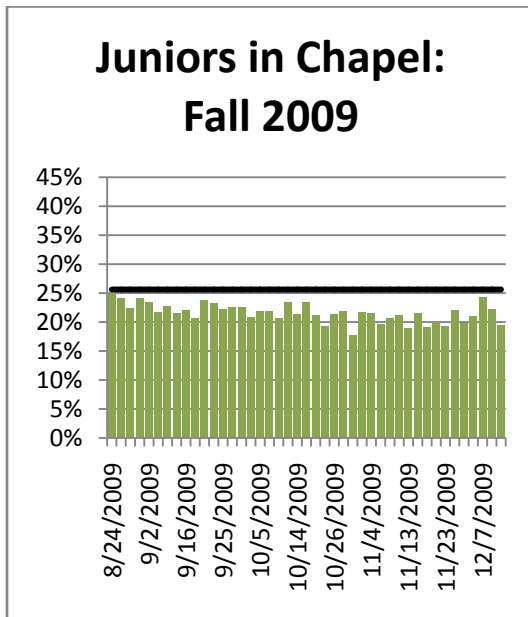


Figure 36E

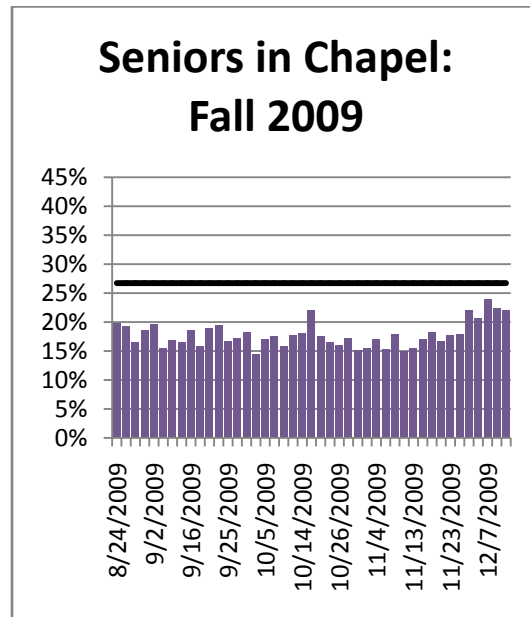


Figure 37E

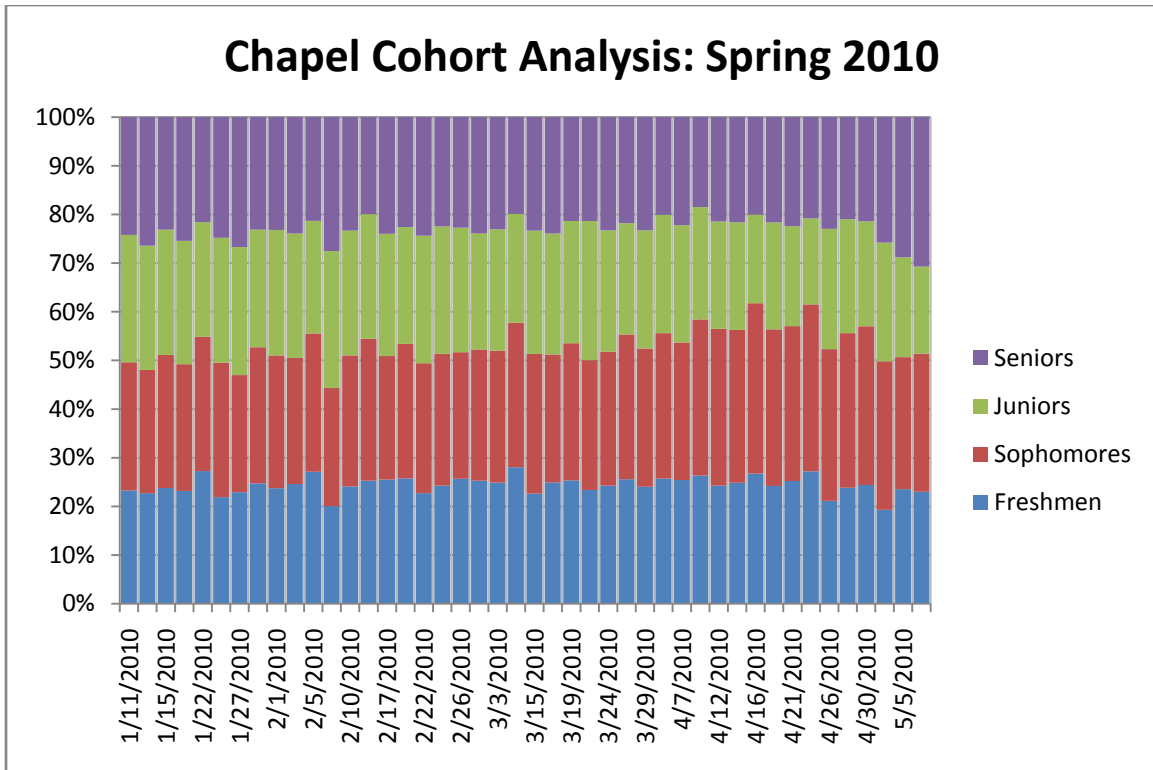


Figure 38E

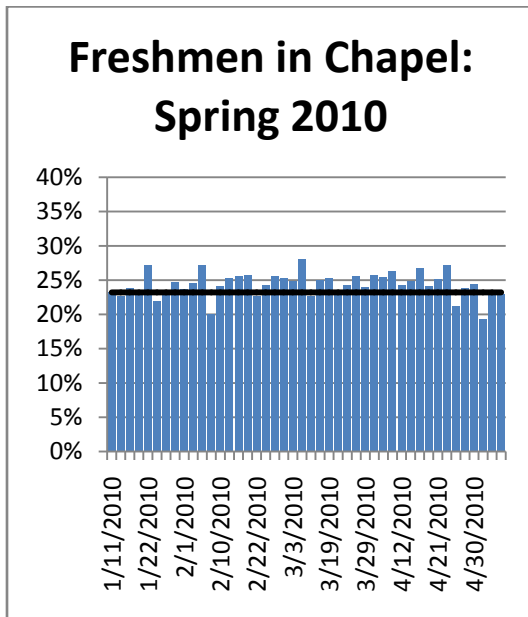


Figure 39E

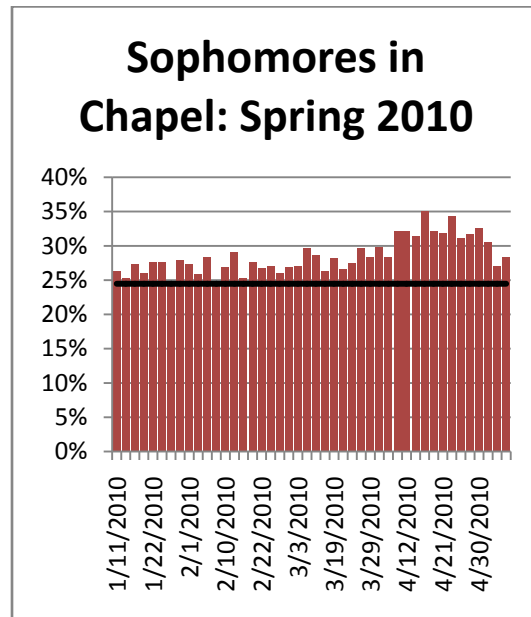


Figure 40E

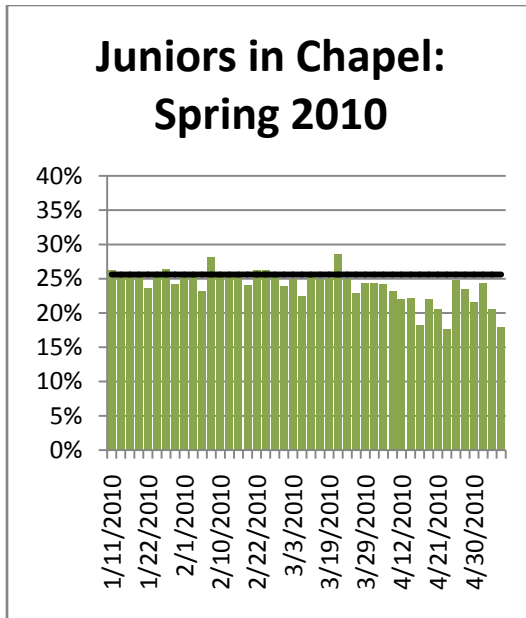


Figure 41E

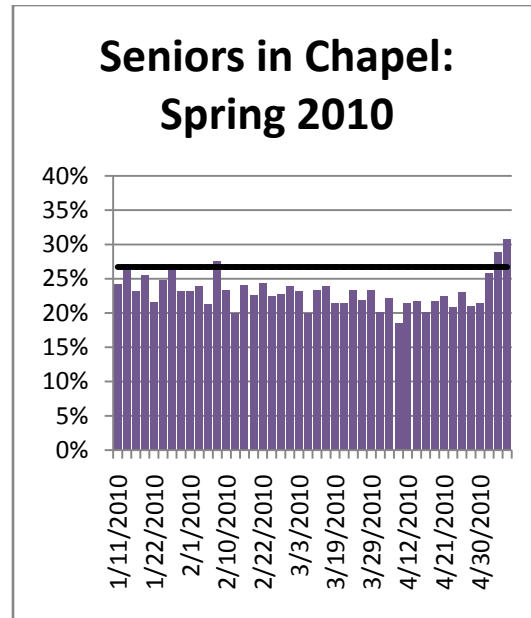


Figure 42E

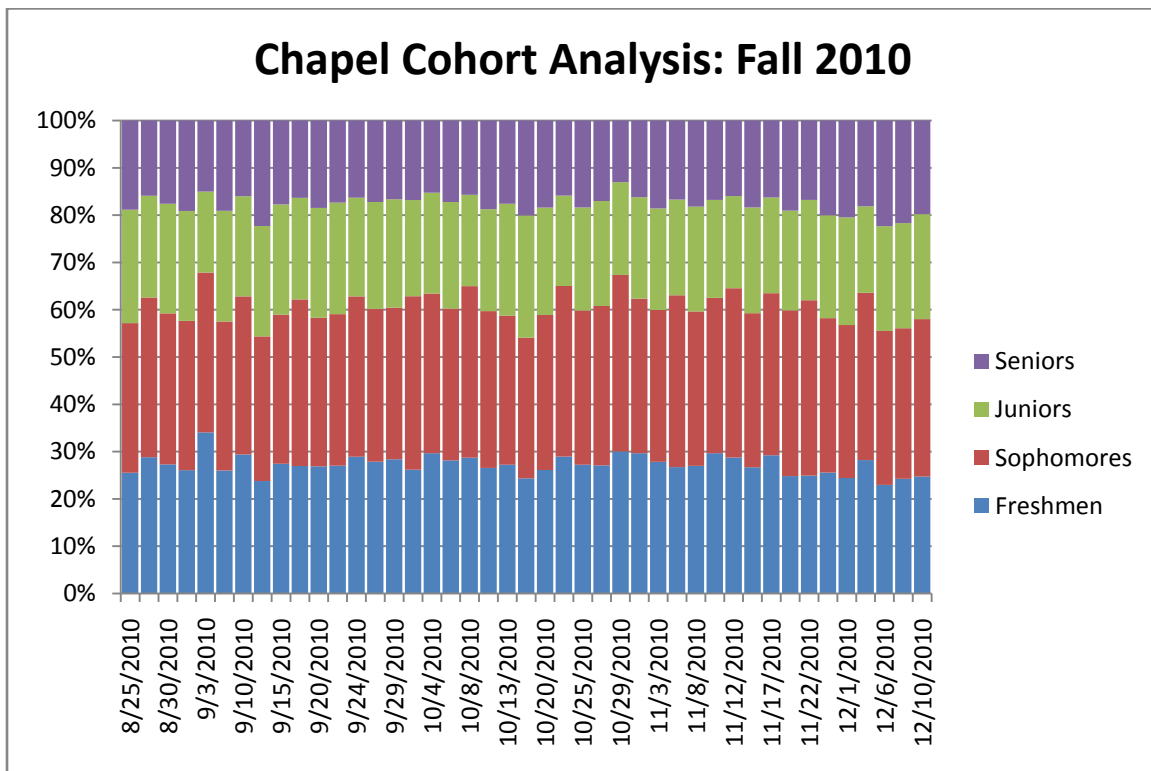


Figure 43E

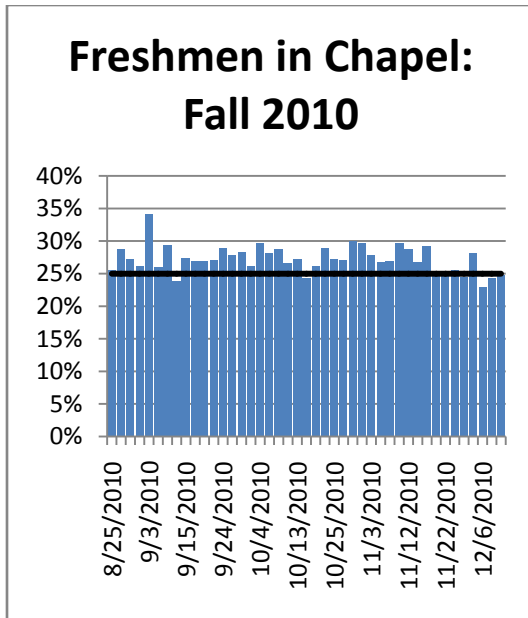


Figure 44E

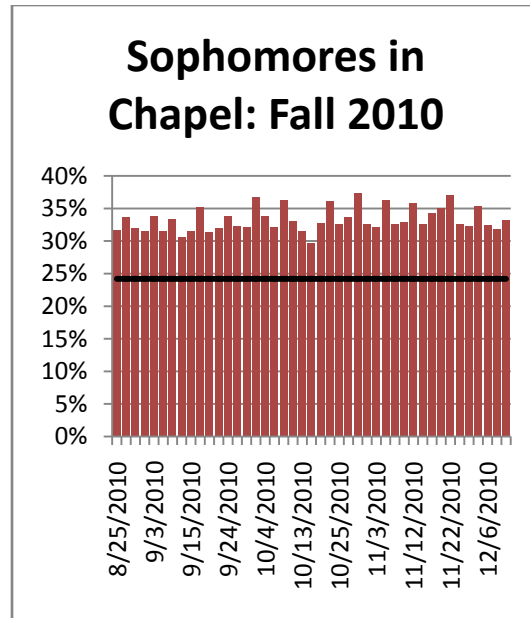


Figure 45E

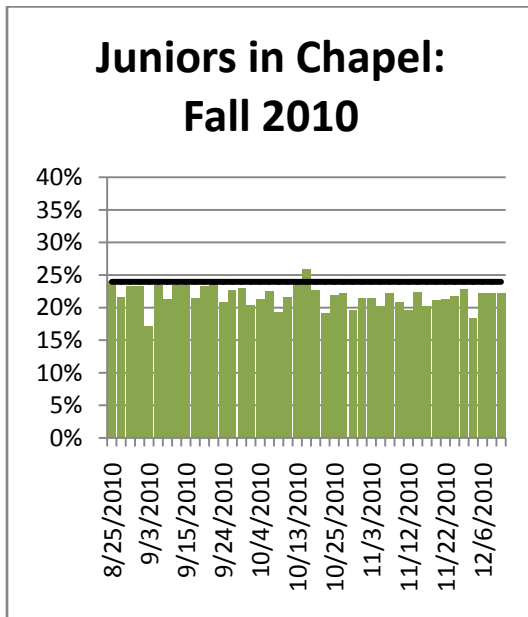


Figure 46E

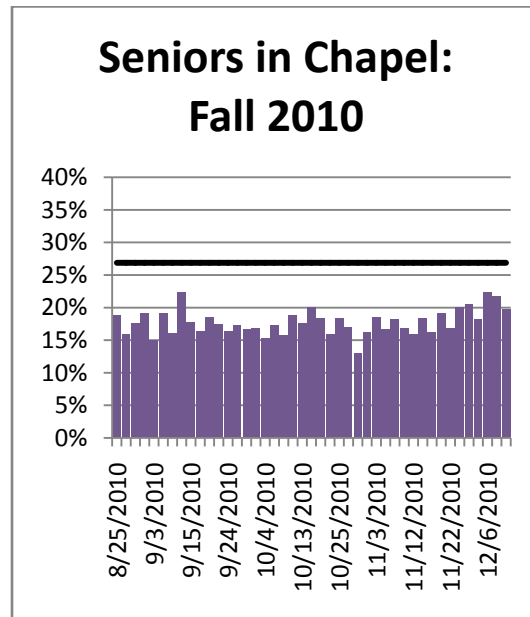


Figure 47E

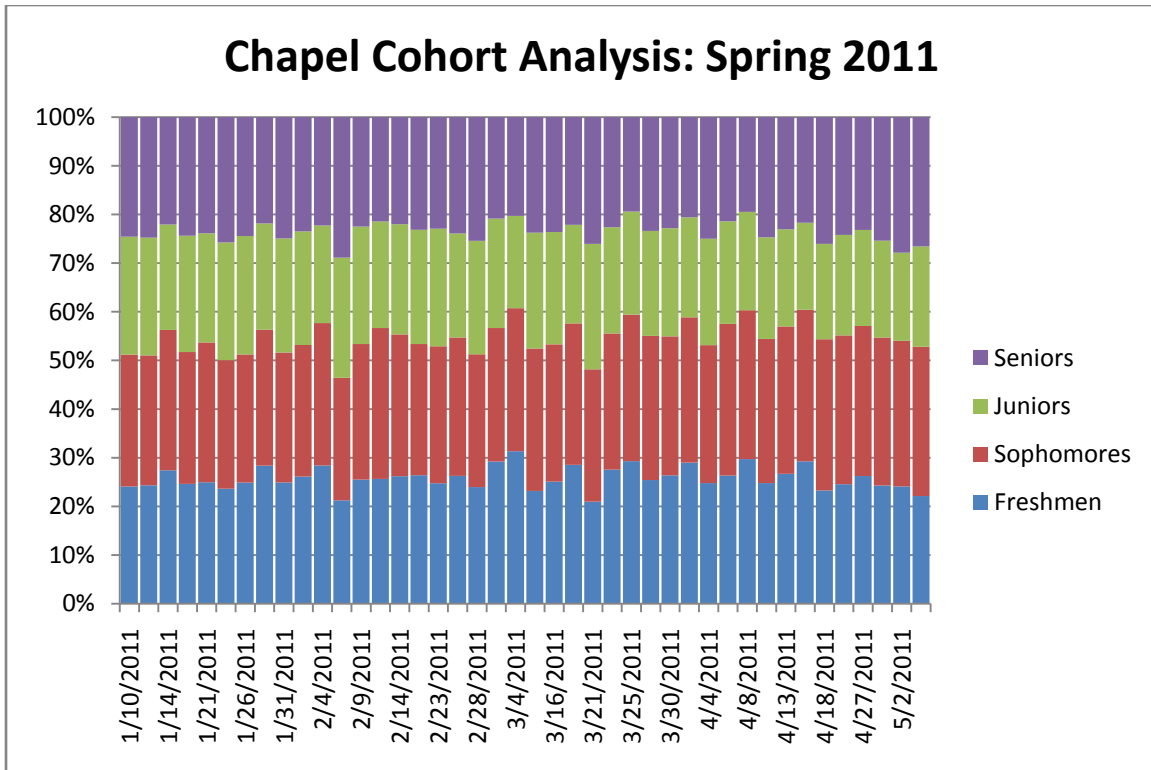


Figure 48E

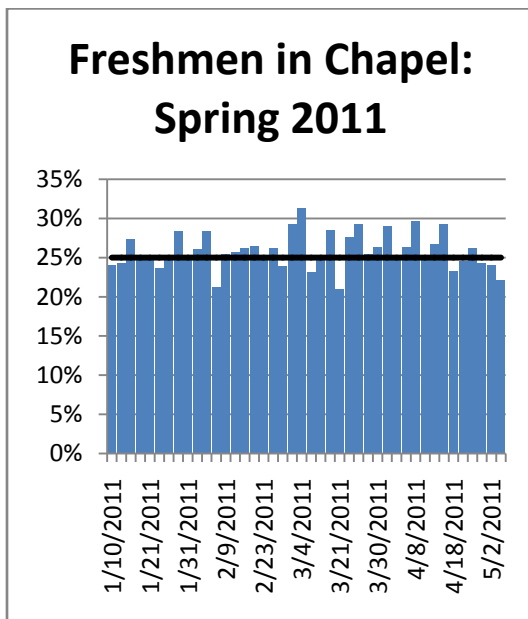


Figure 49E

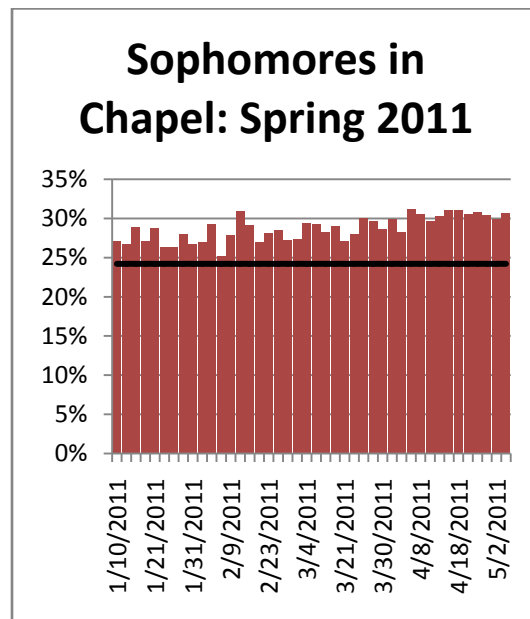


Figure 50E

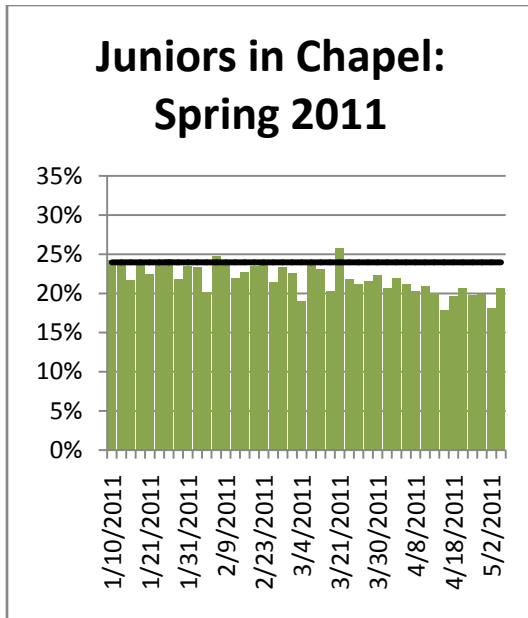


Figure 51E

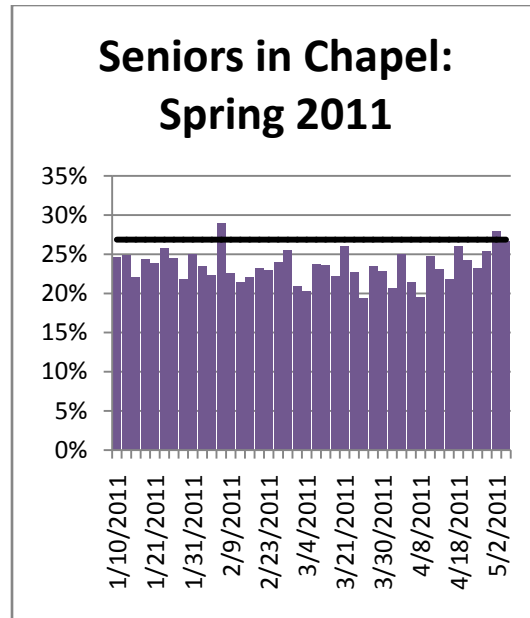


Figure 52E

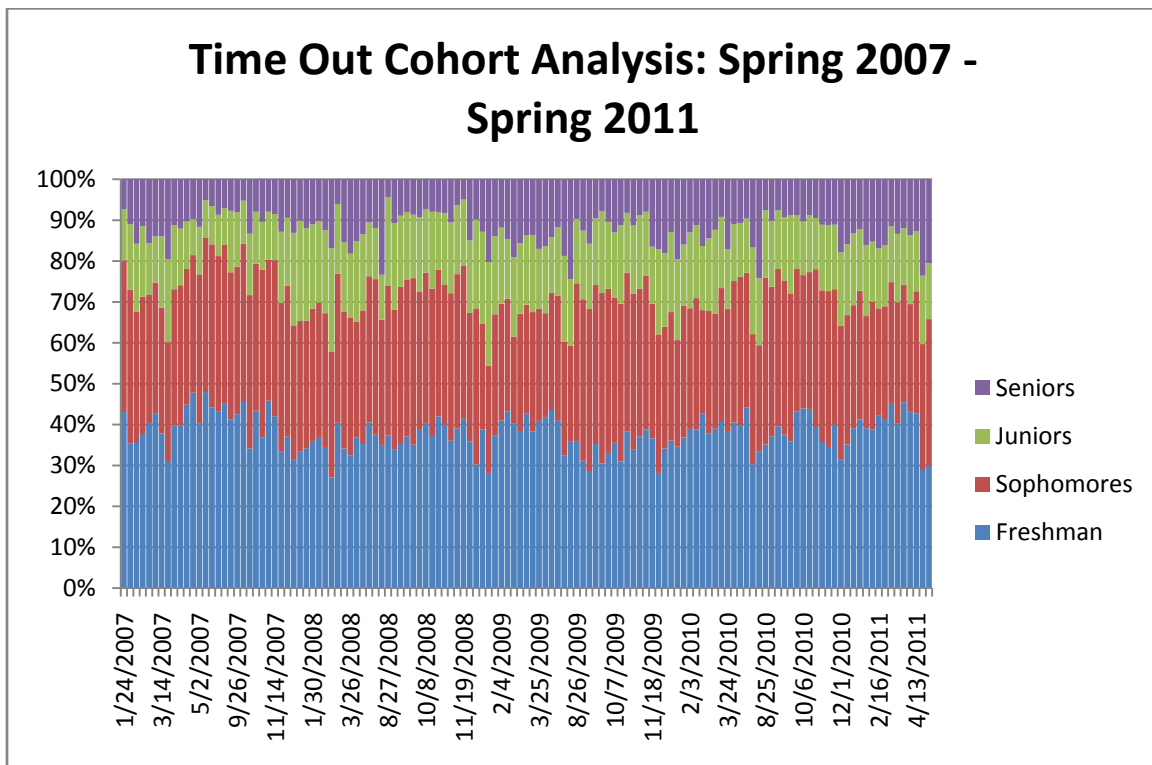


Figure 53E

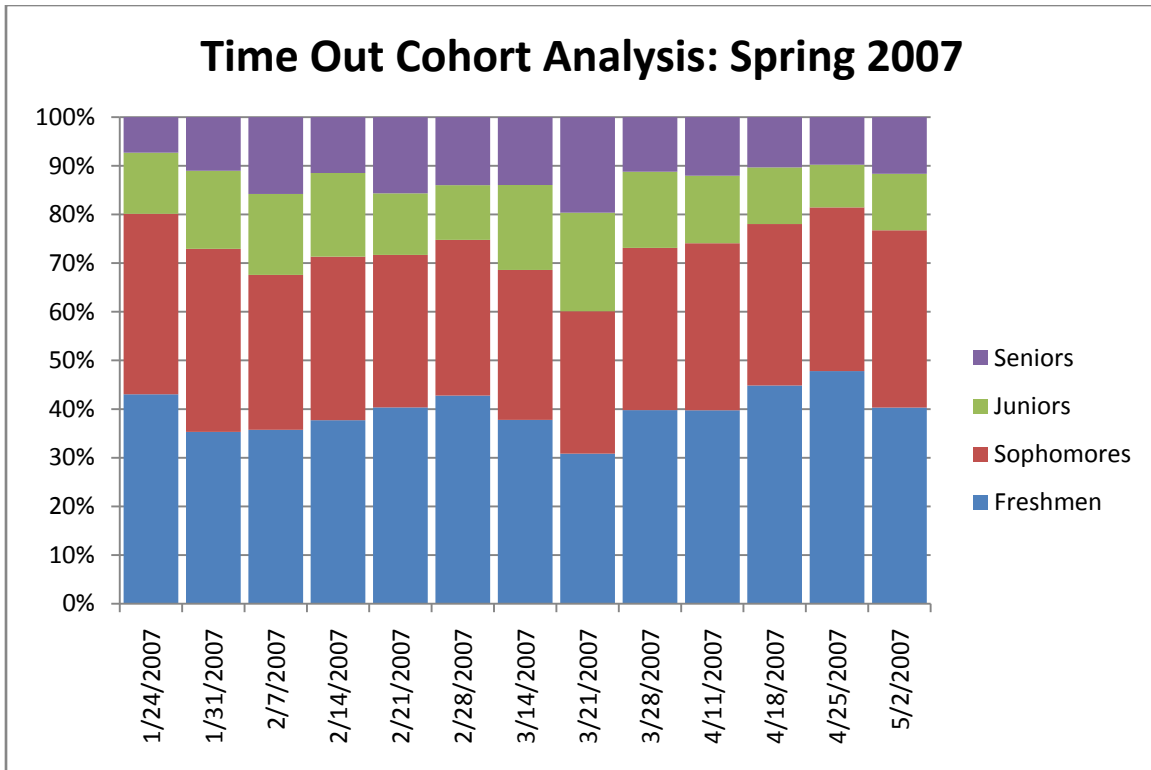


Figure 54E

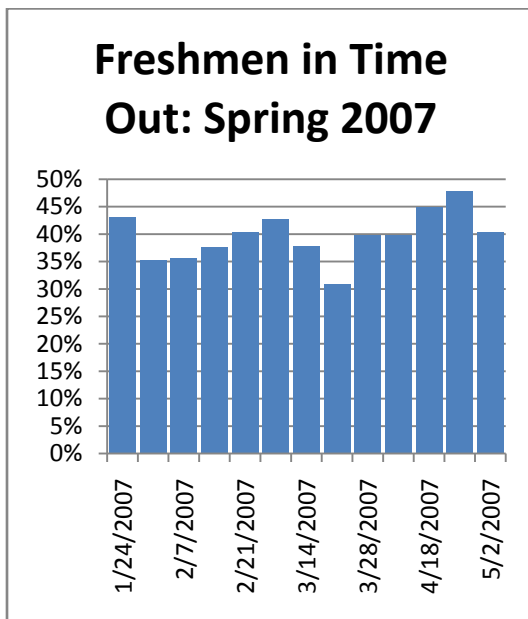


Figure 55E

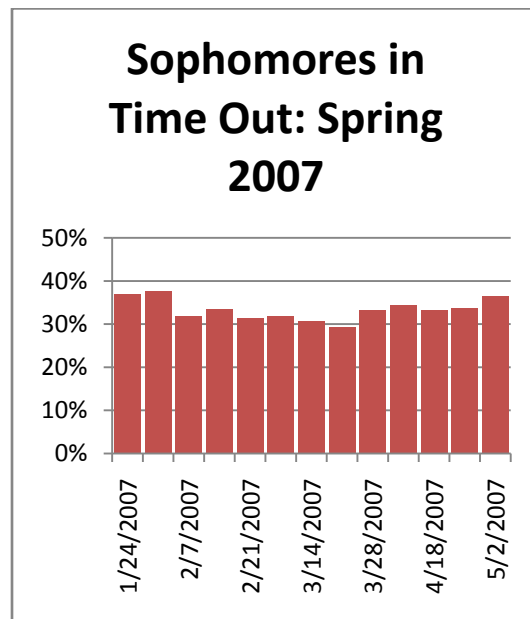


Figure 56E

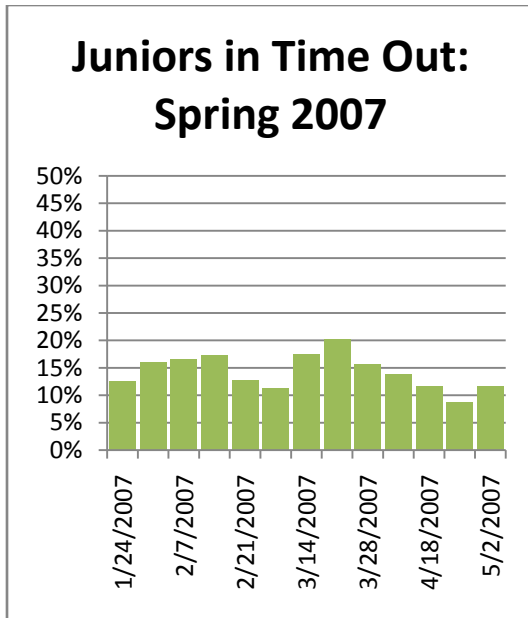


Figure 57E

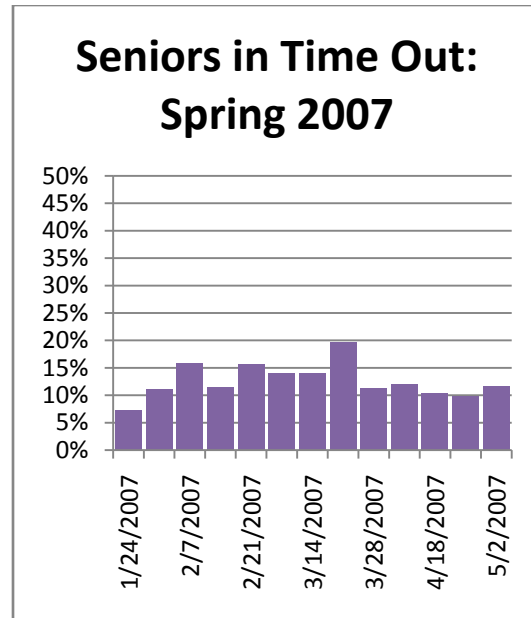


Figure 58E

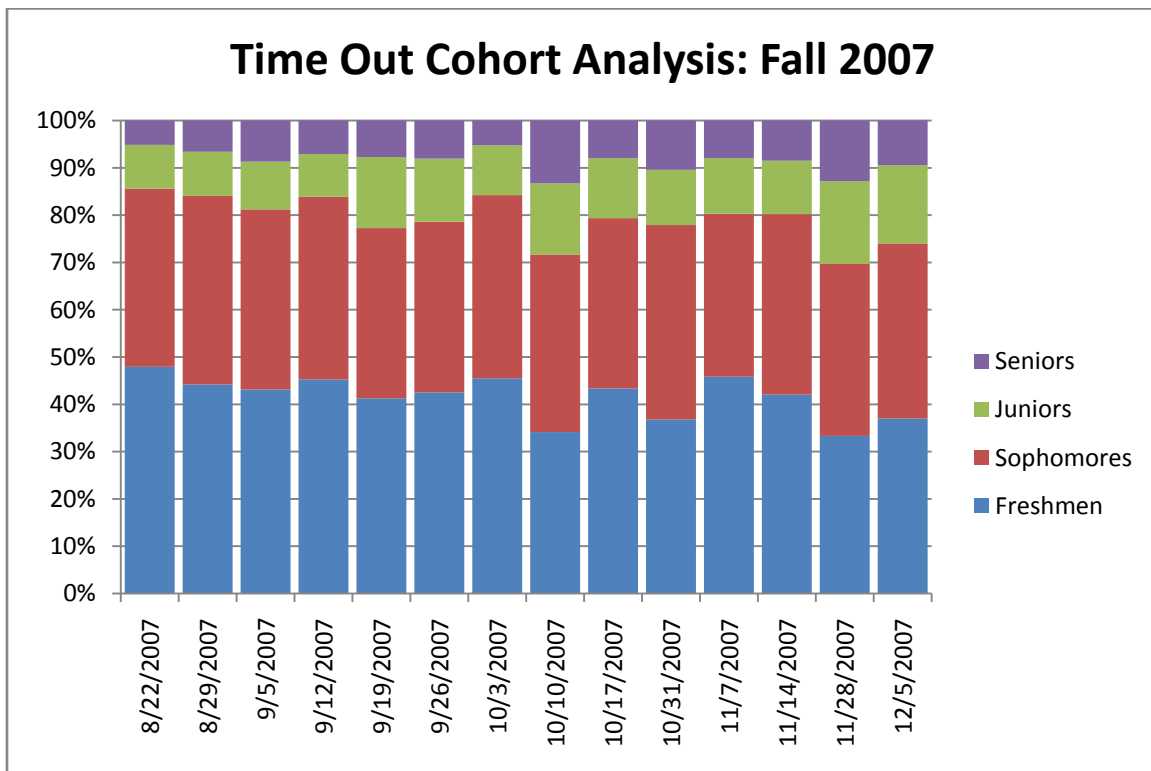


Figure 59E

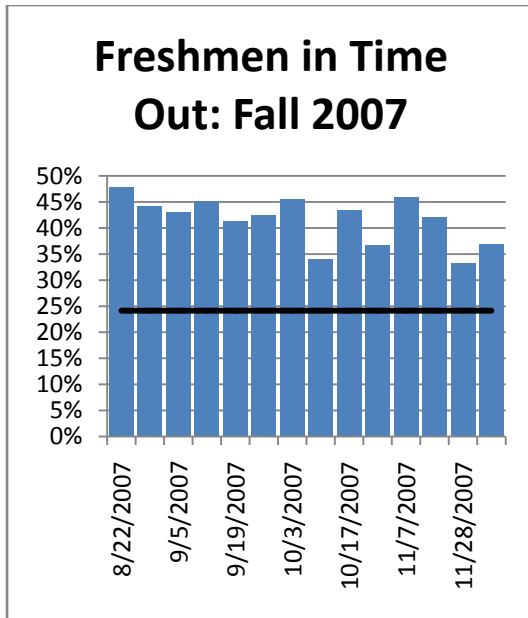


Figure 60E

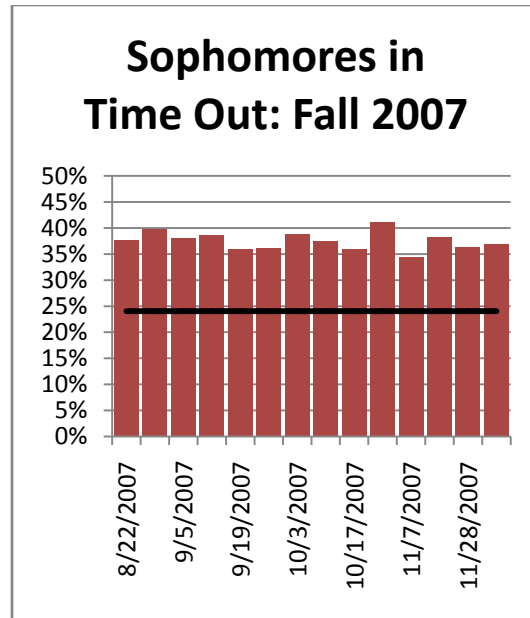


Figure 61E

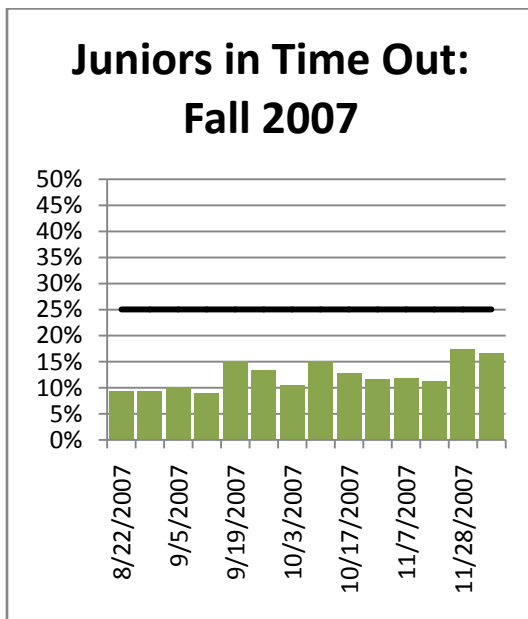


Figure 62E

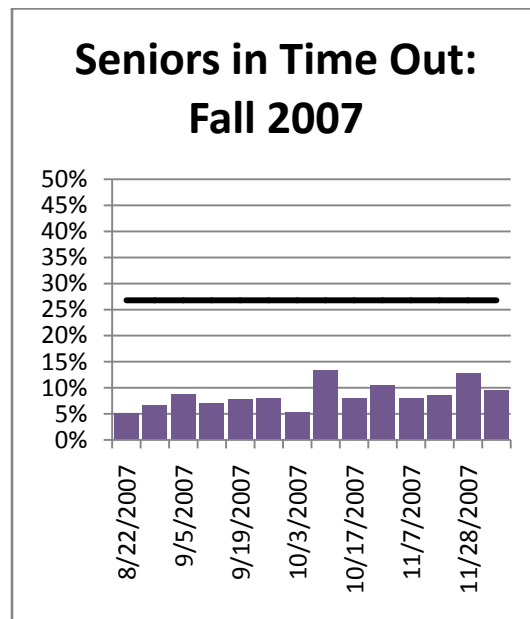


Figure 63E

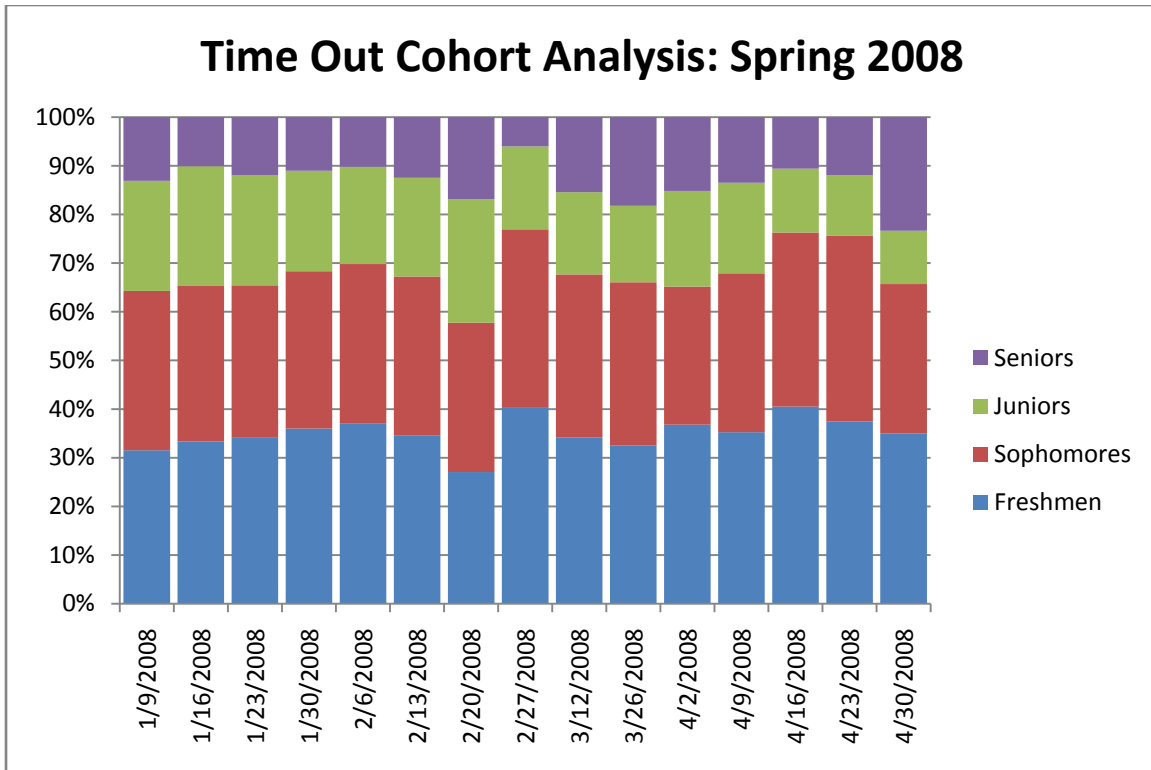


Figure 64E

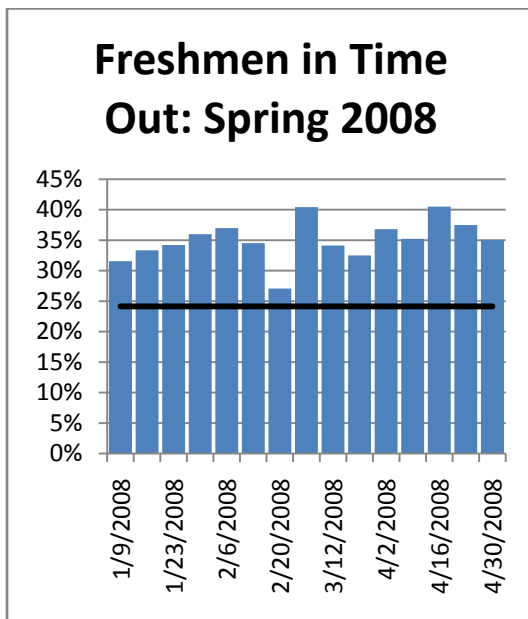


Figure 65E

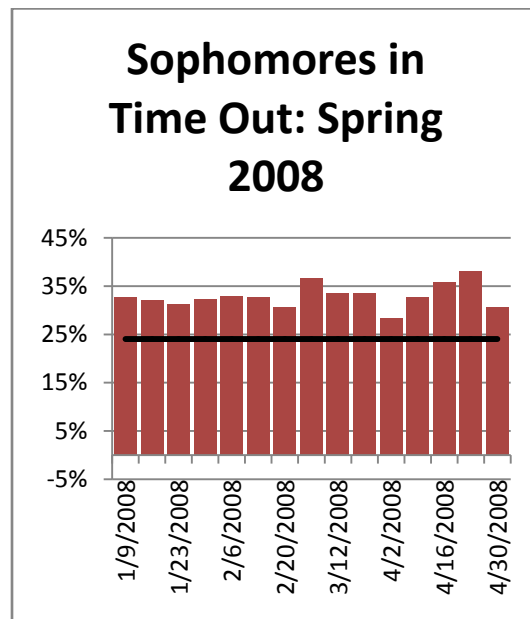


Figure 66E

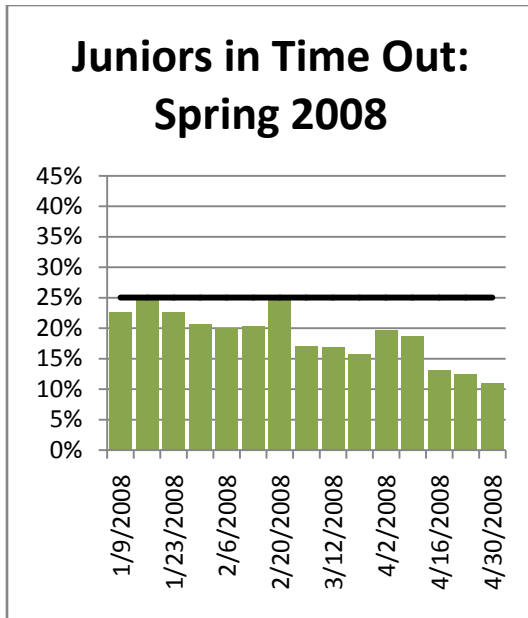


Figure 67E

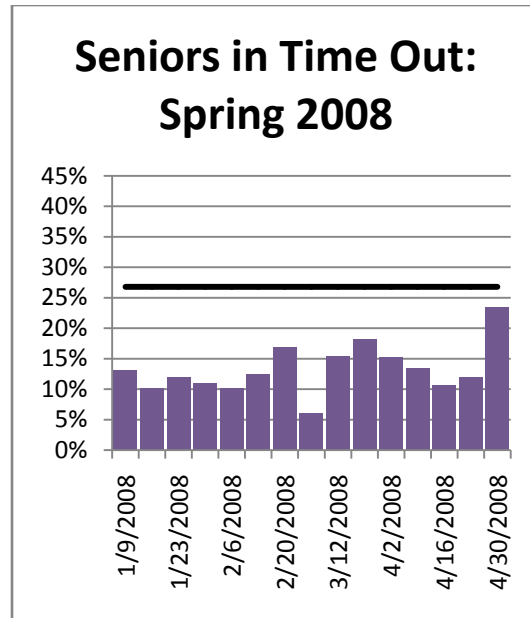


Figure 68E

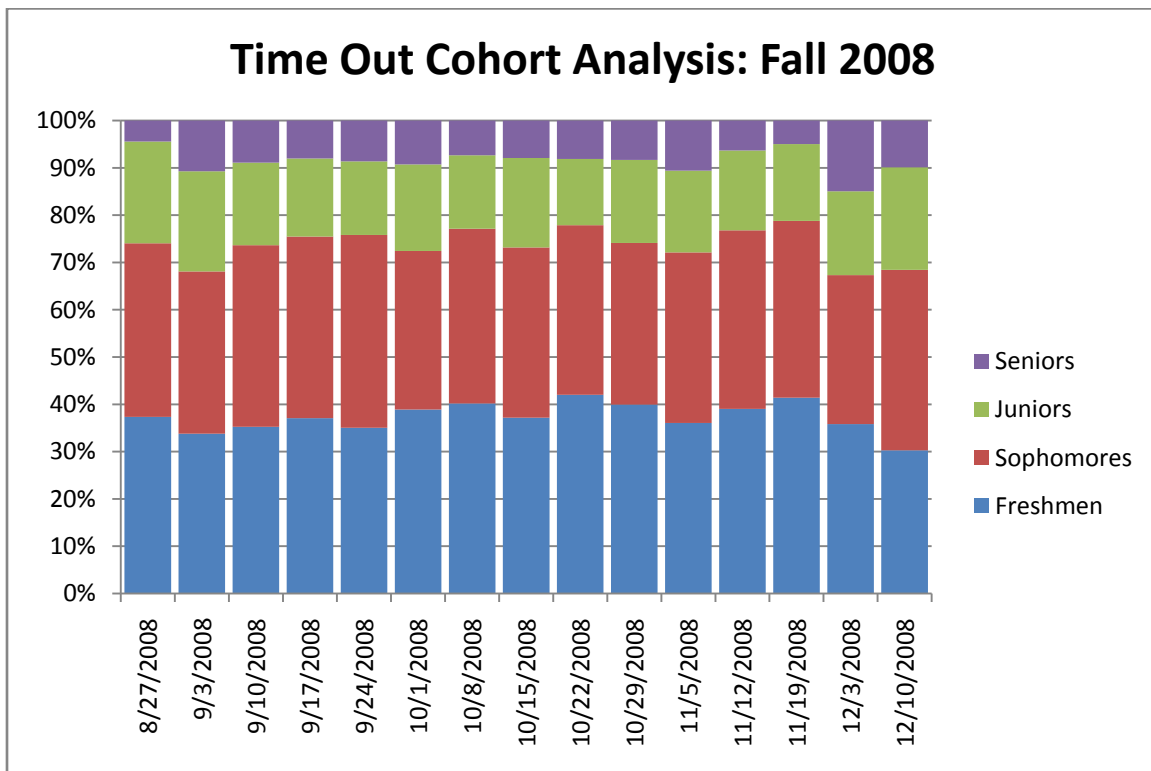


Figure 69E

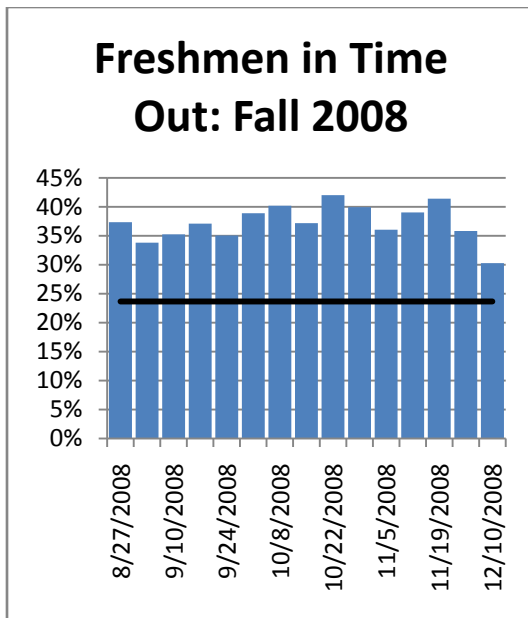


Figure 70E

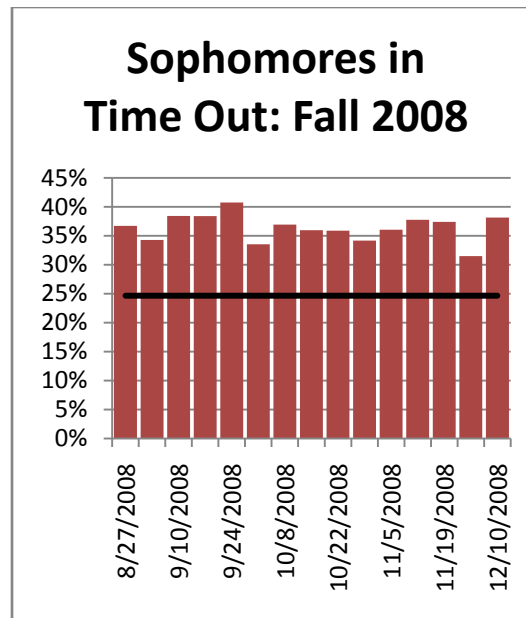


Figure 71E

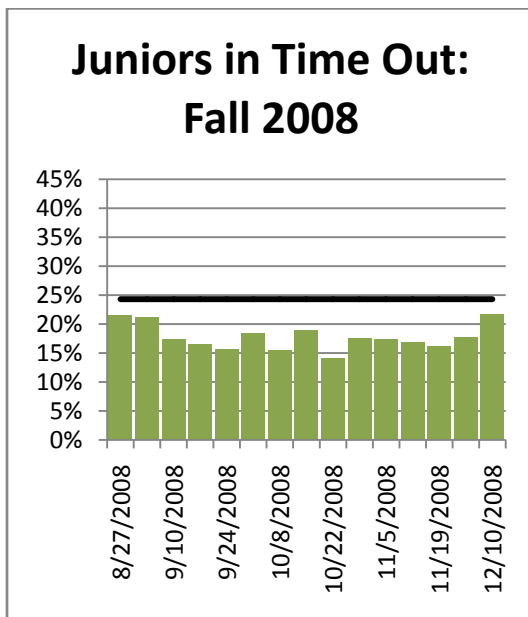


Figure 72E

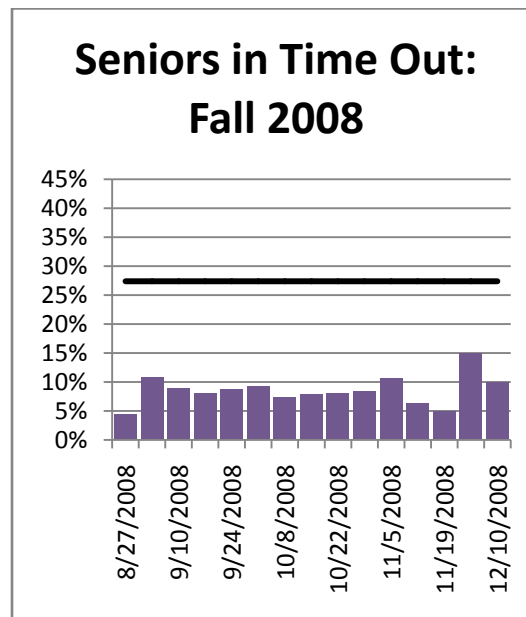


Figure 73E

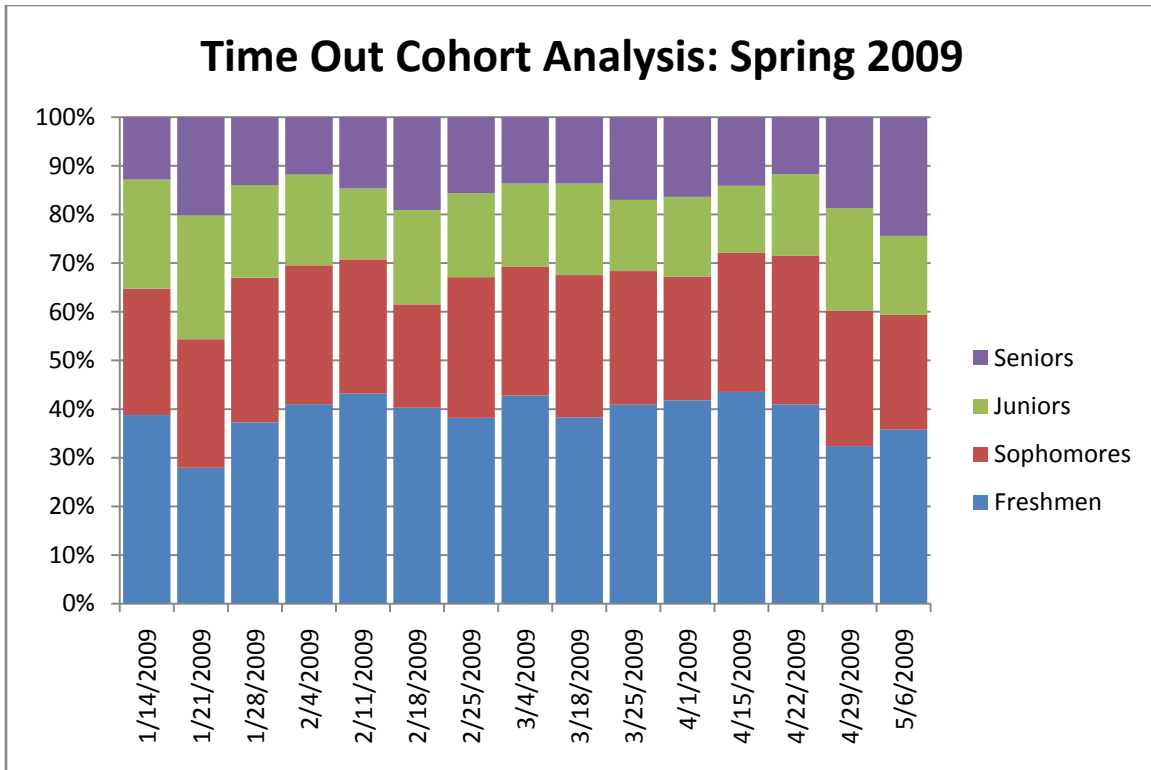


Figure 74E

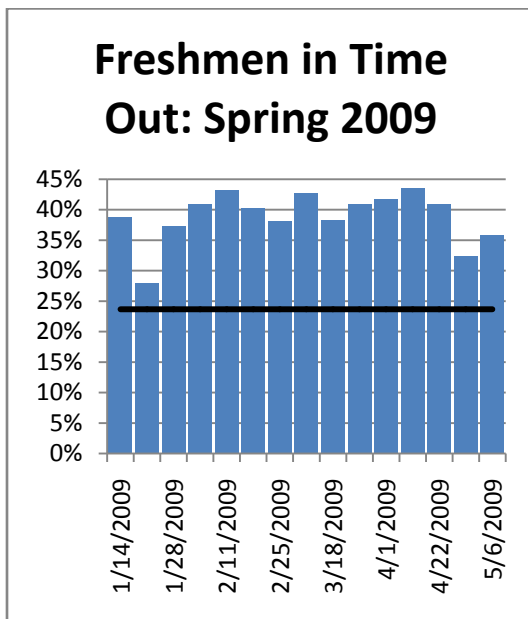


Figure 75E

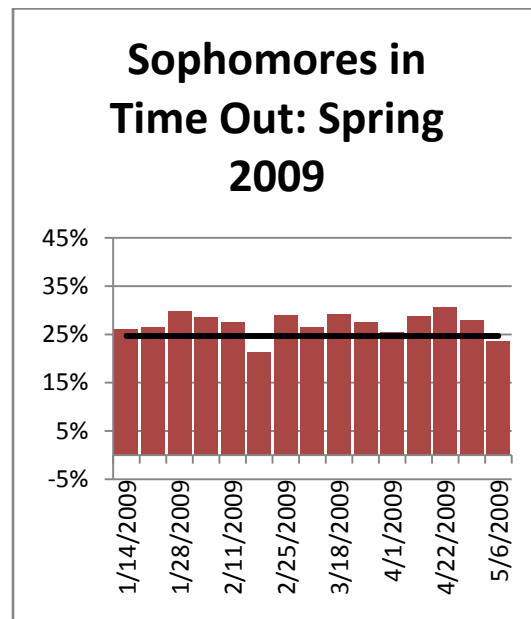


Figure 76E

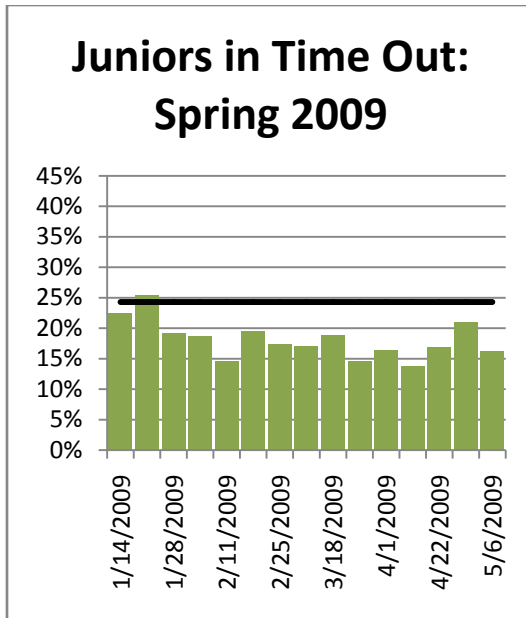


Figure 77E

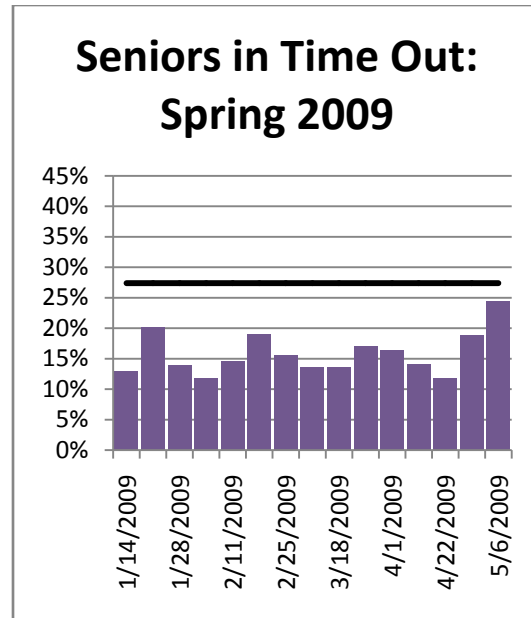


Figure 78E

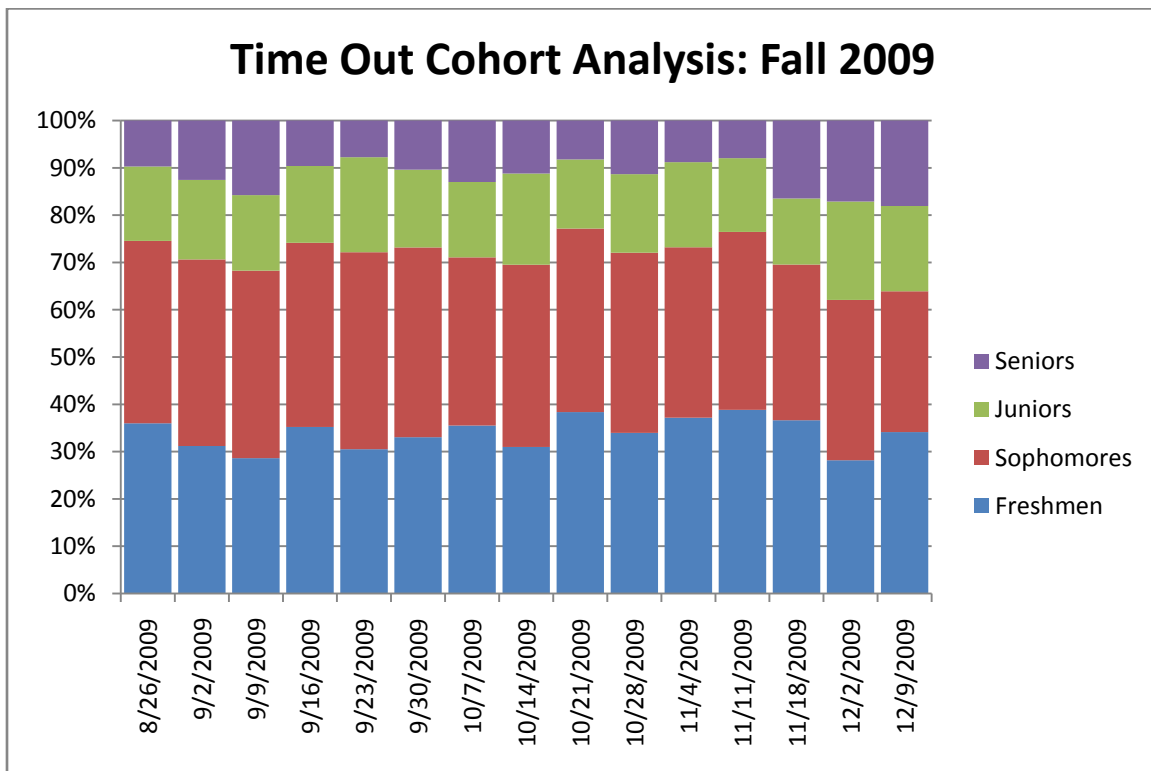


Figure 79E

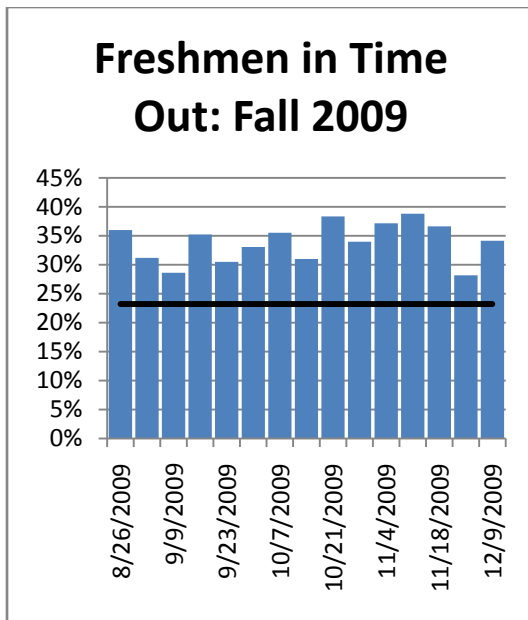


Figure 80E

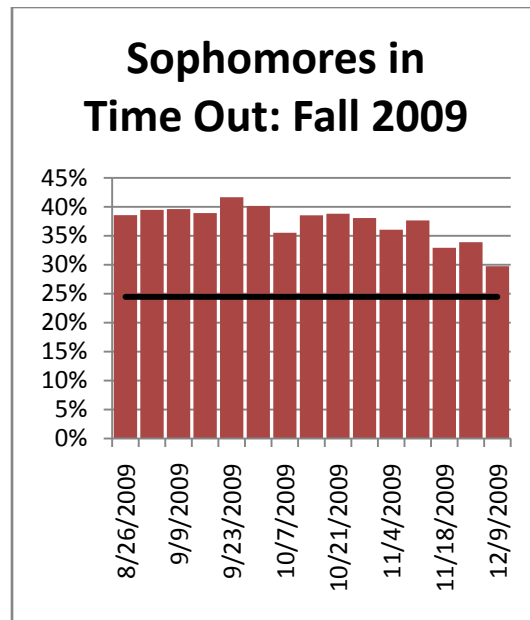


Figure 81E

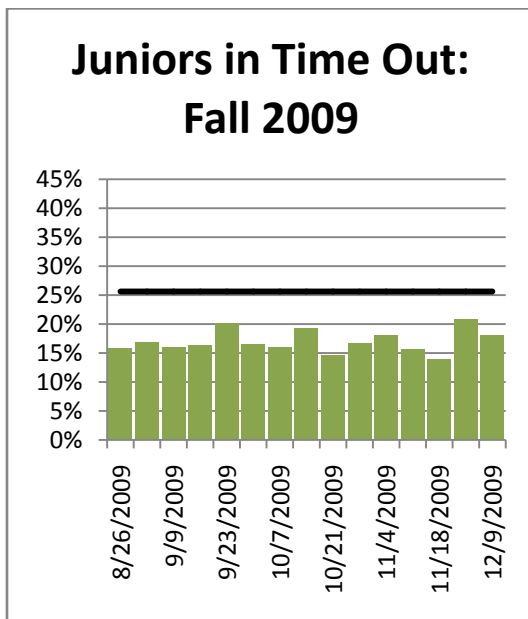


Figure 82E

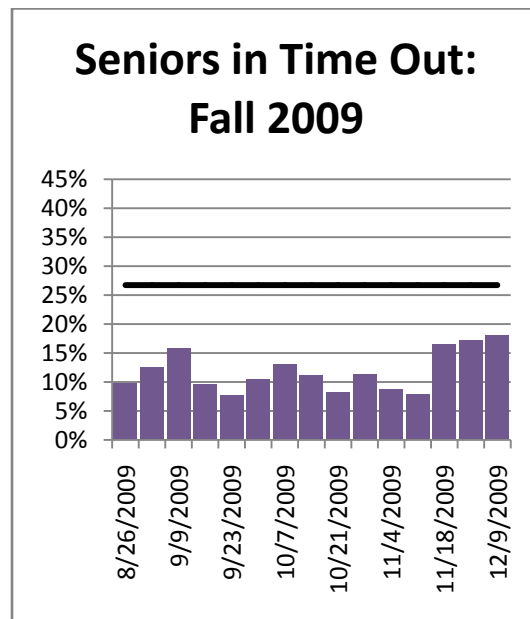


Figure 83E

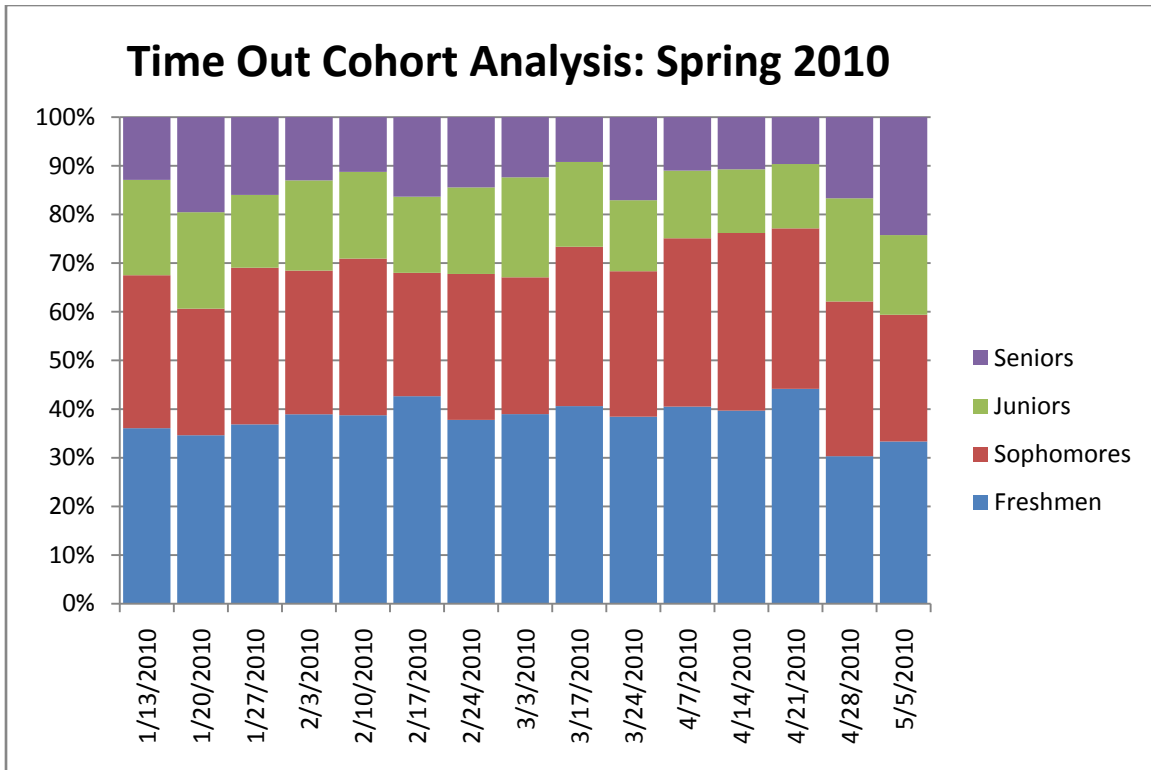


Figure 84E

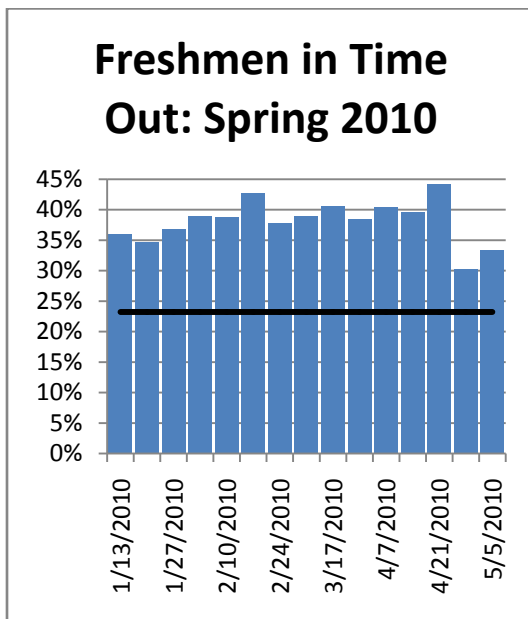


Figure 85E

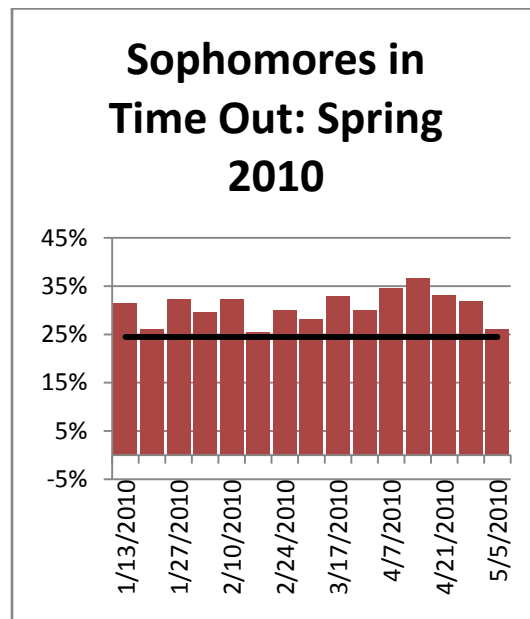


Figure 86E

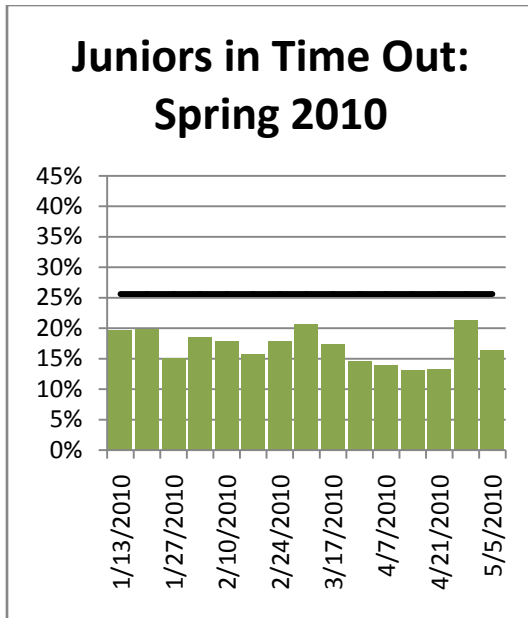


Figure 87E

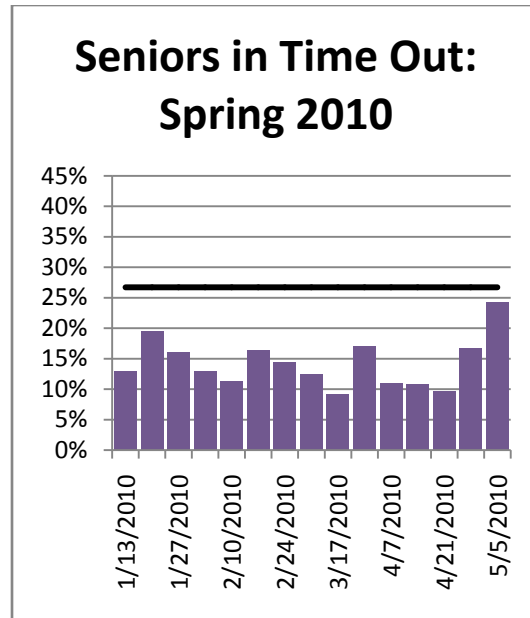


Figure 88E

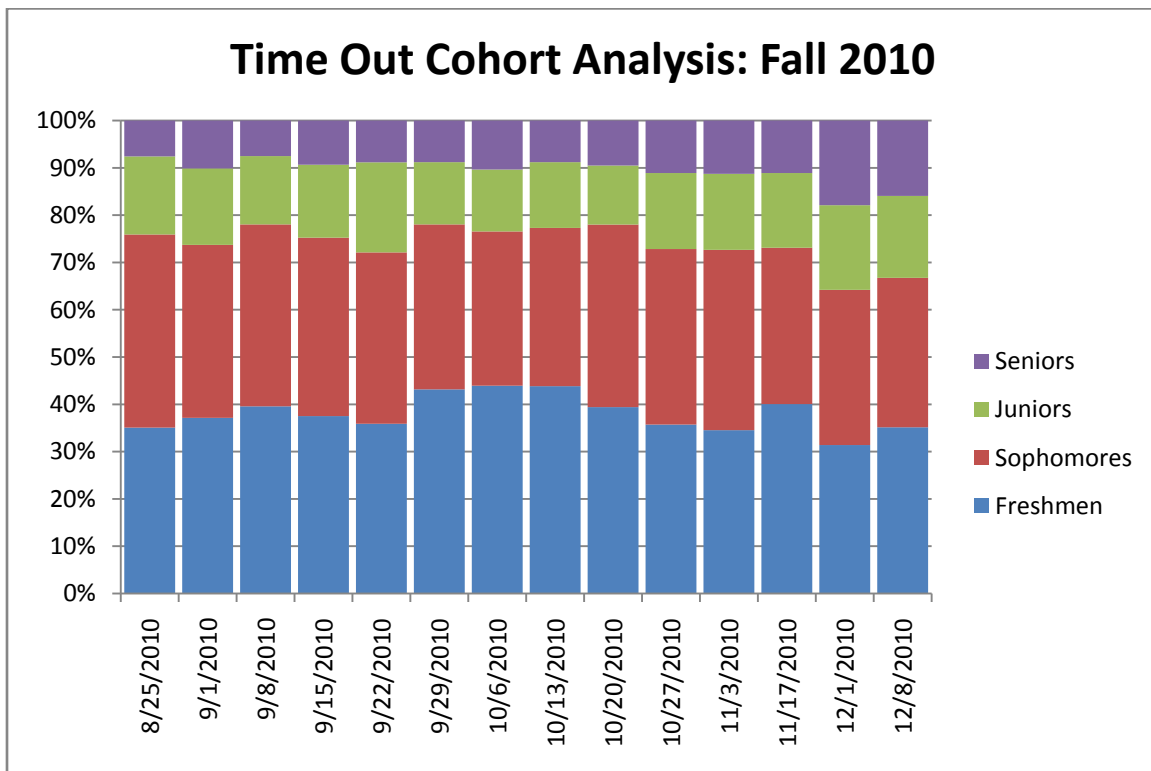


Figure 89E

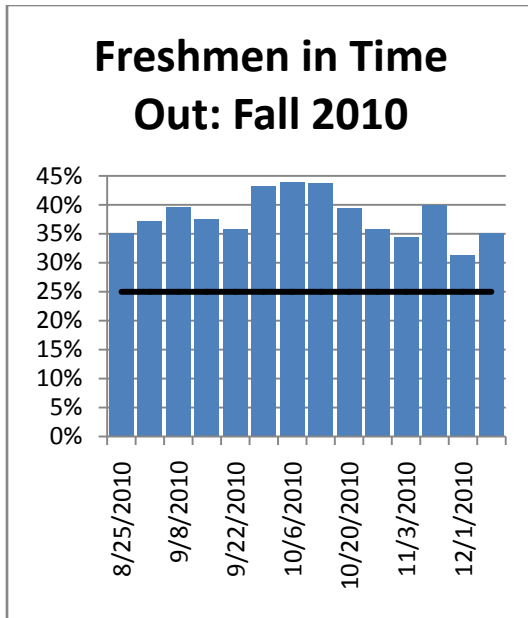


Figure 90E

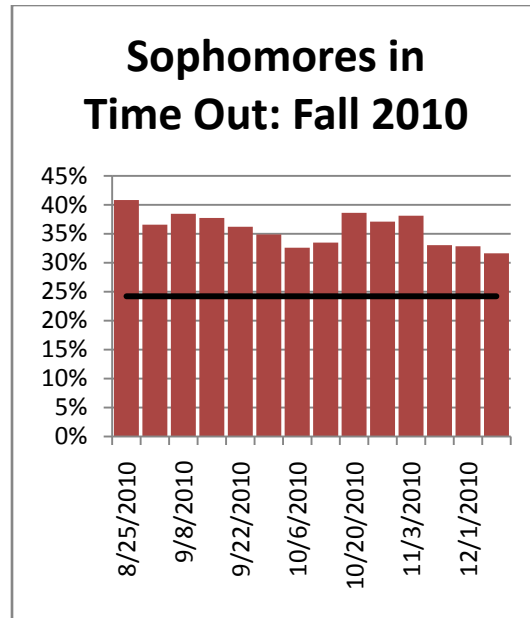


Figure 91E

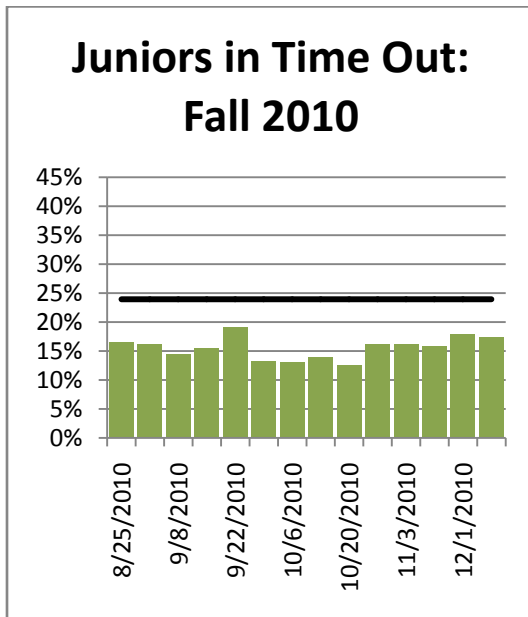


Figure 92E

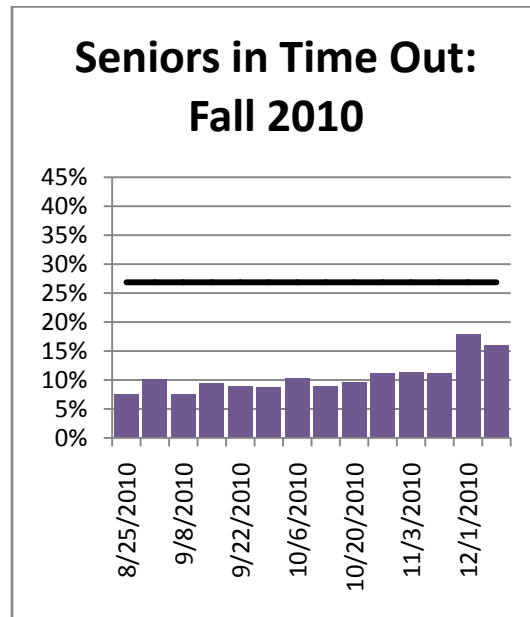


Figure 93E

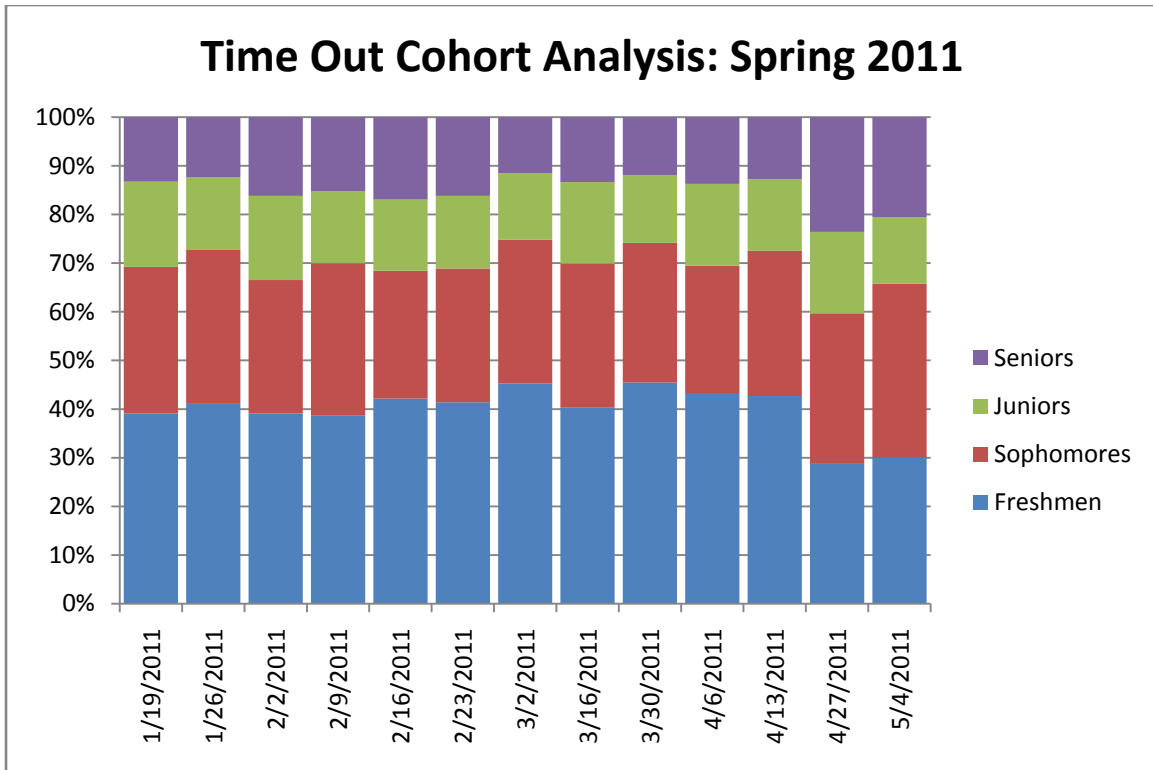


Figure 94E

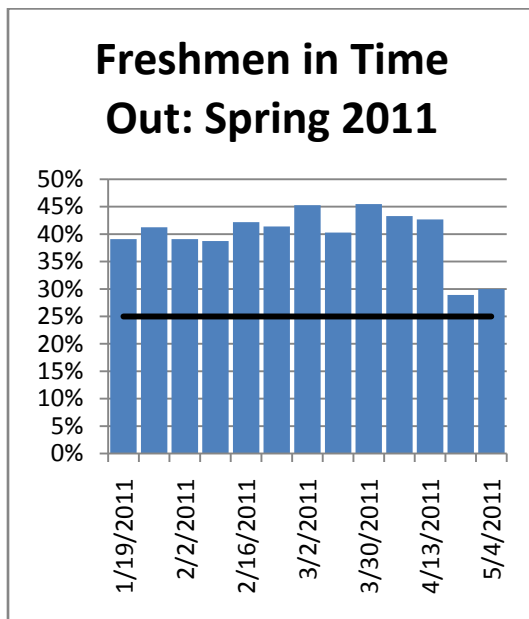


Figure 95E

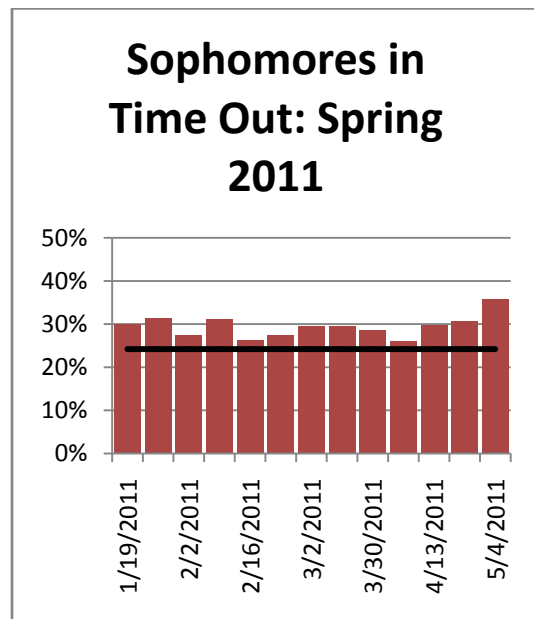


Figure 96E

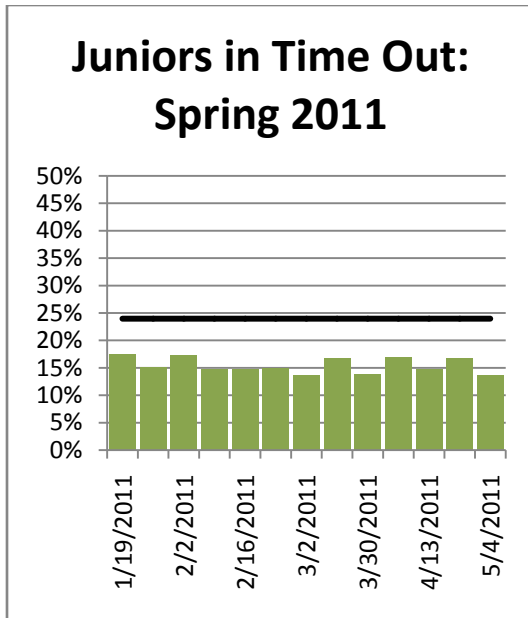


Figure 97E

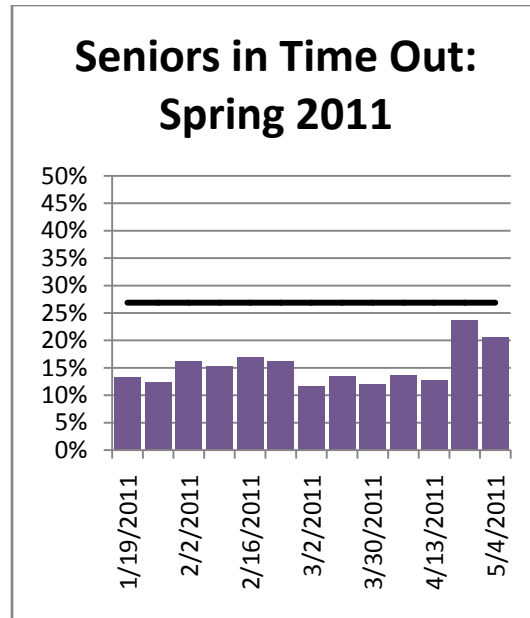


Figure 98E

Appendix F

Unrecorded Genders

This appendix shows the number of people per semester who attended Chapel and their gender was not recorded. Figure 2F illustrates when during the semester the people with unrecorded genders stopped going to Chapel and Time Out. Figure 3F shows the number of Chapels these people attended.

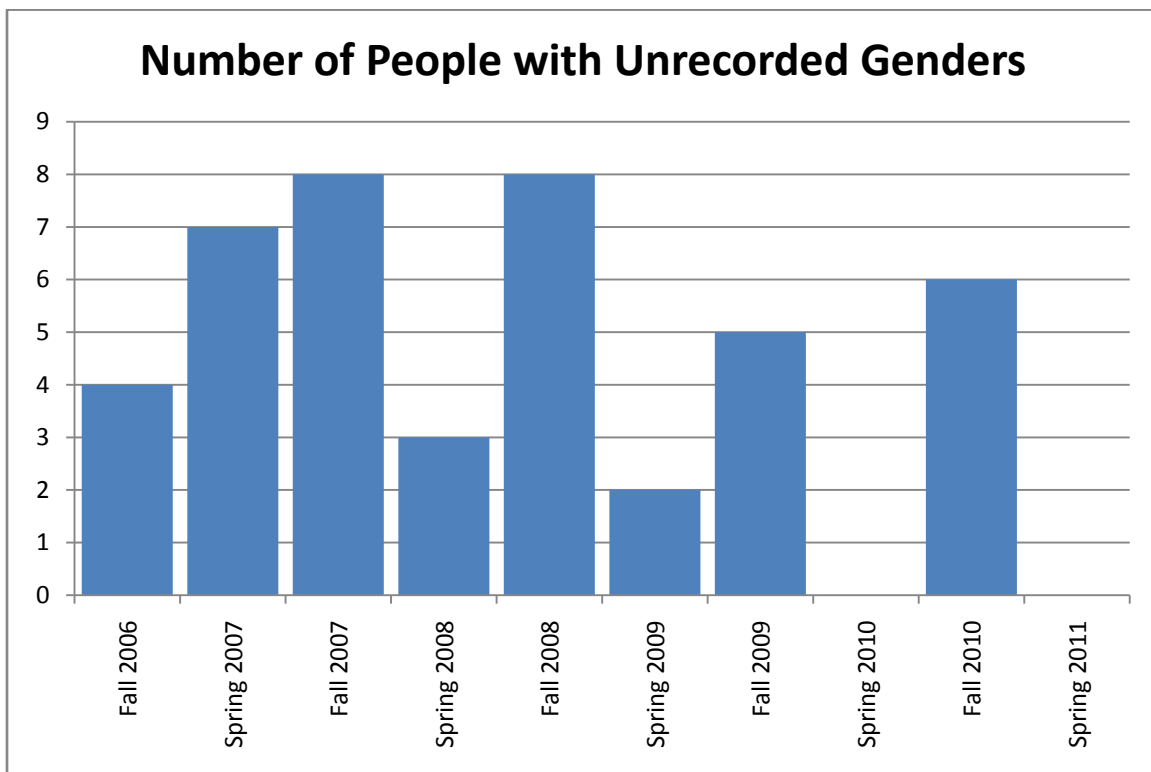


Figure 1F

Gender Unrecorded: Last Chapel Attended

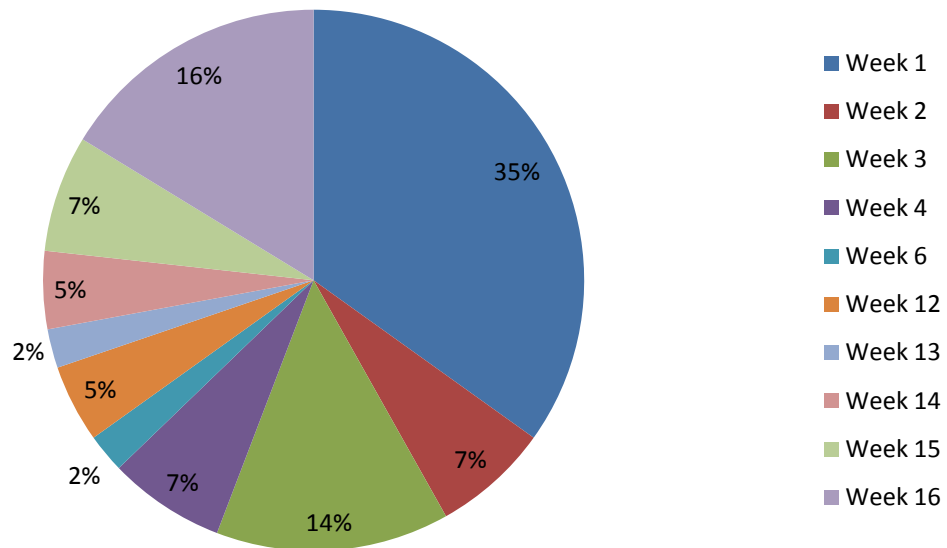


Figure 2F

Gender Unrecorded: Number of Chapels Attended

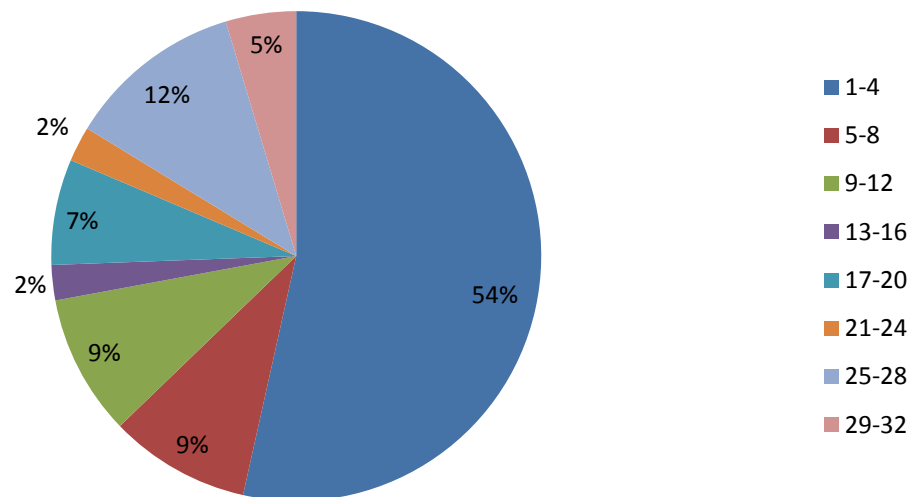


Figure 3F

Appendix G

Chapel Requirement Completed

This appendix shows the percentage of students each semester that finished their Chapel requirement within the following time periods during the given semester: week 1-8, week 9-12, week 13-16, or not at all.

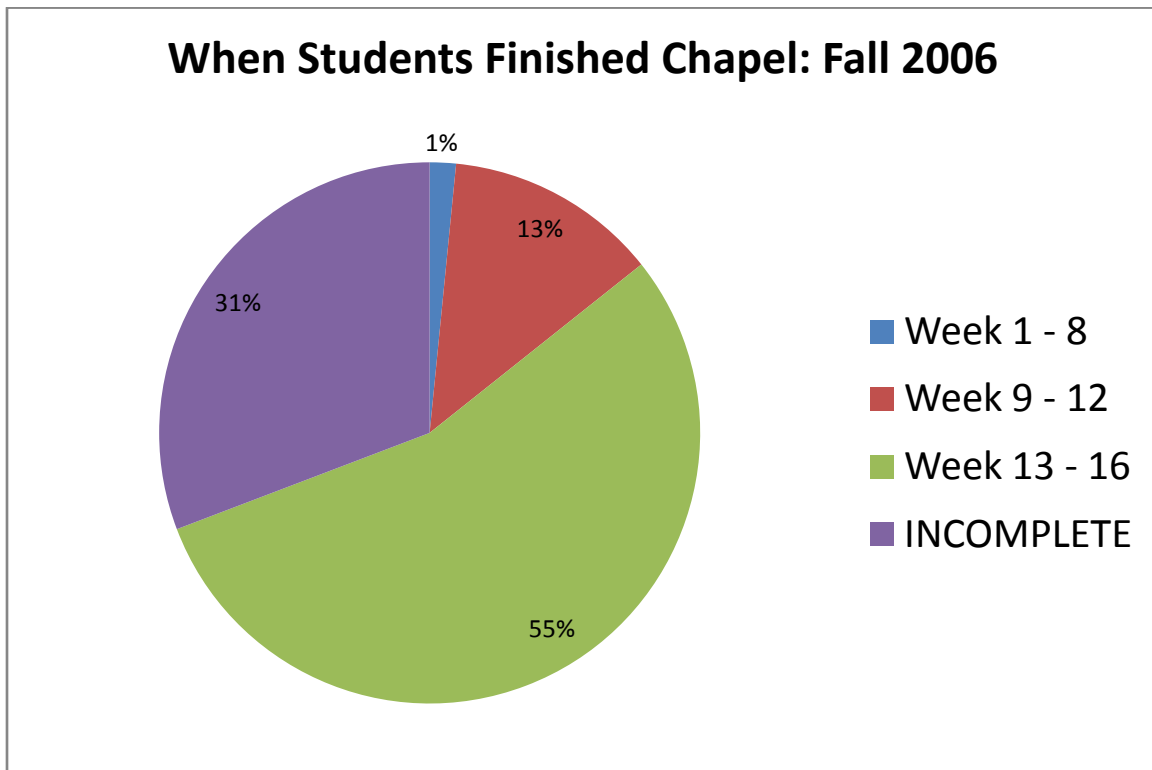


Figure 1G

When Students Finished Chapel: Spring 2007

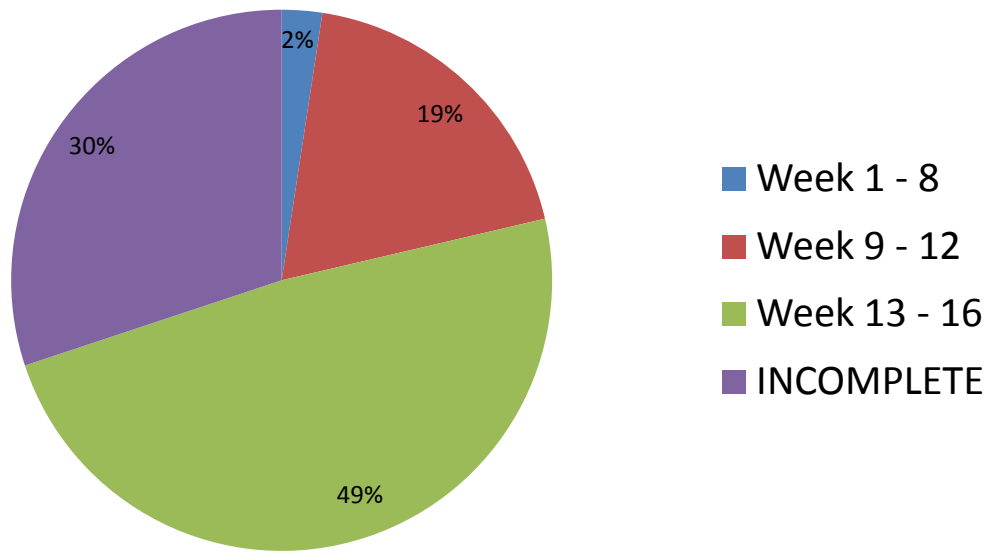


Figure 2G

When Students Finished Chapel: Fall 2007

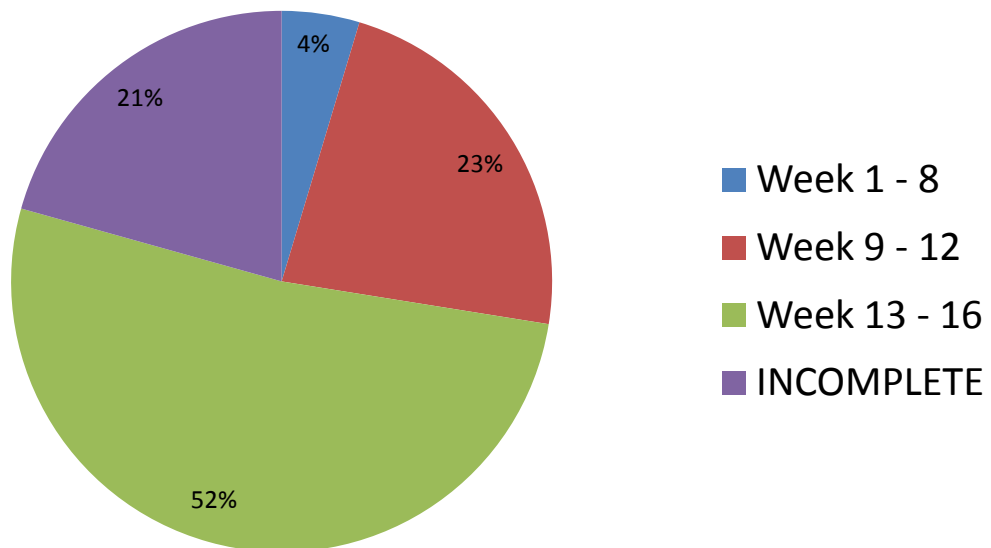


Figure 3G

When Students Finished Chapel: Spring 2008

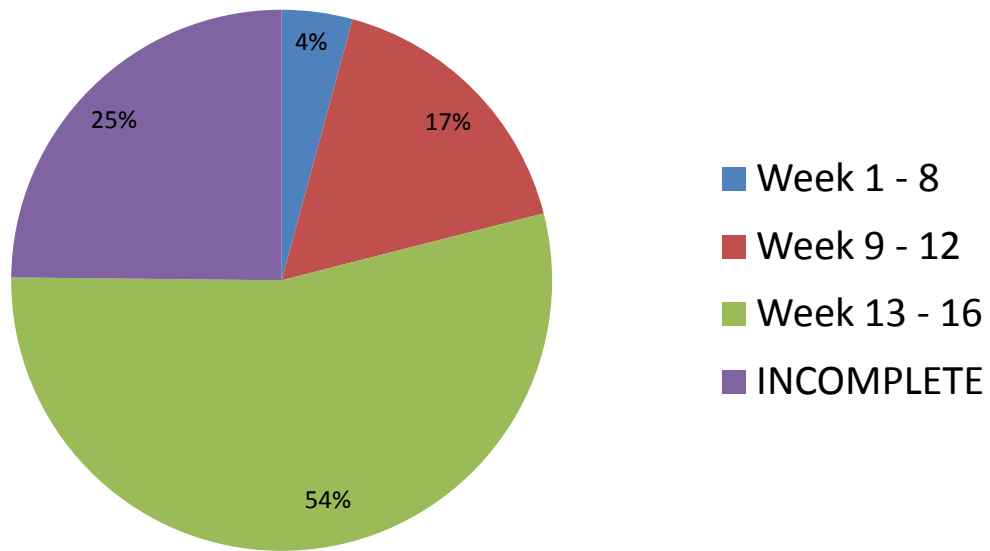


Figure 4G

When Students Finished Chapel: Fall 2008

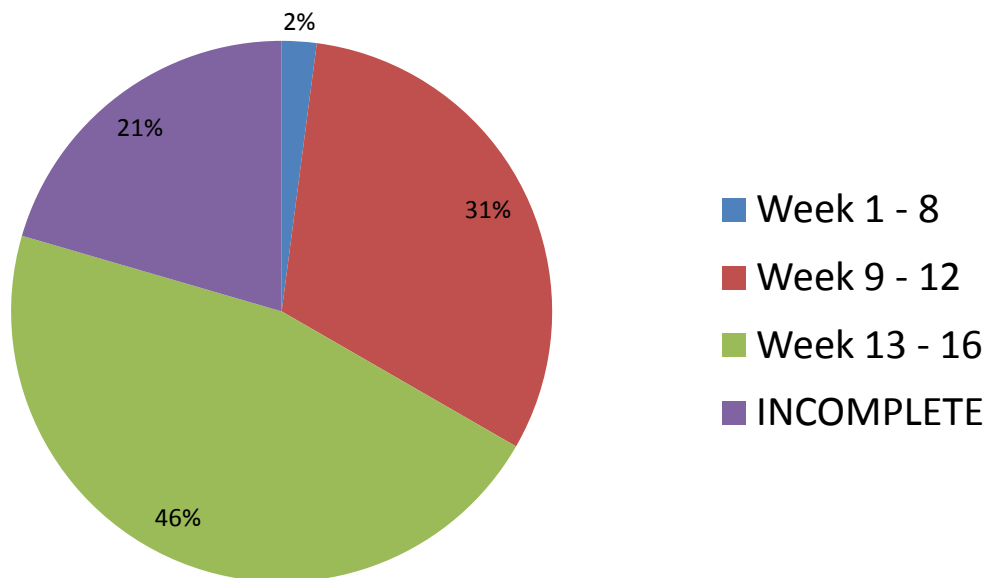


Figure 5G

When Students Finished Chapel: Spring 2009

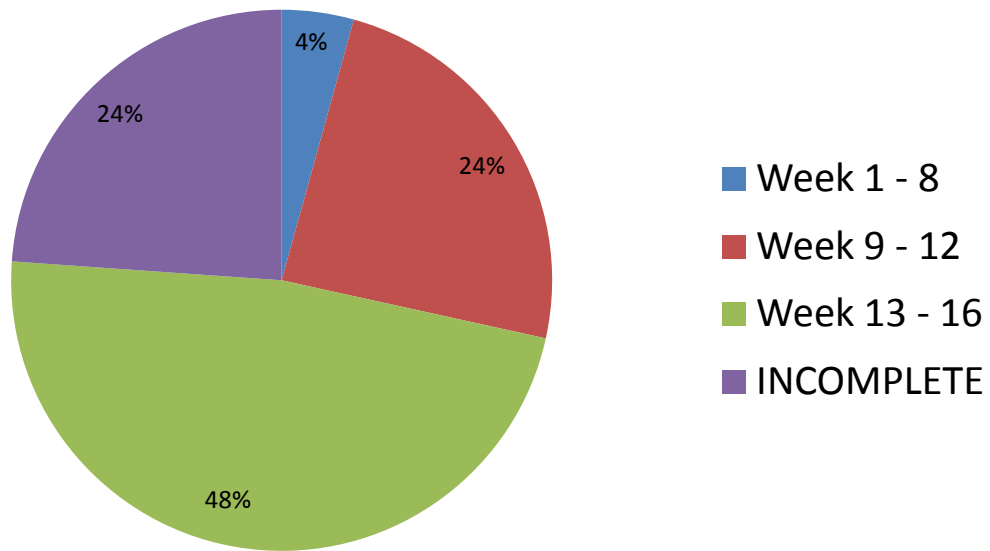


Figure 6G

When Students Finished Chapel: Fall 2009

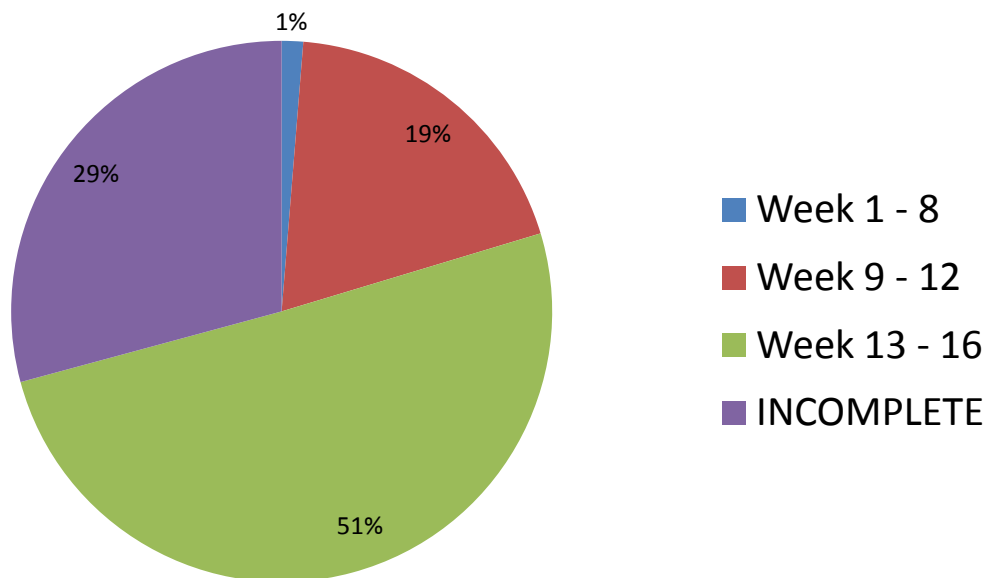


Figure 7G

When Students Finished Chapel: Spring 2010

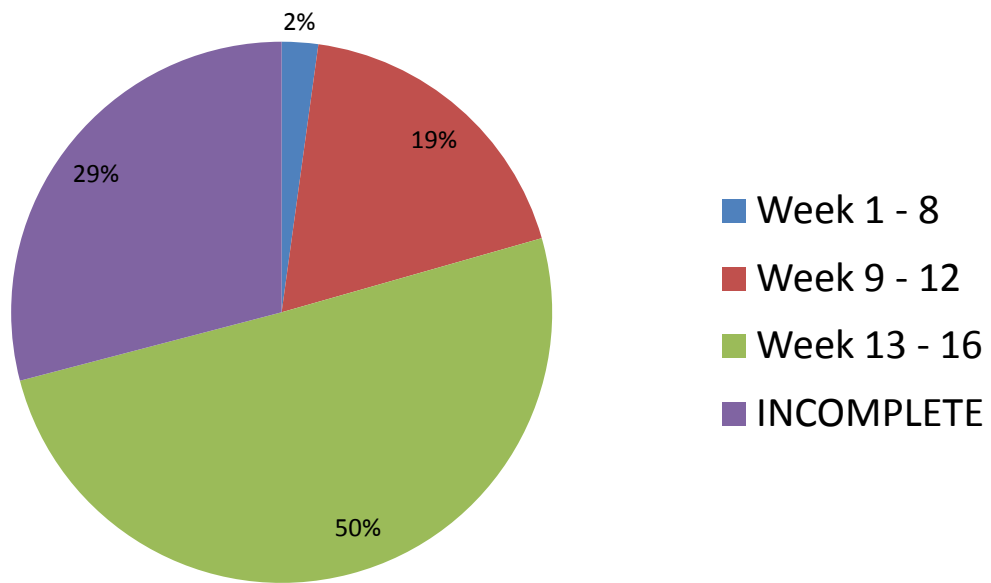


Figure 8G

When Students Finished Chapel: Fall 2010

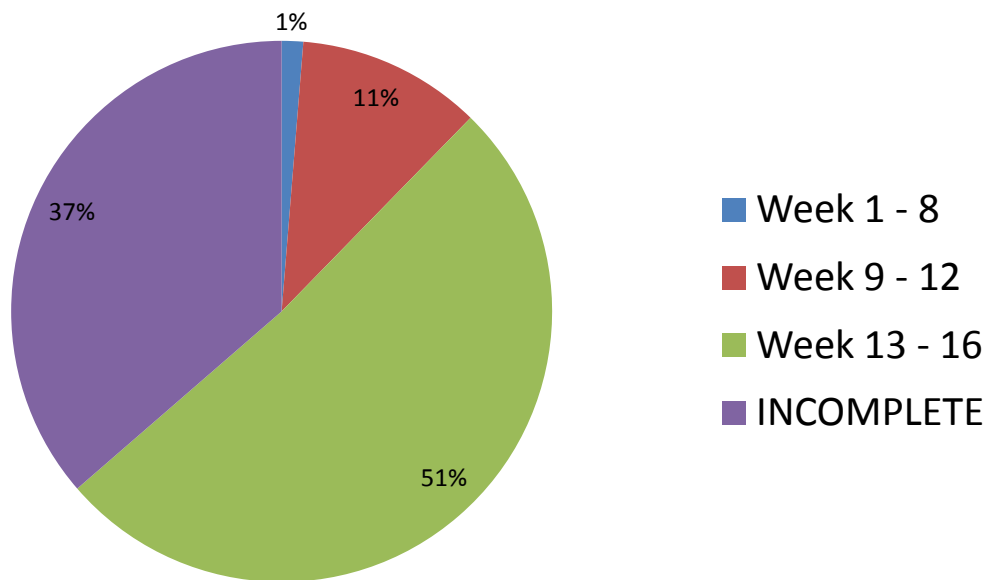


Figure 9G

When Students Finished Chapel: Spring 2011

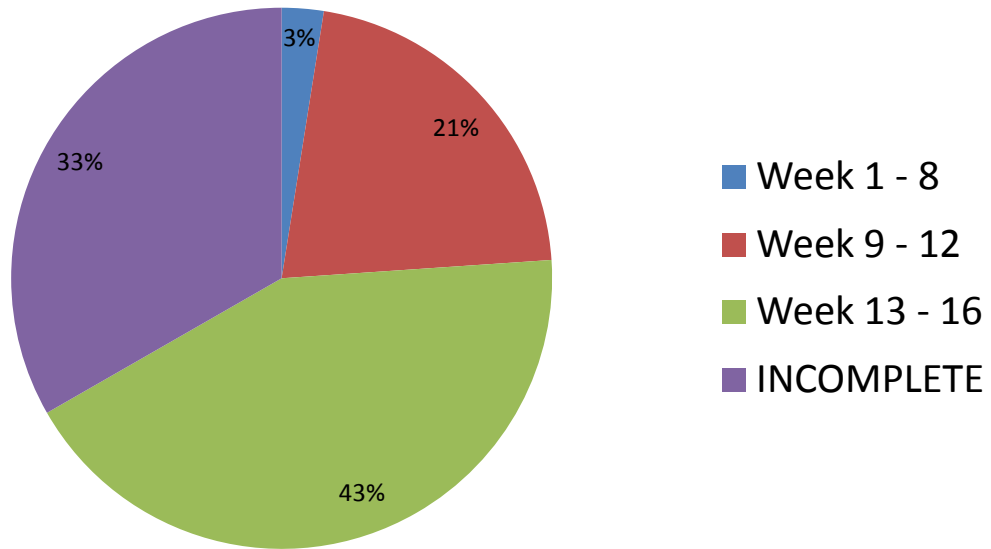


Figure 10G

Appendix H

Chapel Requirement Not Met By Gender

Of the students who did not meet their Chapel requirement each semester, this appendix shows the number of Chapels remaining in categories on the right and the percentage of males or females who fell into those categories in the pie chart. For the semesters studied, Chapel fines were issued to students in the following manner: 1-4 excessive Chapel absences resulted in a fine of \$5 for each absence, and 5 or more excessive absences resulted in a fine of \$10 for each absence in excess of 4 (Chapel Attendance Policy, 2012).

Males with Chapels Remaining: Fall 2006

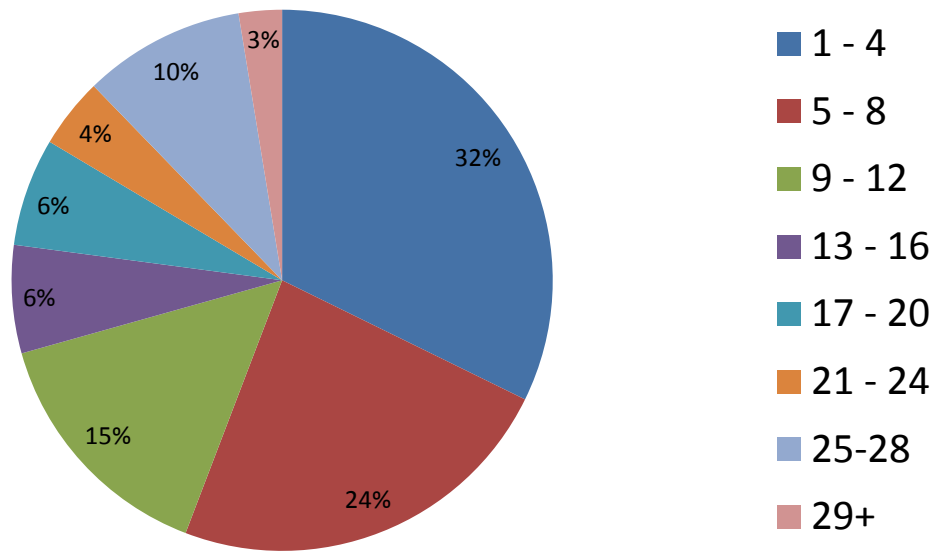


Figure 1H

Females with Chapels Remaining: Fall 2006

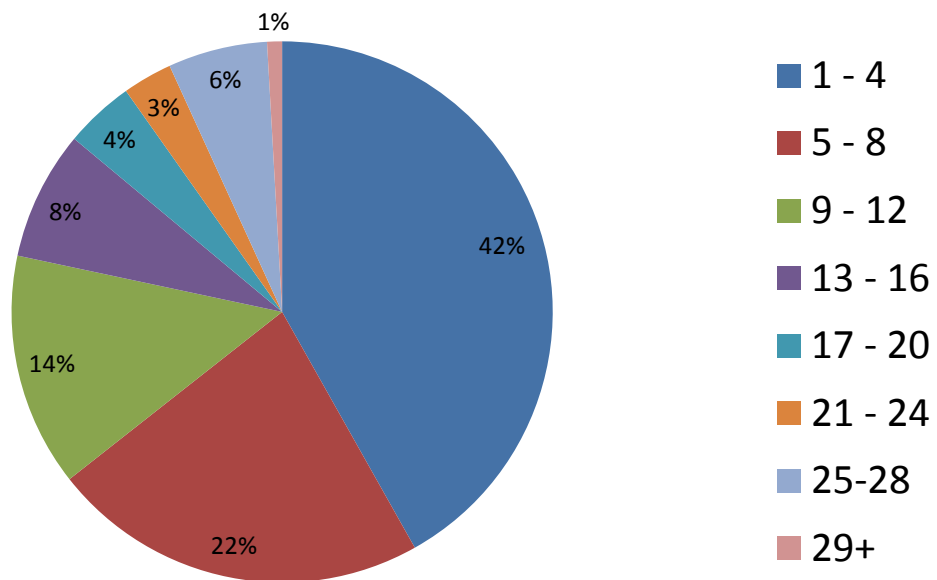


Figure 2H

Males with Chapels Remaining: Spring 2007

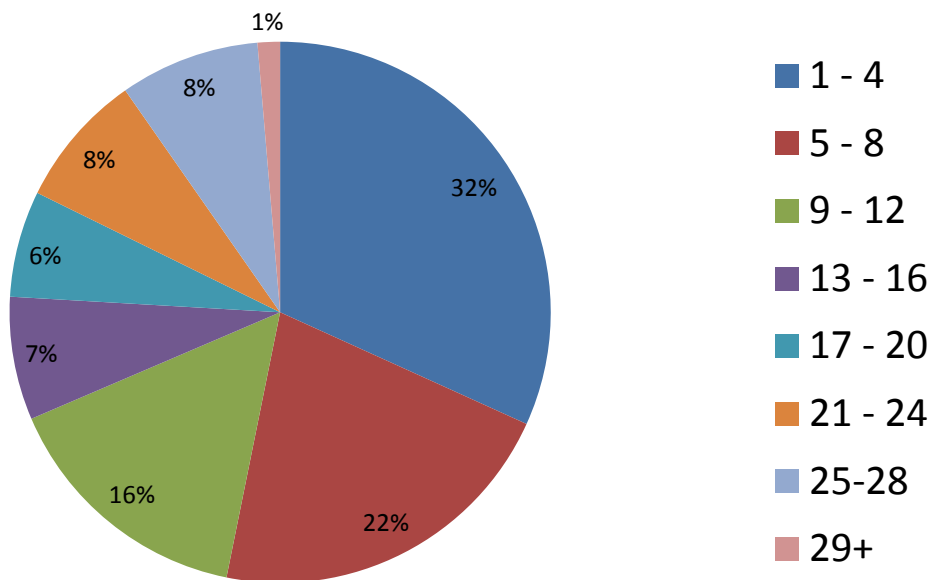


Figure 3H

Females with Chapels Remaining: Spring 2007

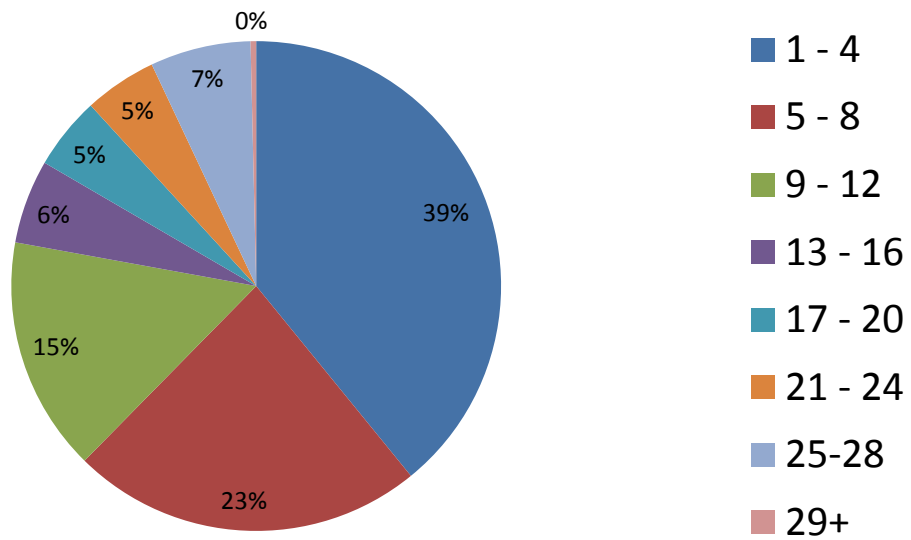


Figure 4H

Males with Chapels Remaining: Fall 2007

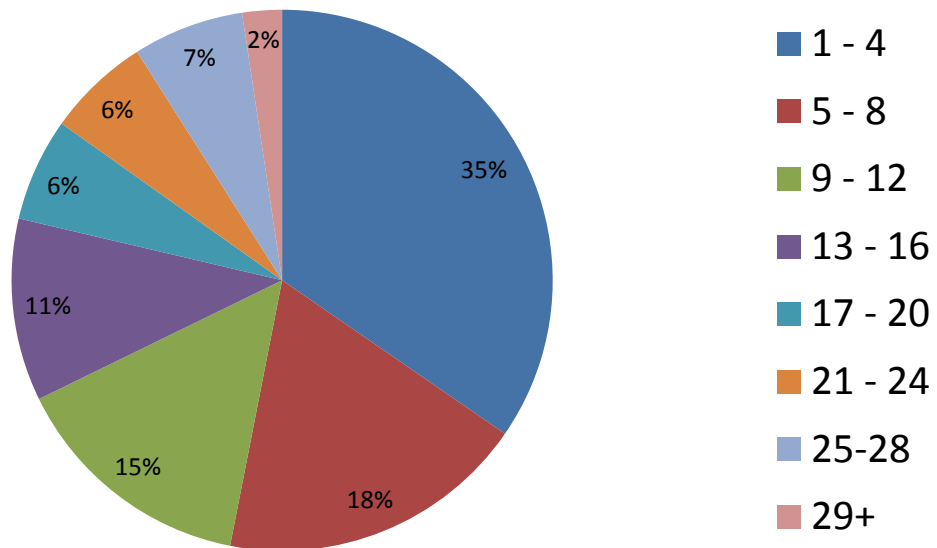


Figure 5H

Females with Chapels Remaining: Fall 2007

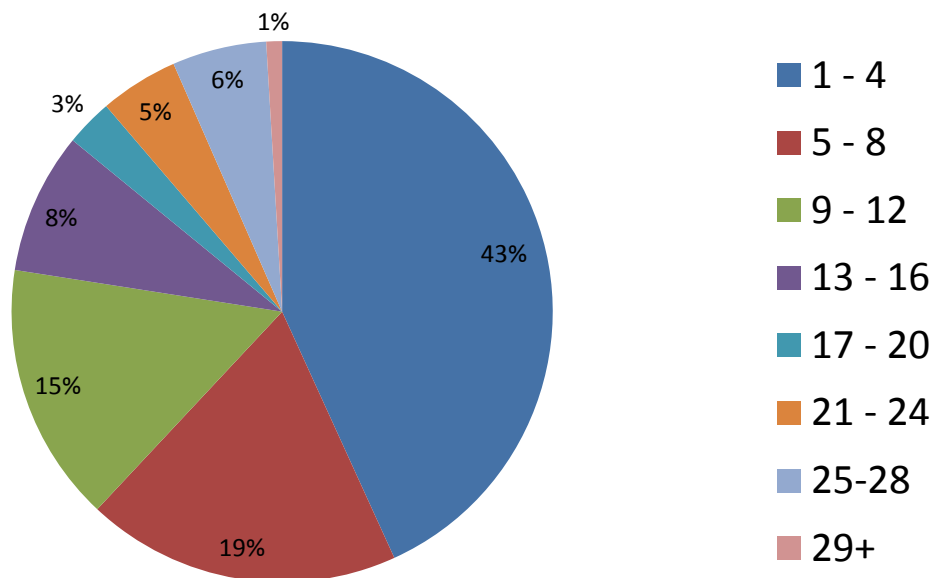


Figure 6H

Males with Chapels Remaining: Spring 2008

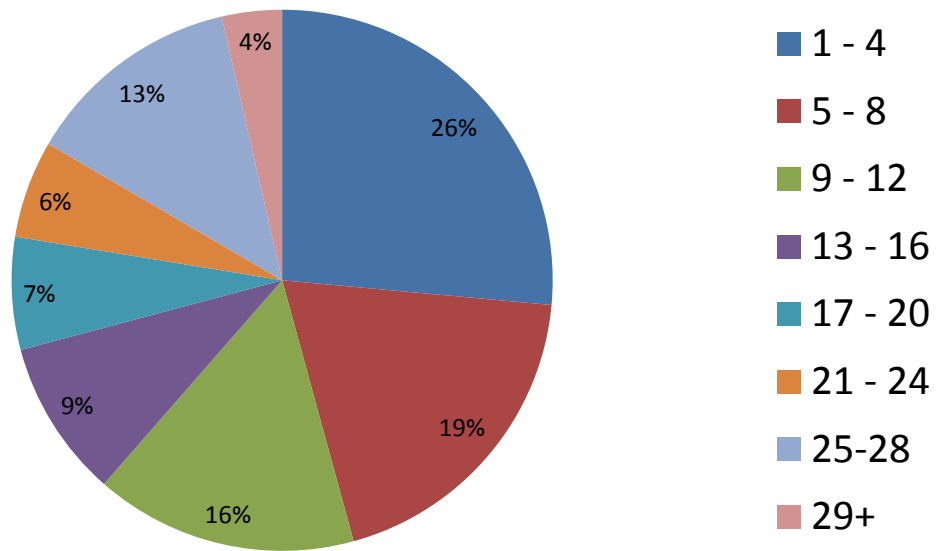


Figure 7H

Females with Chapels Remaining: Spring 2008

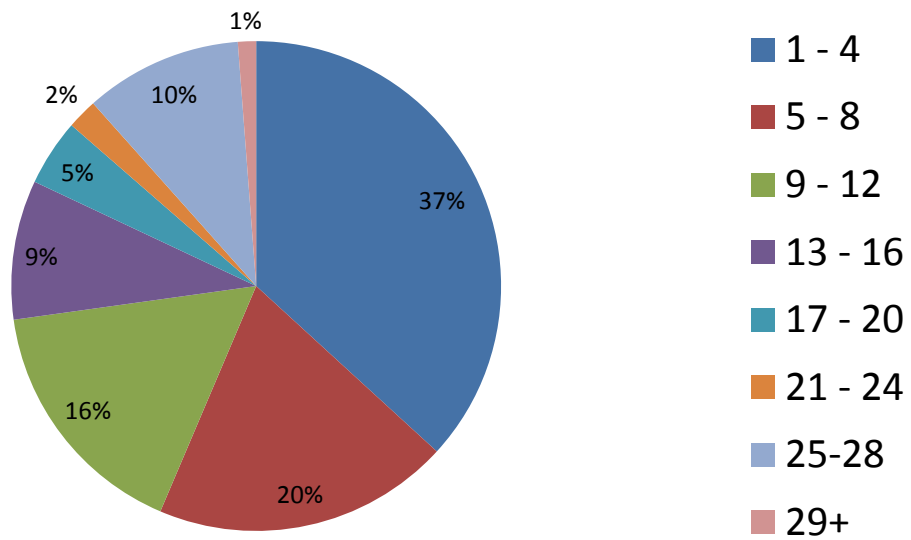


Figure 8H

Males with Chapels Remaining: Fall 2008

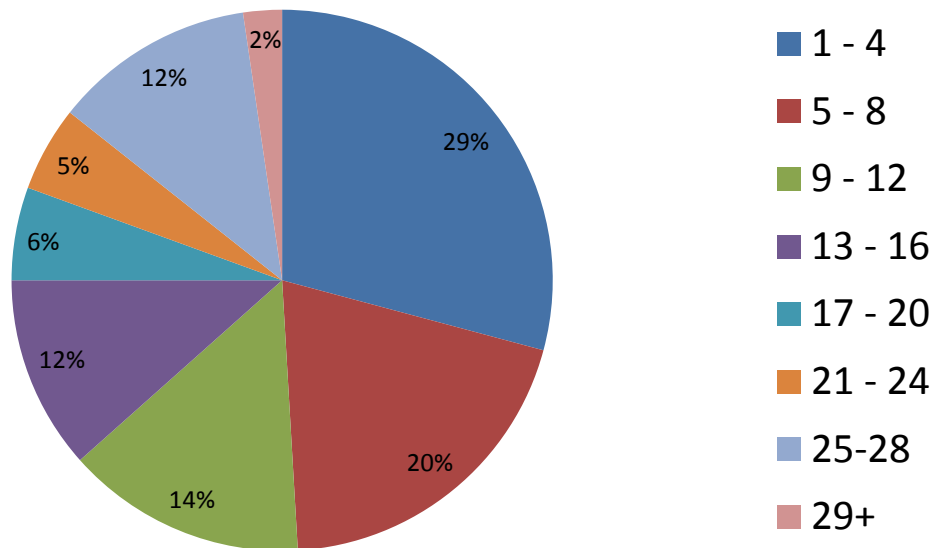


Figure 9H

Females with Chapels Remaining: Fall 2008

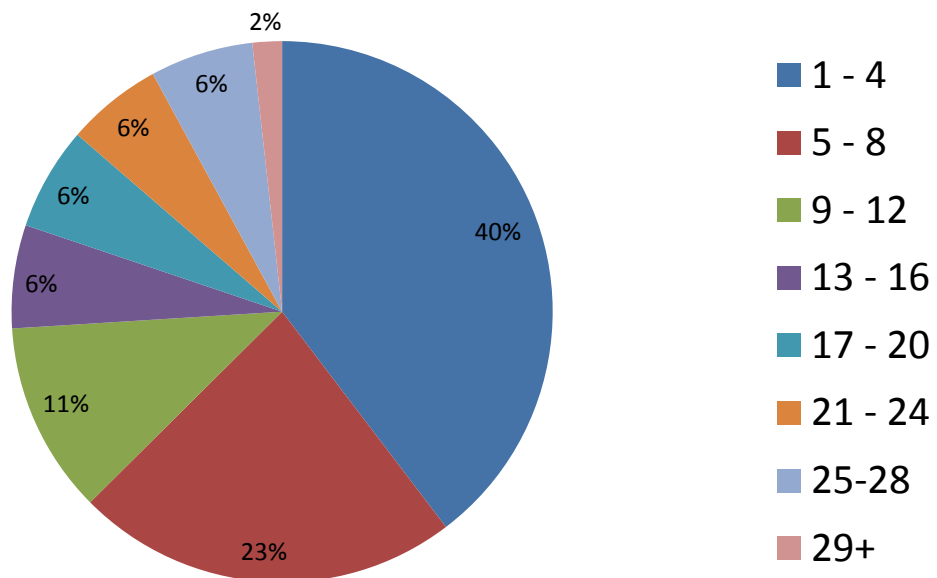


Figure 10H

Males with Chapels Remaining: Spring 2009

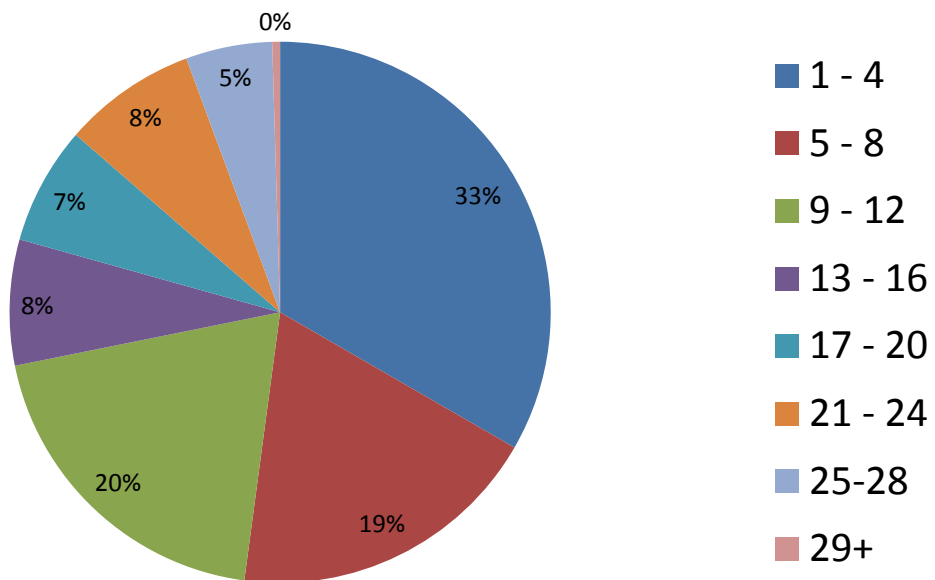


Figure 11H

Females with Chapels Remaining: Spring 2009

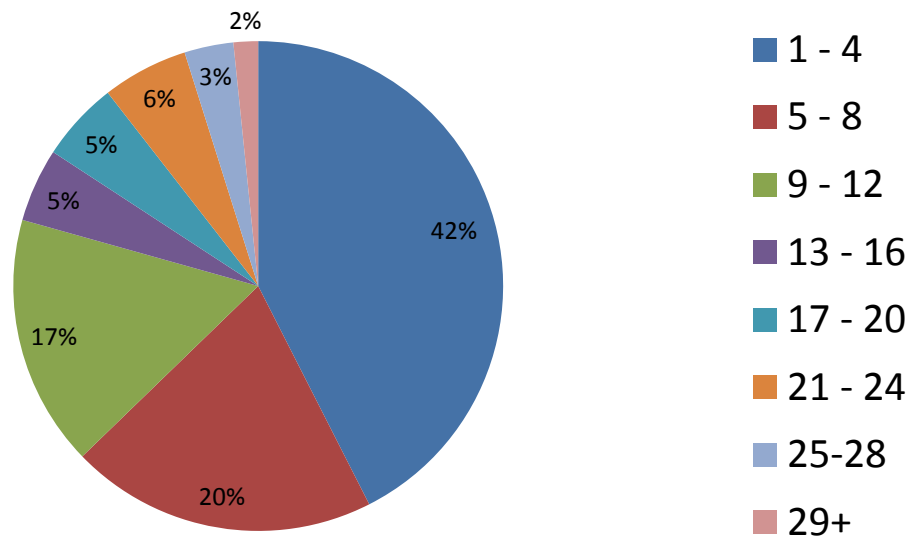


Figure 12H

Males with Chapels Remaining: Fall 2009

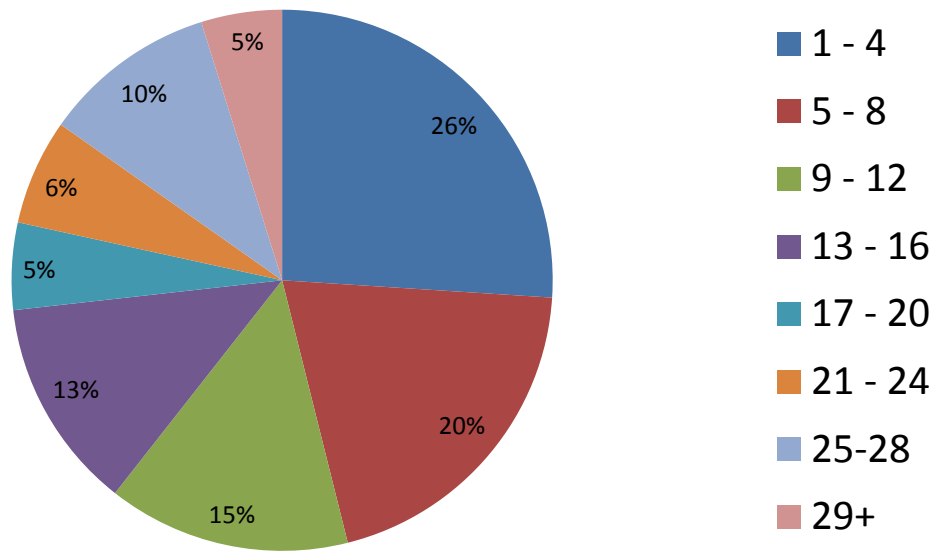


Figure 13H

Females with Chapels Remaining: Fall 2009

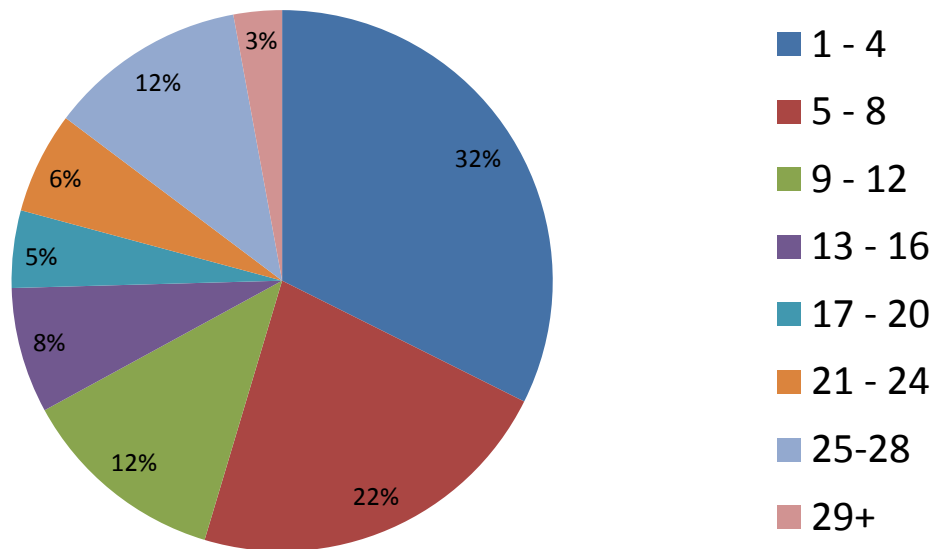


Figure 14H

Males with Chapels Remaining: Spring 2010

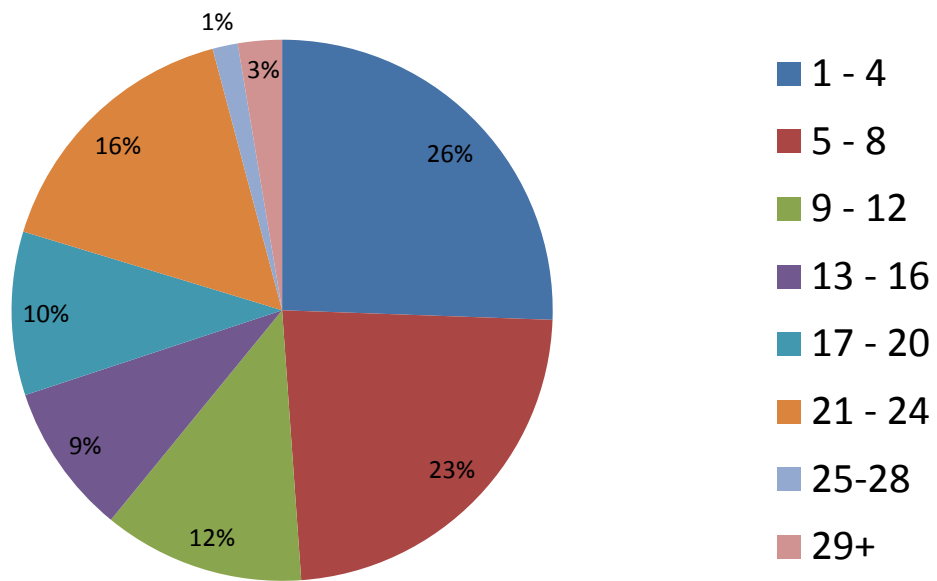


Figure 15H

Females with Chapels Remaining: Spring 2010

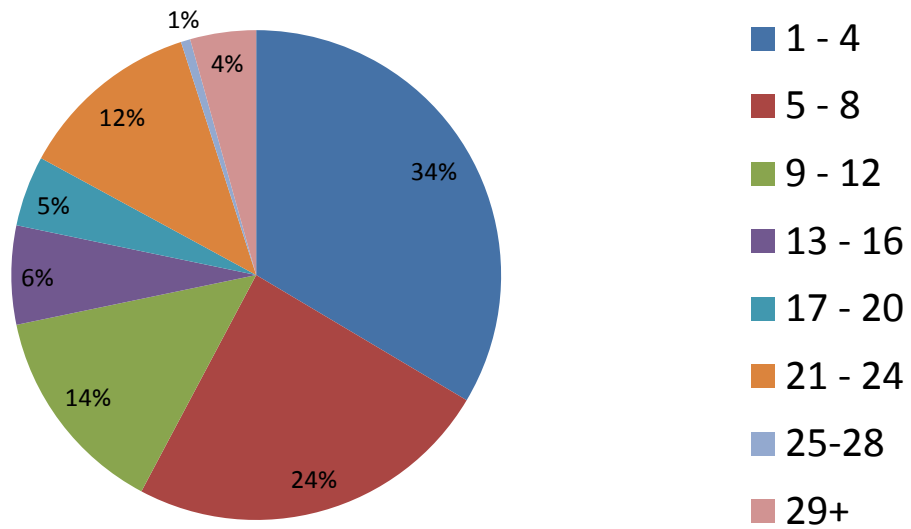


Figure 16H

Males with Chapels Remaining: Fall 2010

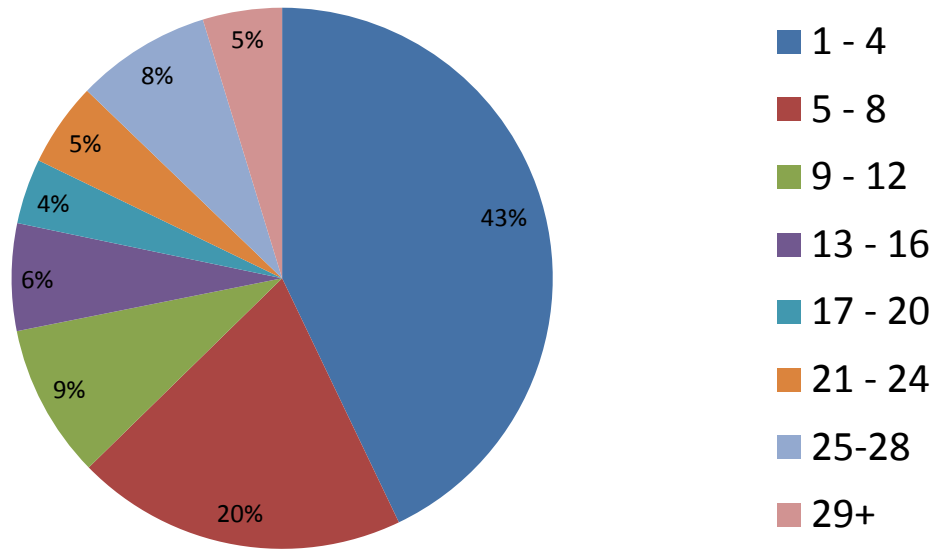


Figure 17H

Females with Chapels Remaining: Fall 2010

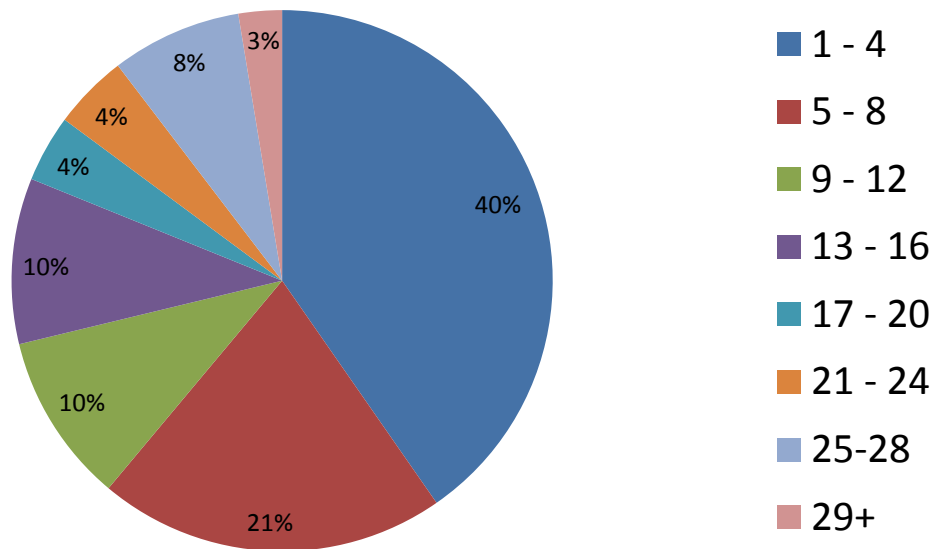


Figure 18H

Males with Chapels Remaining: Spring 2011

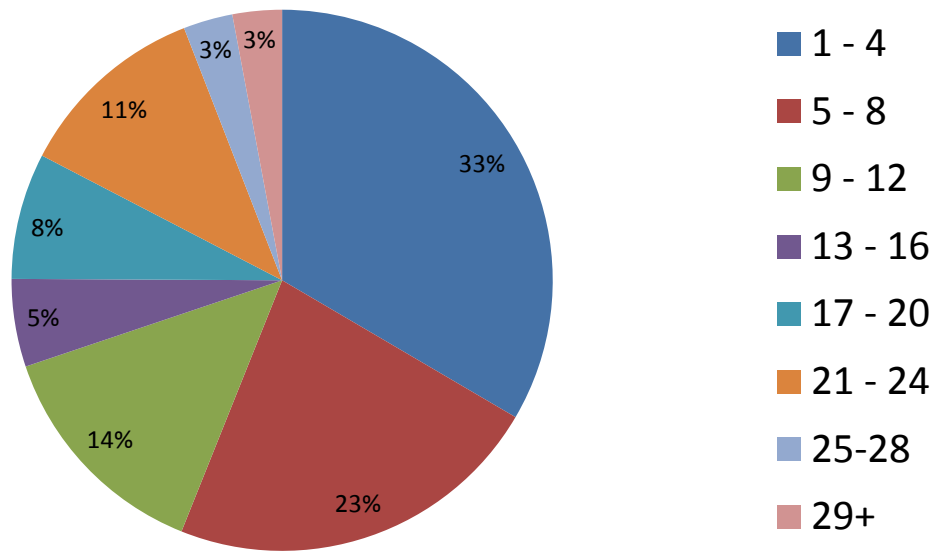


Figure 19H

Females with Chapels Remaining: Spring 2011

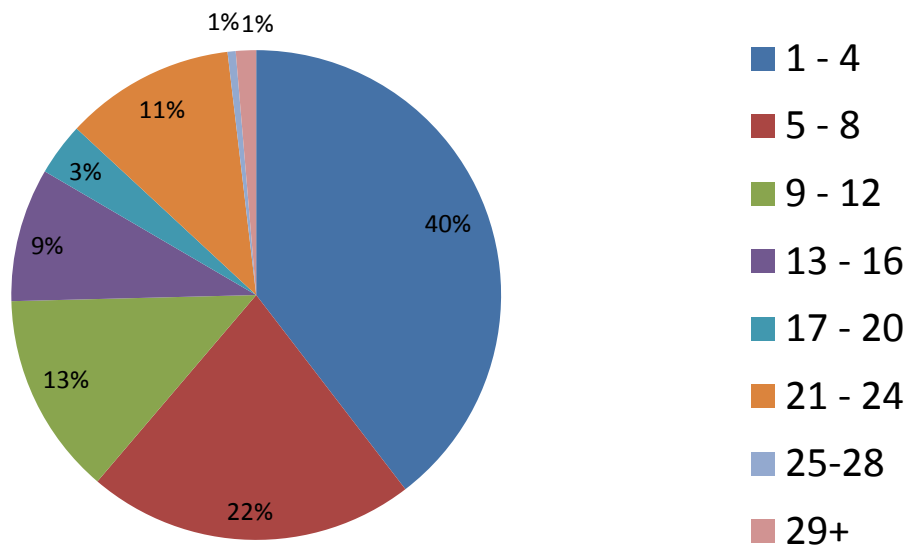


Figure 20H

Appendix I

Chapel Requirement Not Met, All Students

Of the students who did not meet their Chapel requirement each semester, this appendix shows the number of Chapels remaining in categories on the right and the percentage of students who fell into those categories in the pie chart.

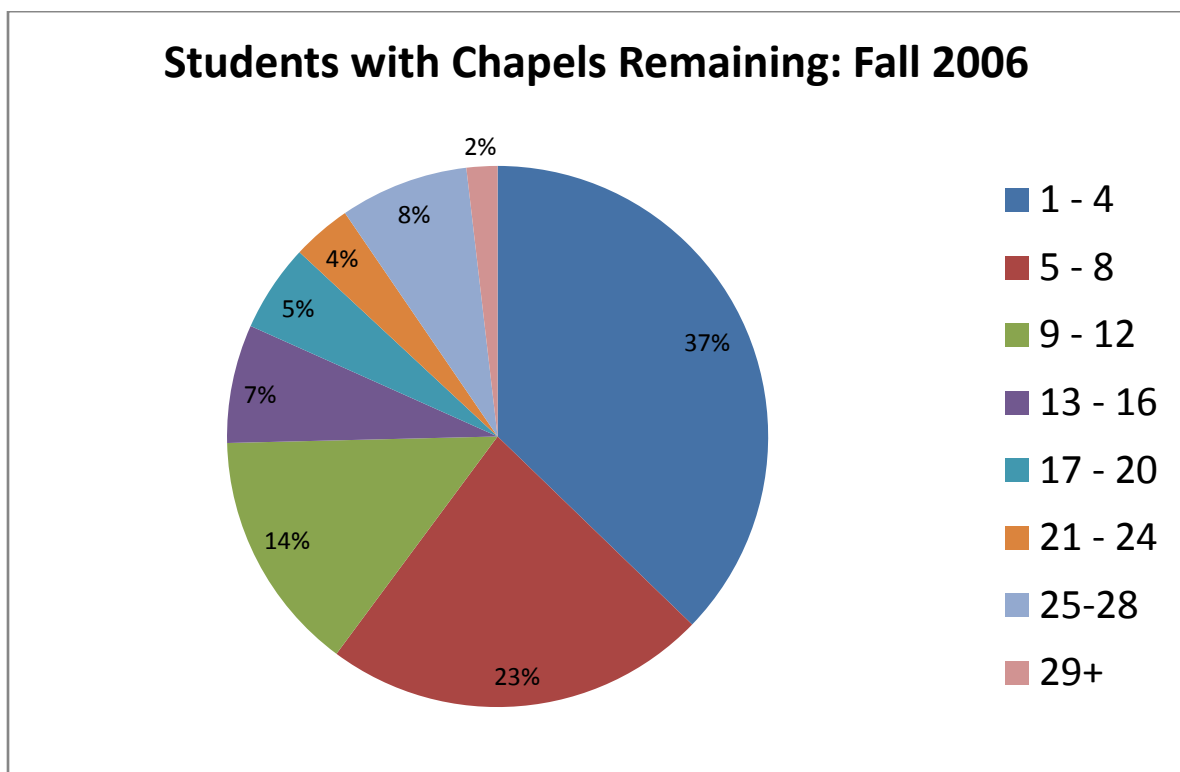


Figure 1I

Students with Chapels Remaining: Spring 2007

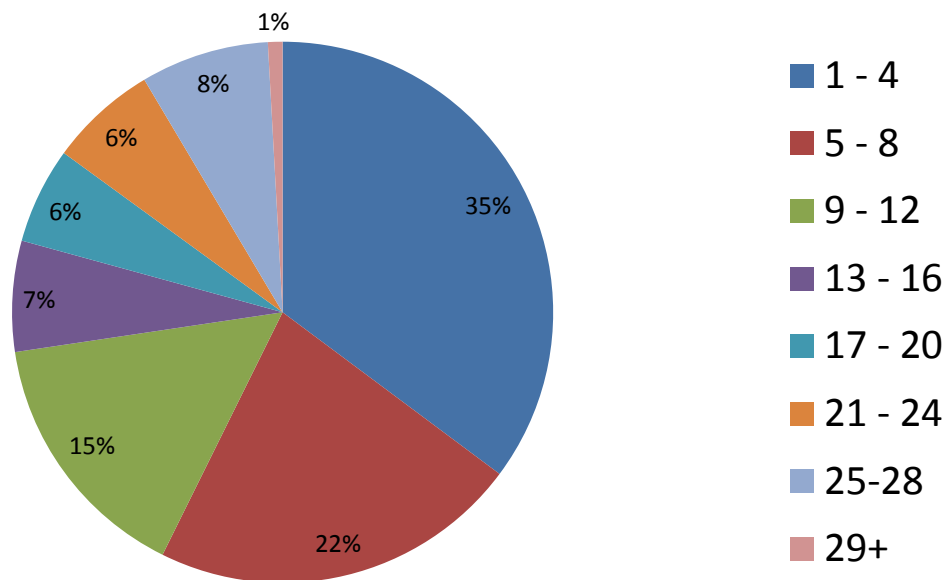


Figure 2I

Students with Chapels Remaining: Fall 2007

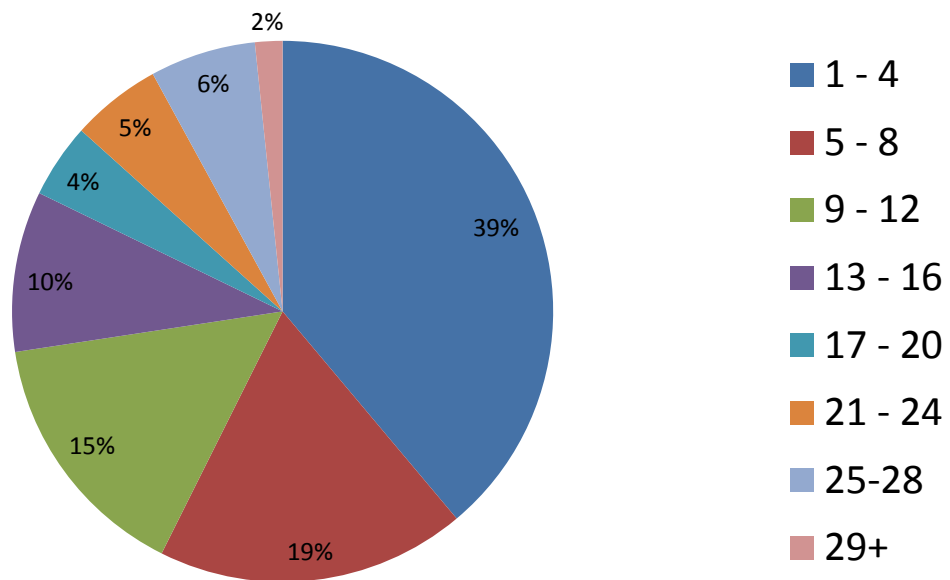


Figure 3I

Students with Chapels Remaining: Spring 2008

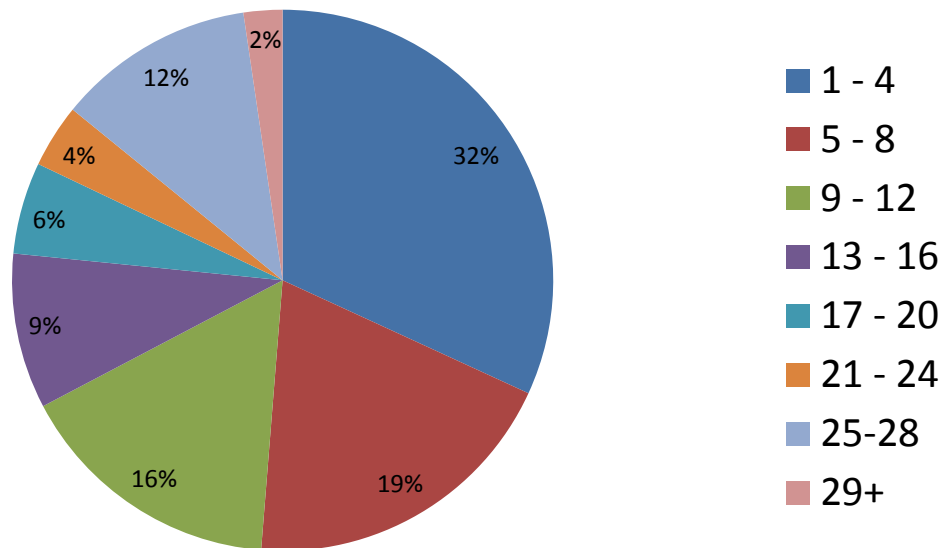


Figure 4I

Students with Chapels Remaining: Fall 2008

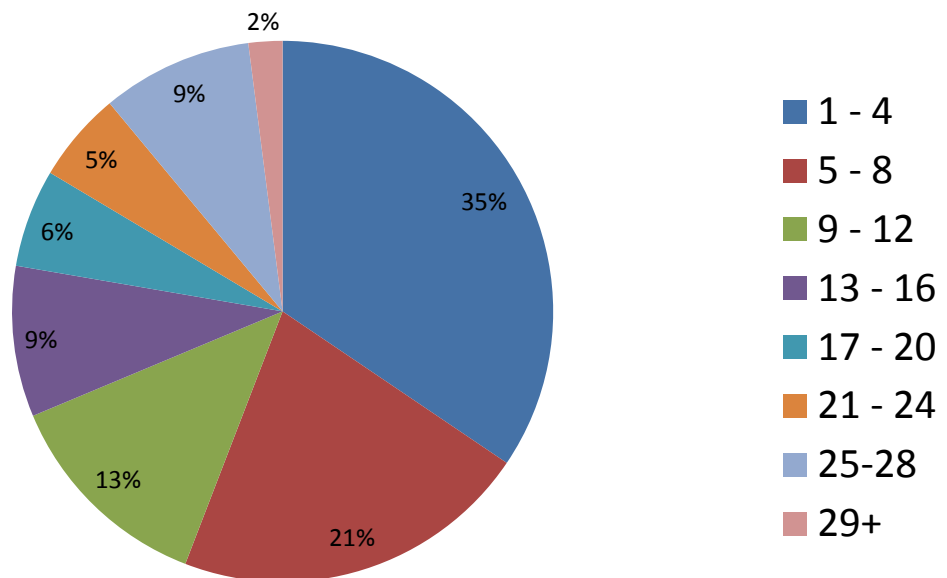


Figure 5I

Students with Chapels Remaining: Spring 2009

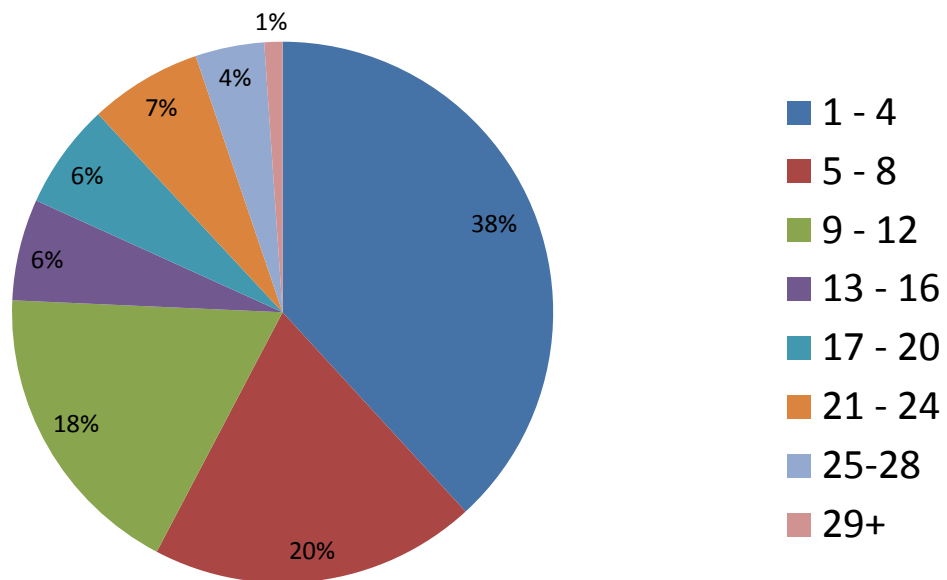


Figure 6I

Students with Chapels Remaining: Fall 2009

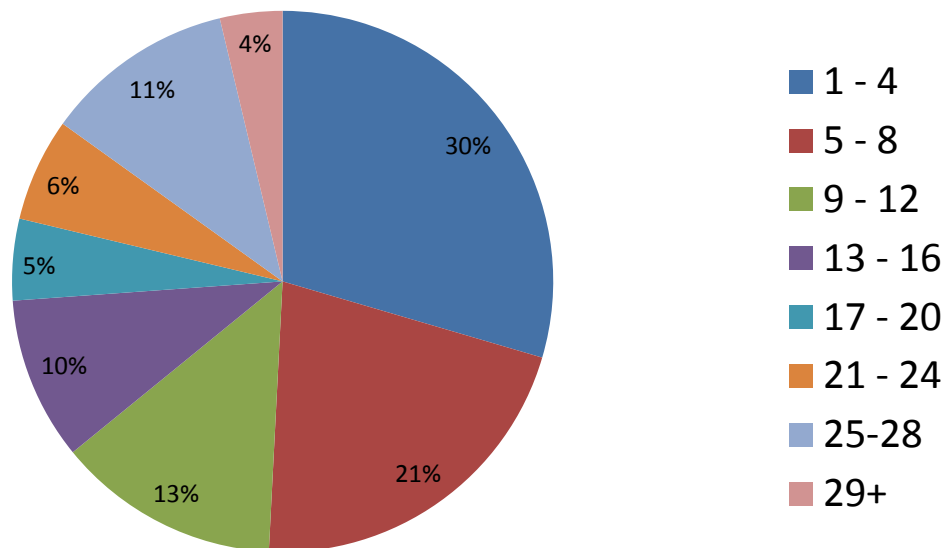


Figure 7I

Students with Chapels Remaining: Spring 2010

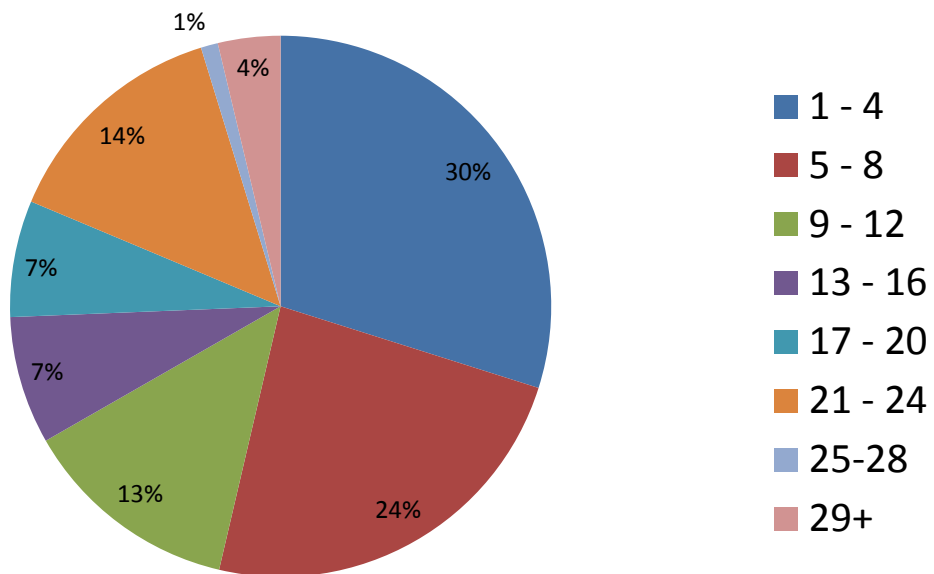


Figure 8I

Students with Chapels Remaining: Fall 2010

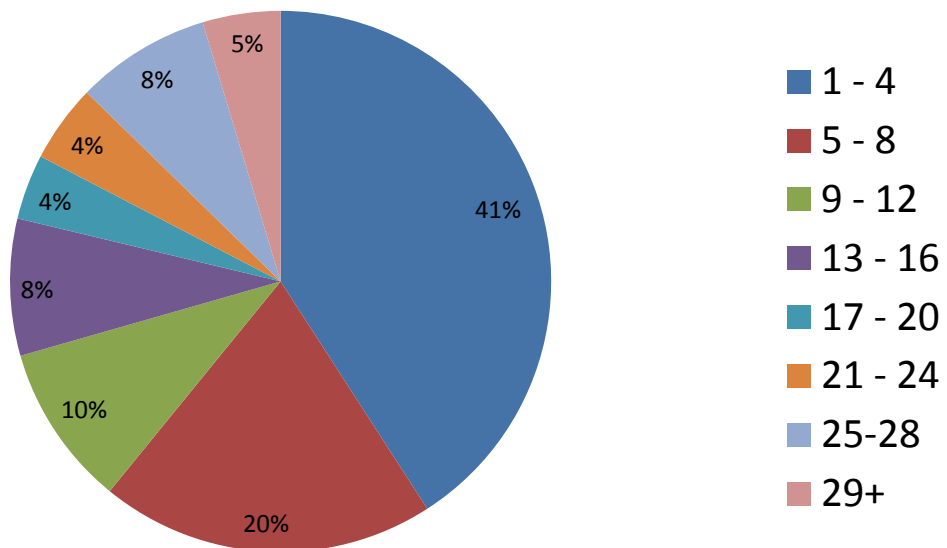


Figure 9I

Students with Chapels Remaining: Spring 2011

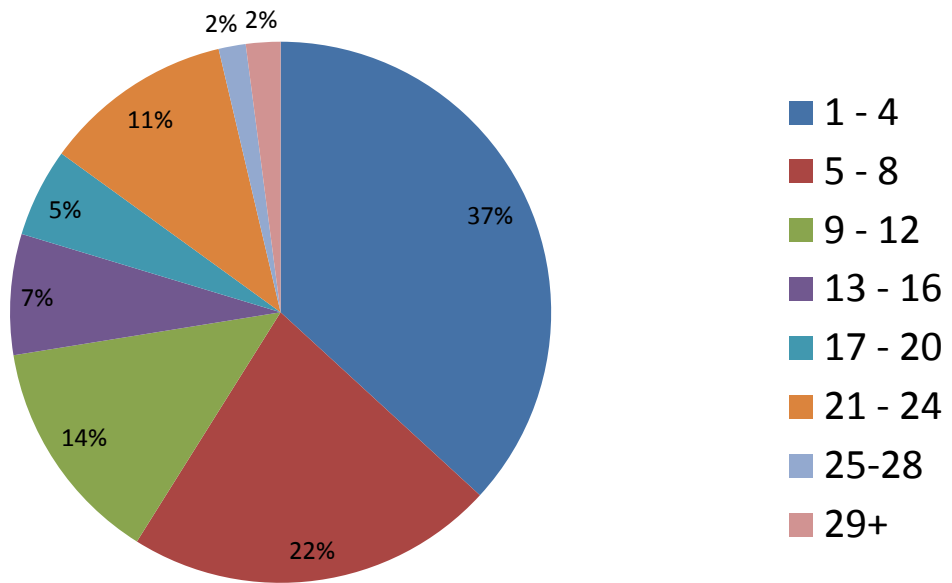


Figure 10I

Appendix J

Chapel Requirement Not Met by Cohort

This appendix shows the percentage breakup by cohort of the students who did not finish their Chapel requirement for each semester. FR stands for Freshmen, SO for Sophomores, JR for Juniors, and SR for Seniors.

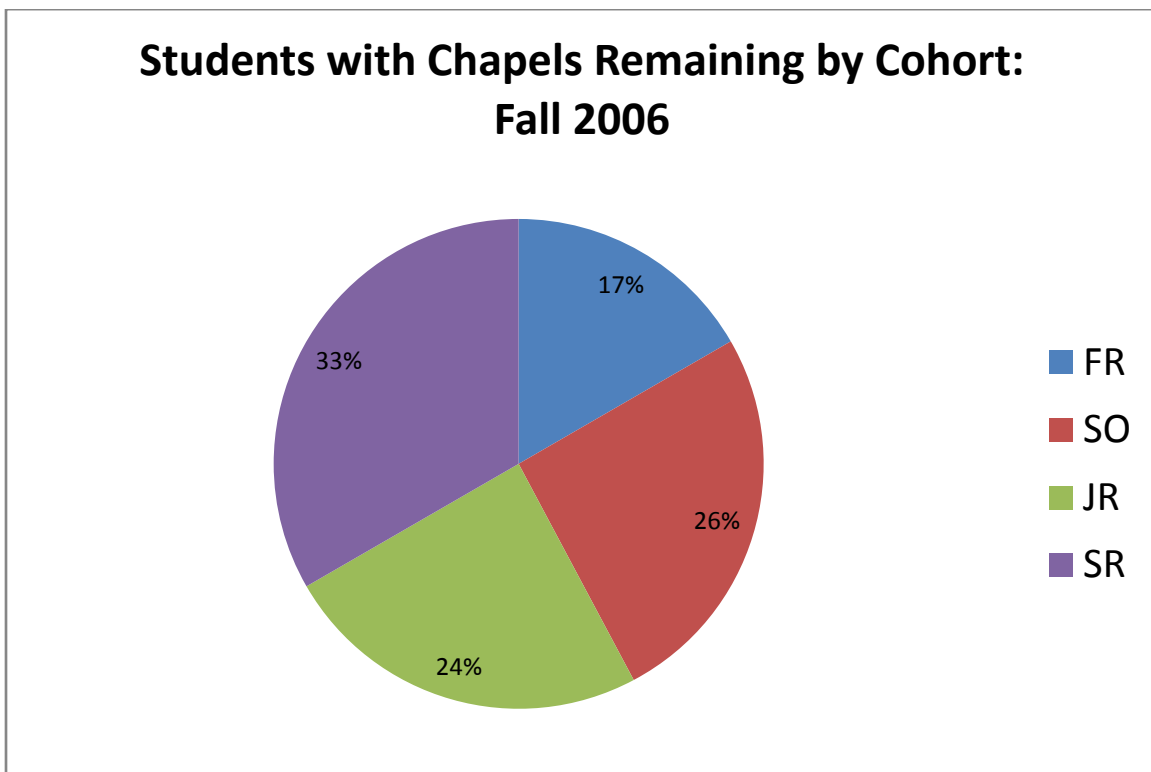


Figure 1J

**Students with Chapels Remaining by Cohort:
Spring 2007**

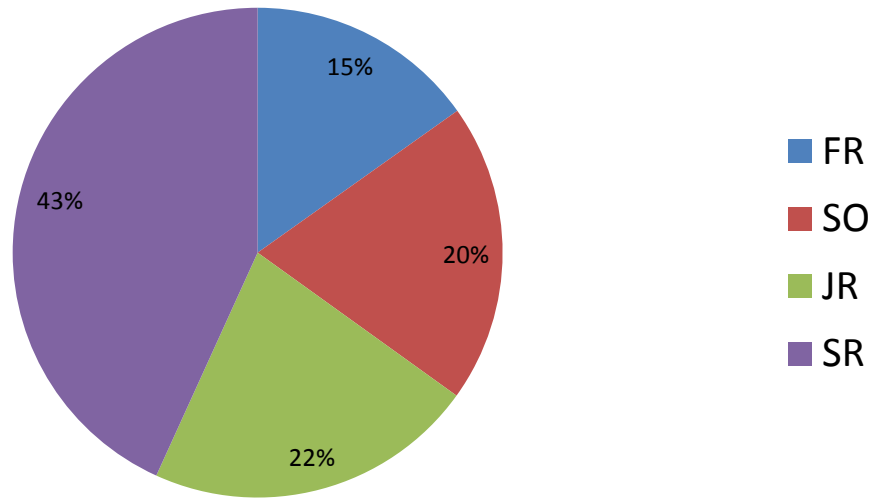


Figure 2J

**Students with Chapels Remaining by Cohort:
Fall 2007**

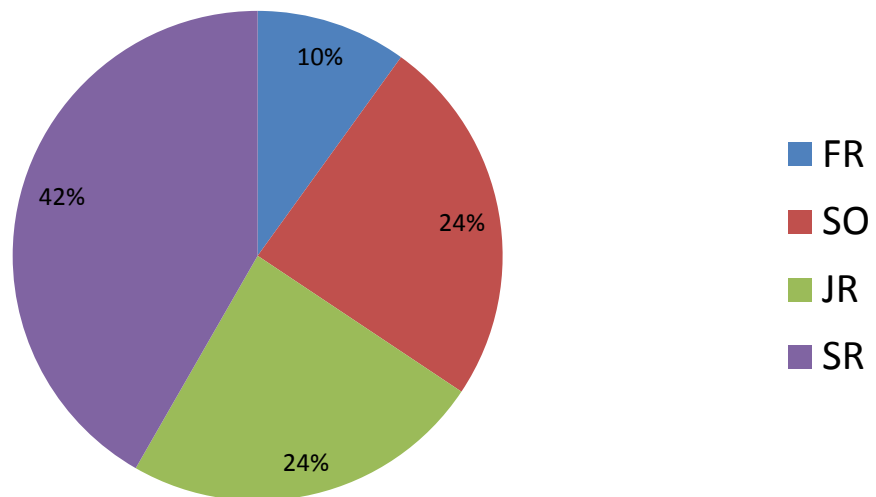


Figure 3J

**Students with Chapels Remaining by Cohort:
Spring 2008**

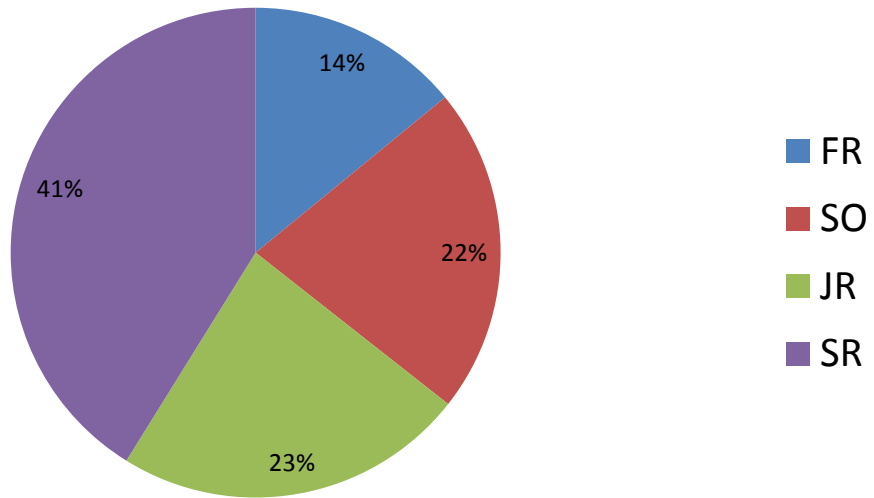


Figure 4J

**Students with Chapels Remaining by Cohort:
Fall 2008**

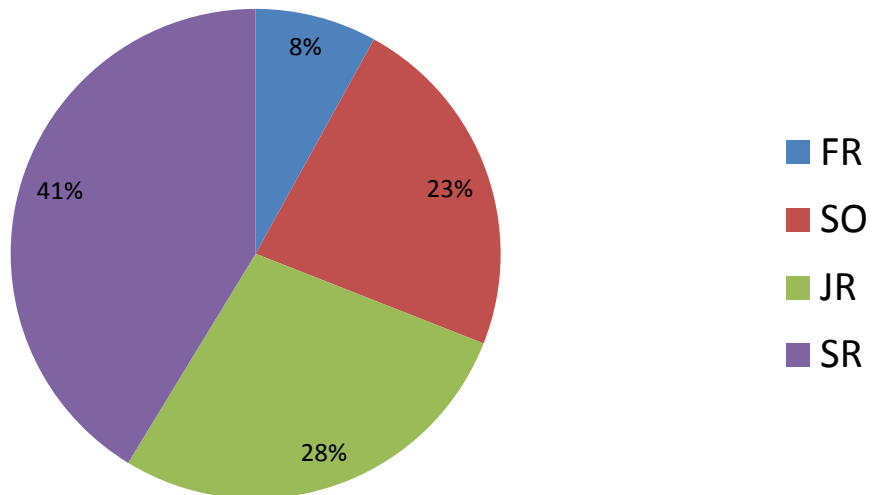


Figure 5J

**Students with Chapels Remaining by Cohort:
Spring 2009**

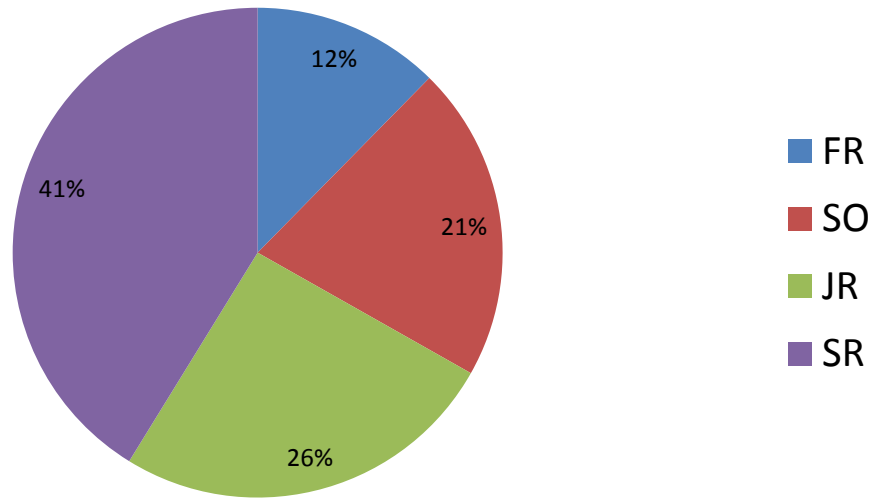


Figure 6J

**Students with Chapels Remaining by Cohort:
Fall 2009**

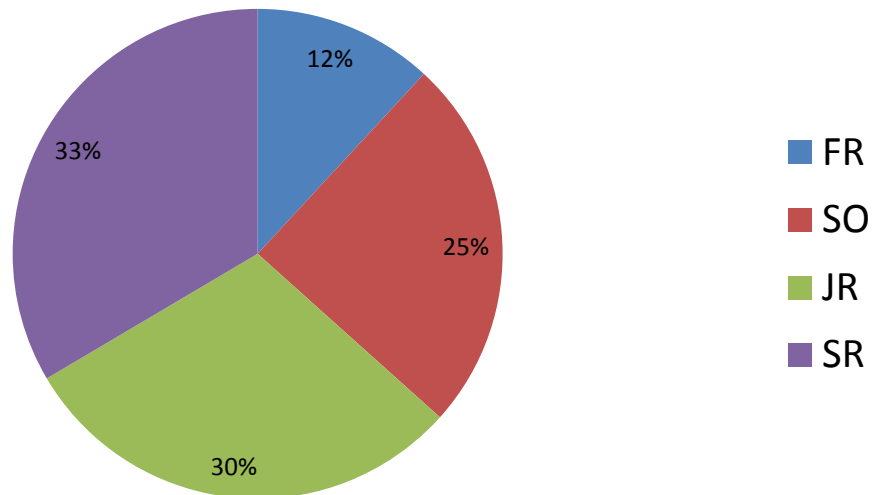


Figure 7J

**Students with Chapels Remaining by Cohort:
Spring 2010**

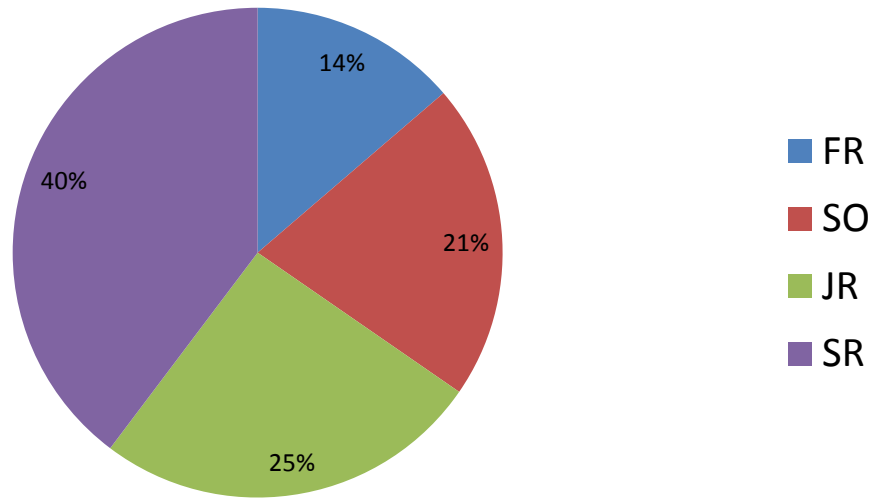


Figure 8J

**Students with Chapels Remaining by Cohort:
Fall 2010**

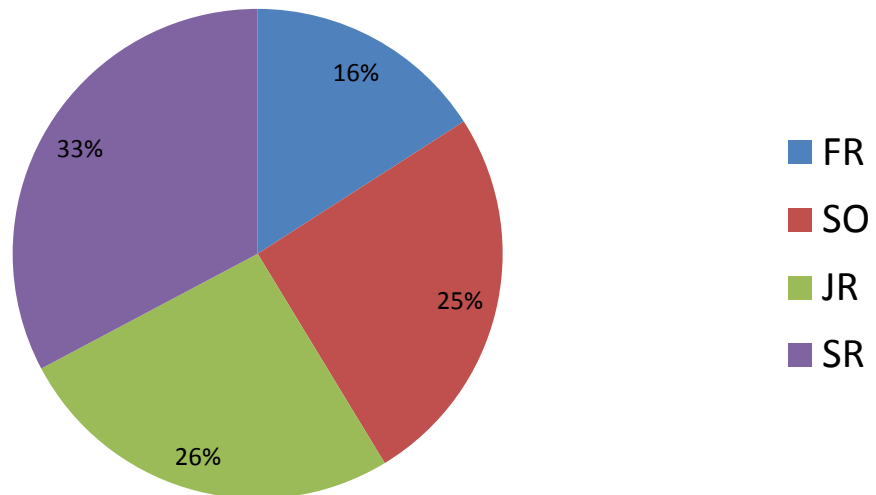


Figure 9J

Students with Chapels Remaining by Cohort: Spring 2011

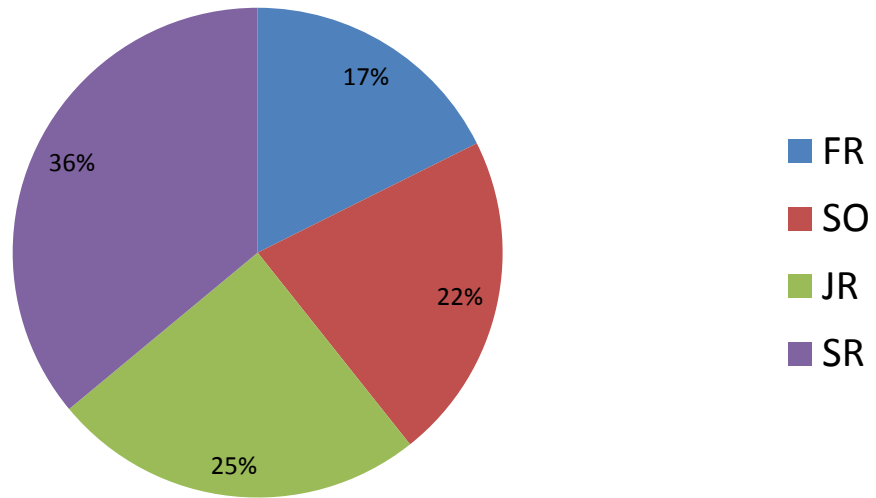


Figure 10J

Appendix K

Chapel Requirement Not Met By Individual Cohort

Of the students who did not meet their Chapel requirement each semester, this appendix shows the number of Chapels remaining in categories on the right and the percentage of Freshmen (FR), Sophomores (SO), Juniors (JR), or Seniors (SR) respectively in the pie chart.

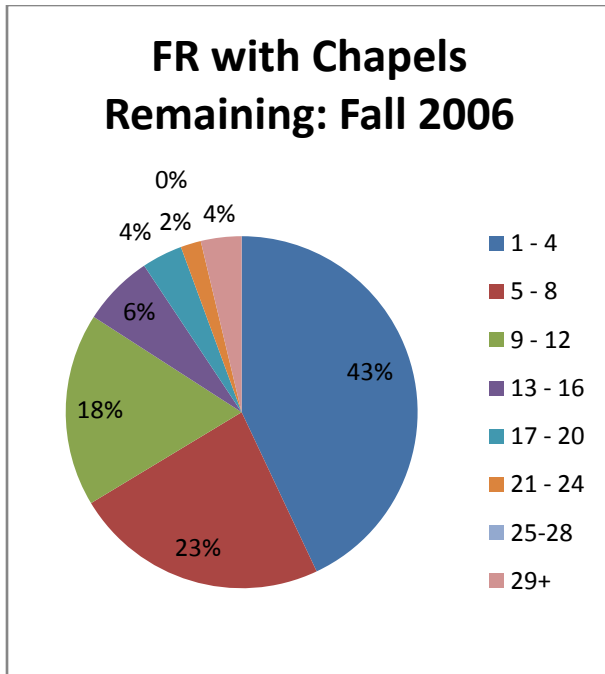


Figure 1K

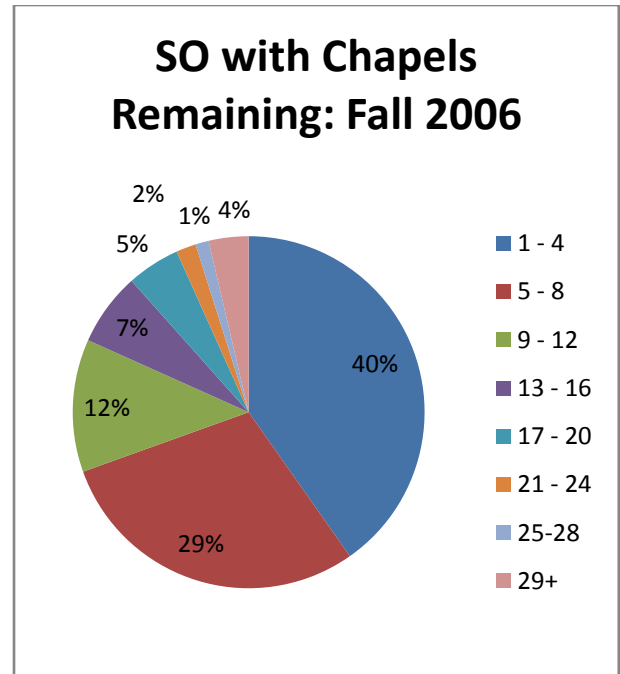


Figure 2K

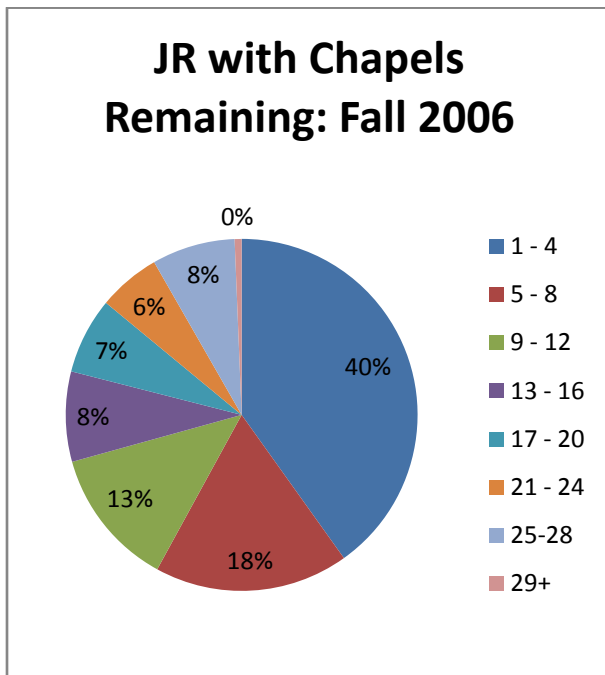


Figure 3K

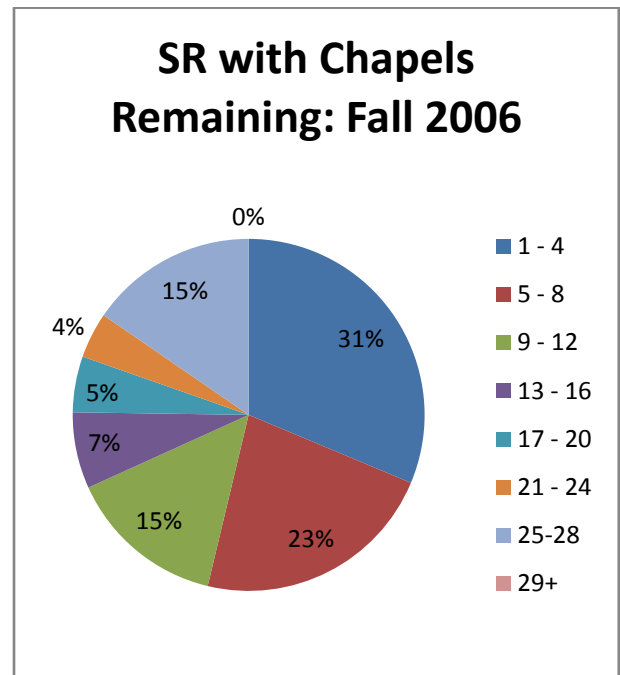


Figure 4K

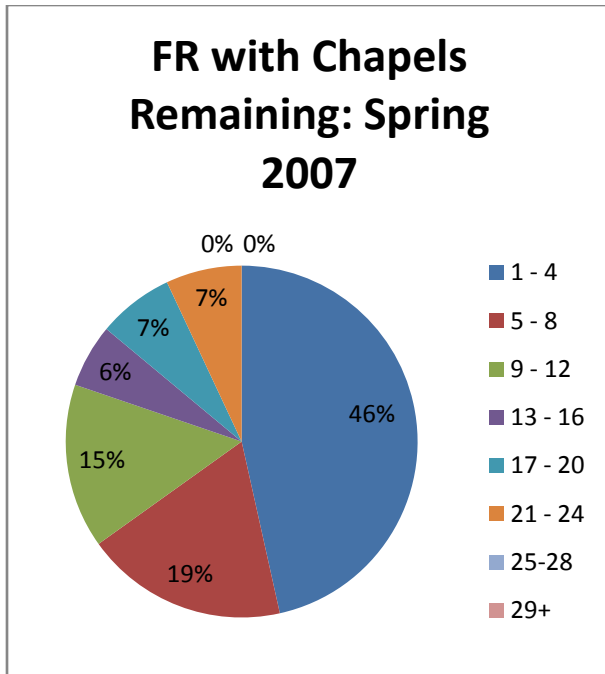


Figure 5K

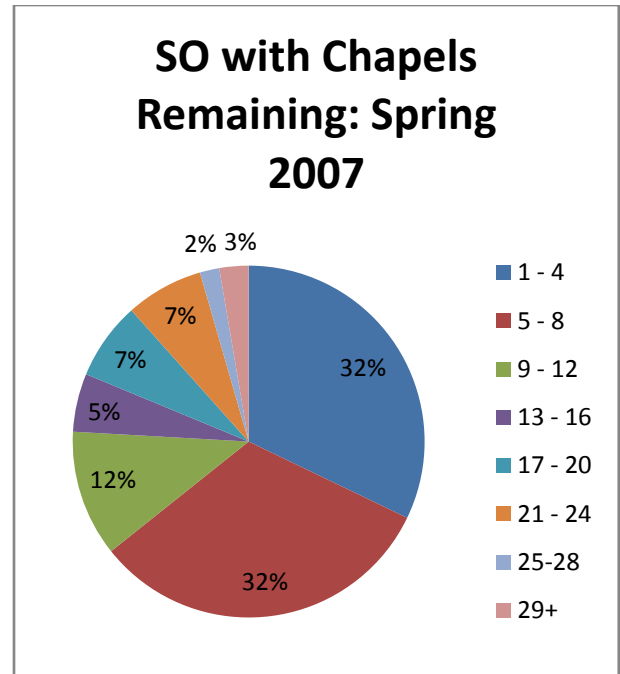


Figure 6K

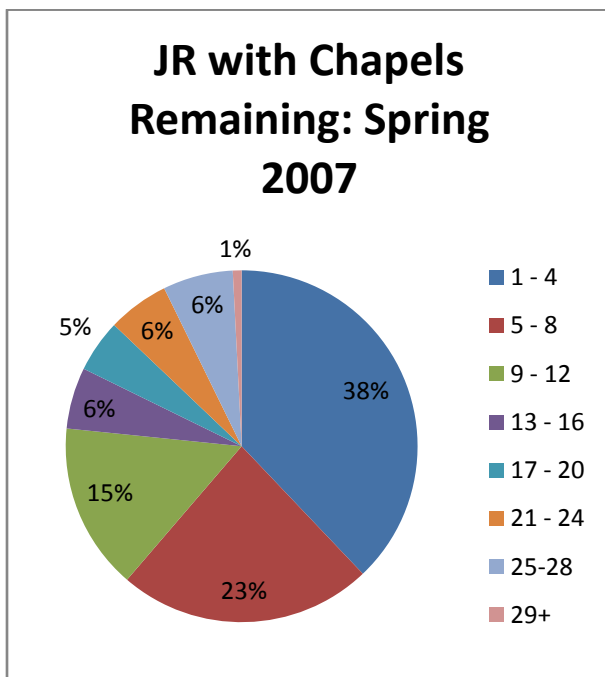


Figure 7K

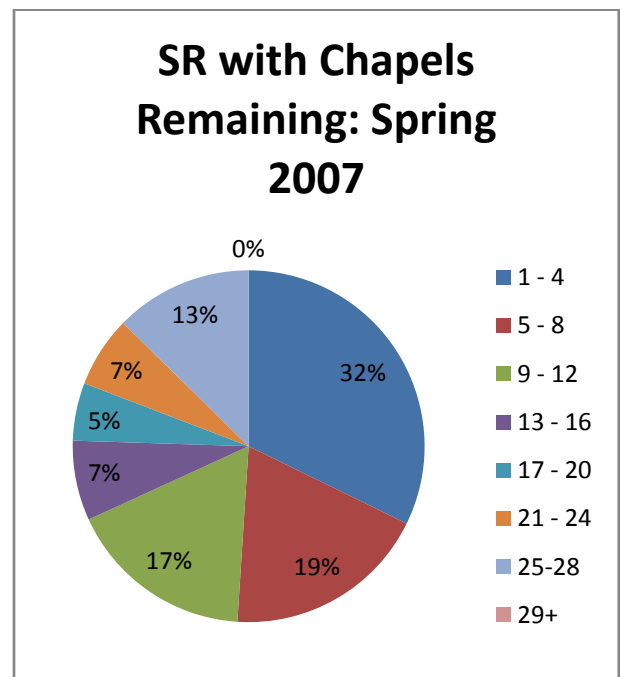


Figure 8K

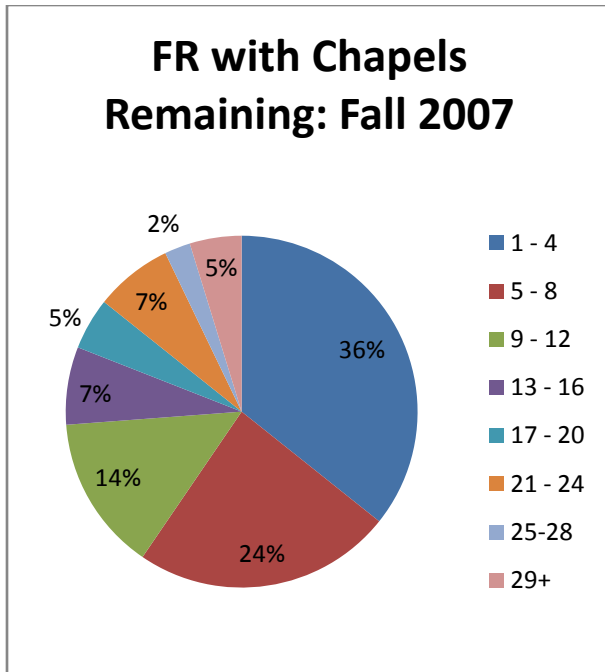


Figure 9K

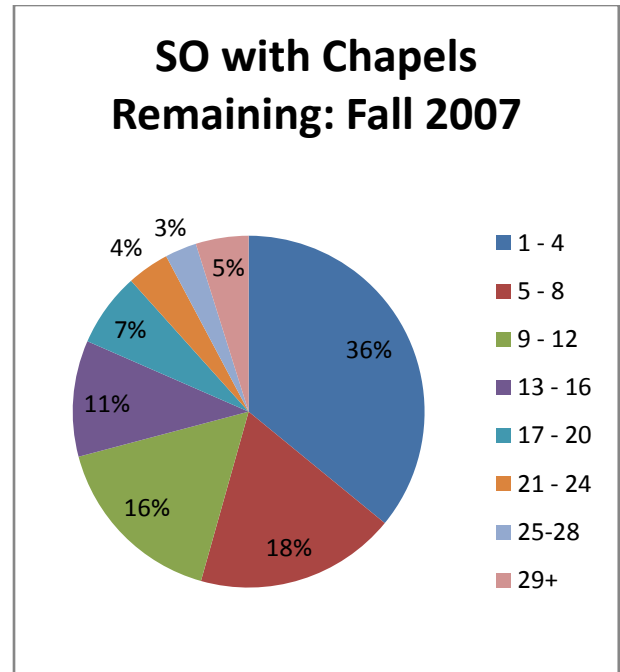


Figure 10K

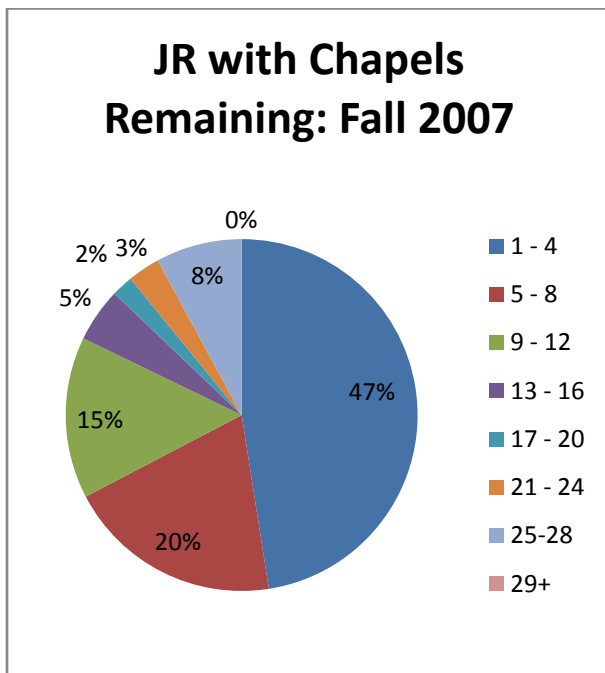


Figure 11K

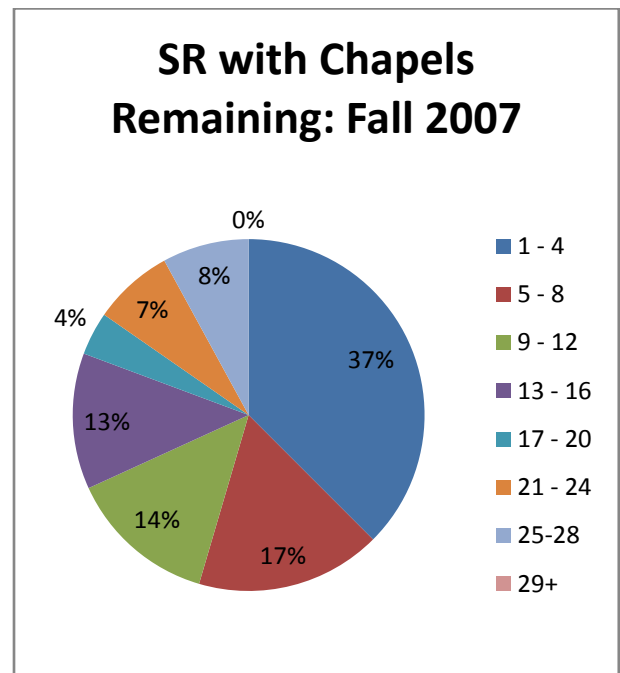


Figure 12K

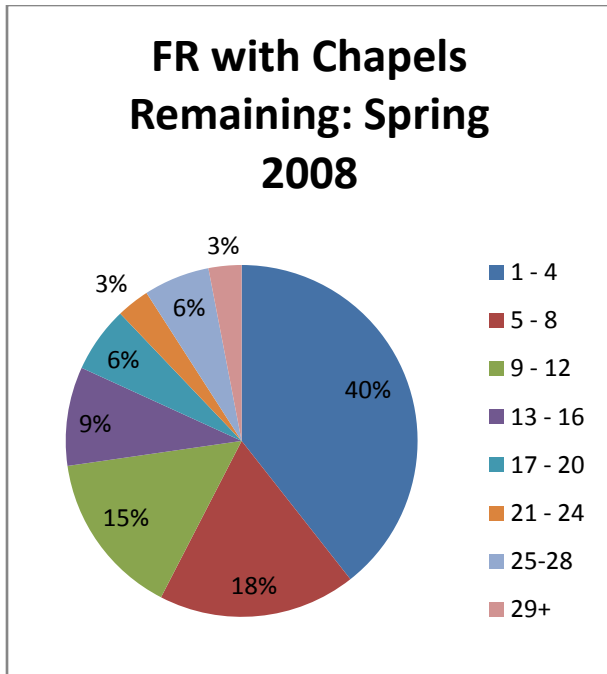


Figure 13K

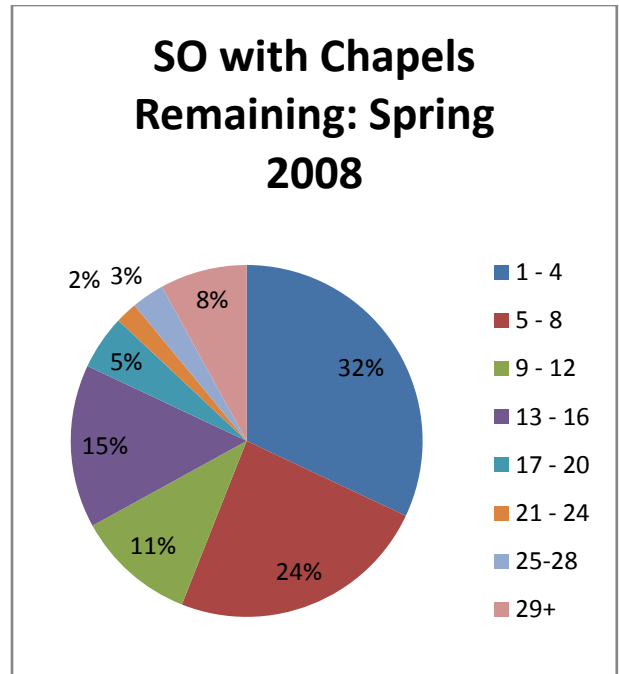


Figure 14K

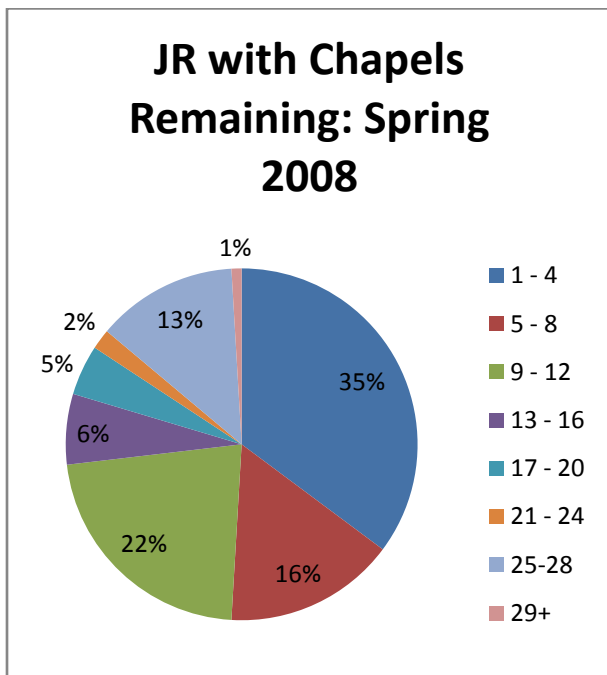


Figure 15K

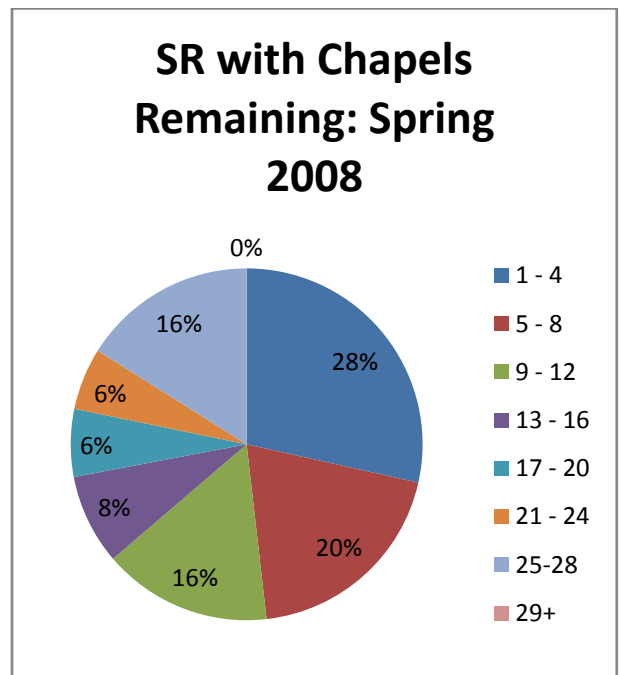


Figure 16K

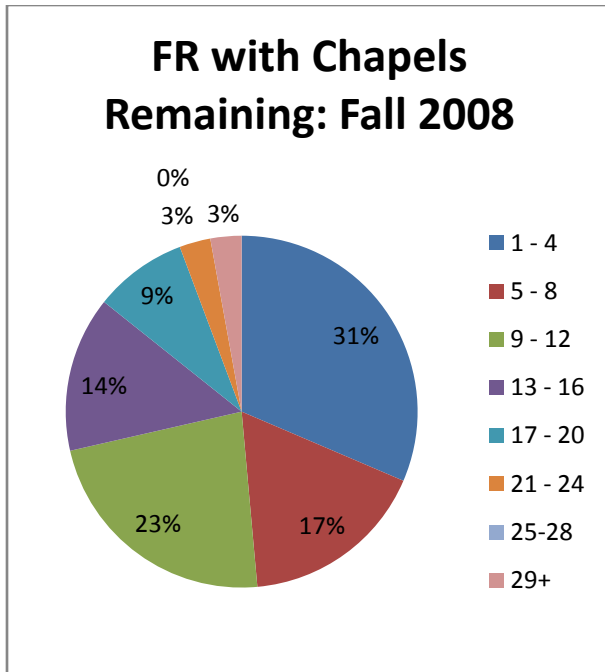


Figure 17K

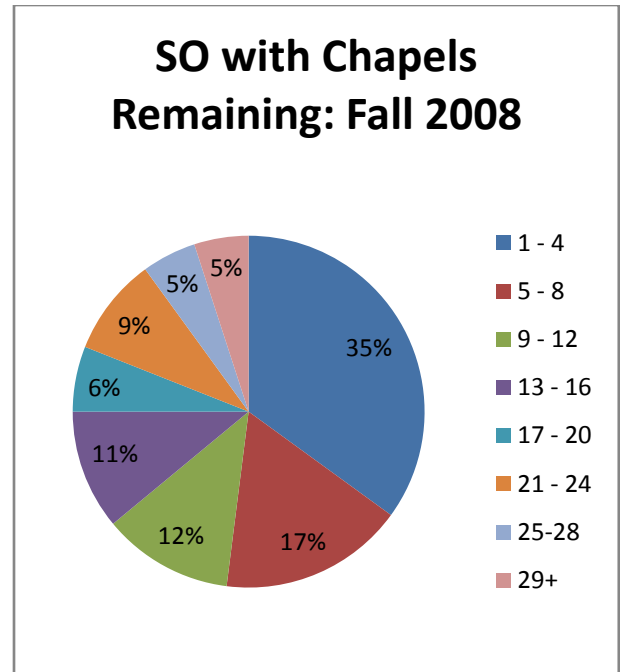


Figure 18K

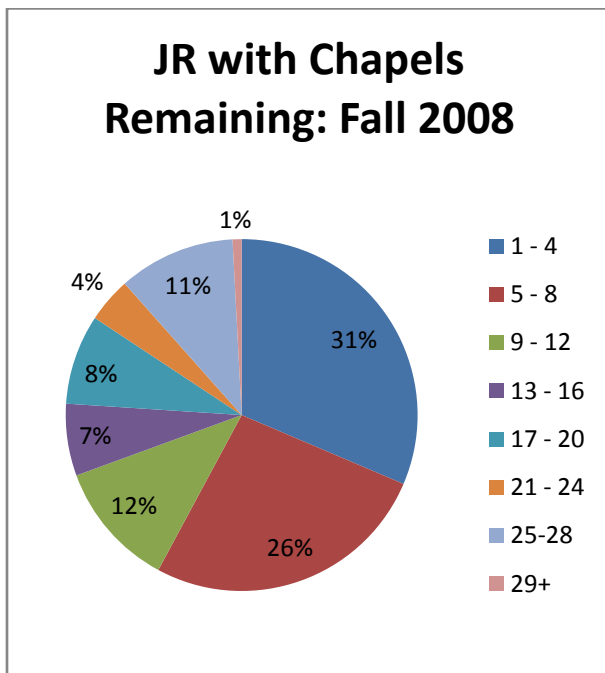


Figure 19K

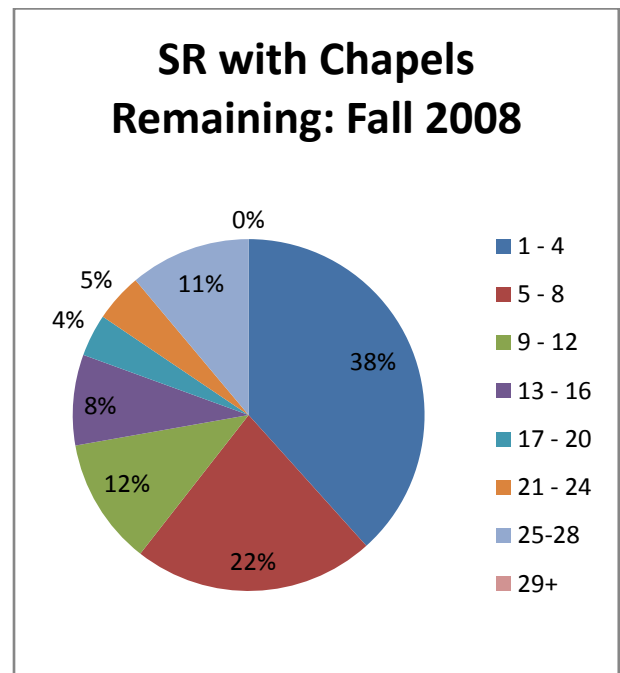


Figure 20K

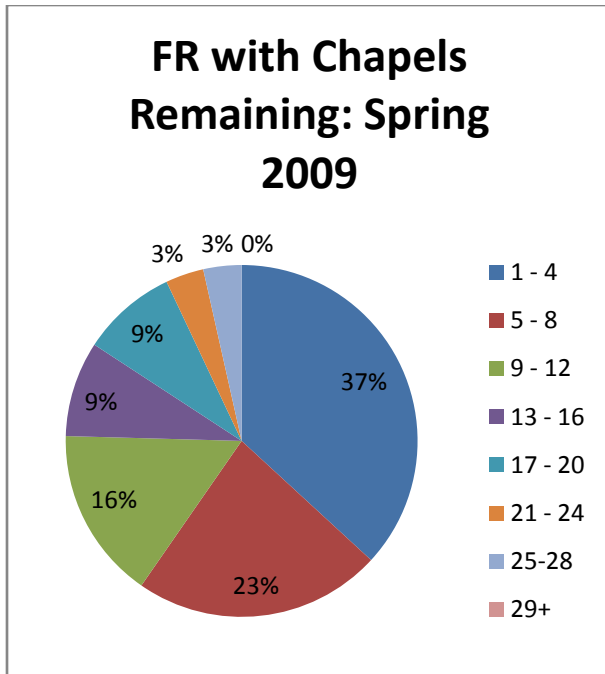


Figure 21K

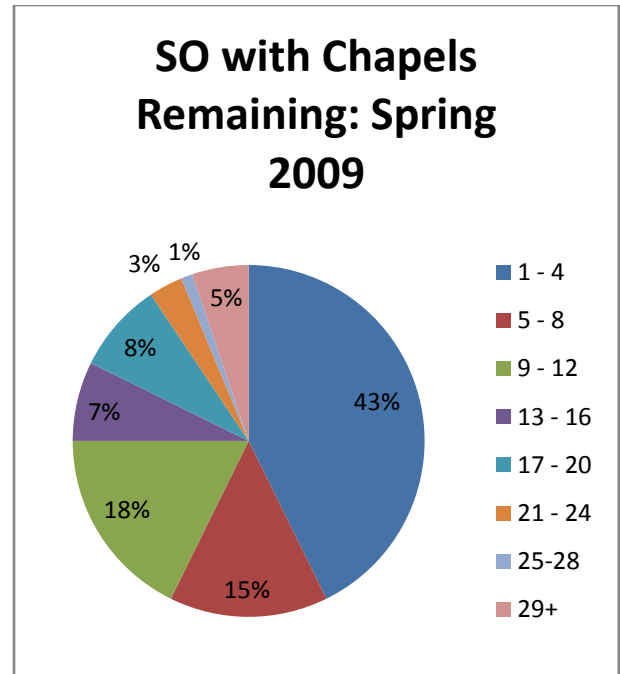


Figure 22K

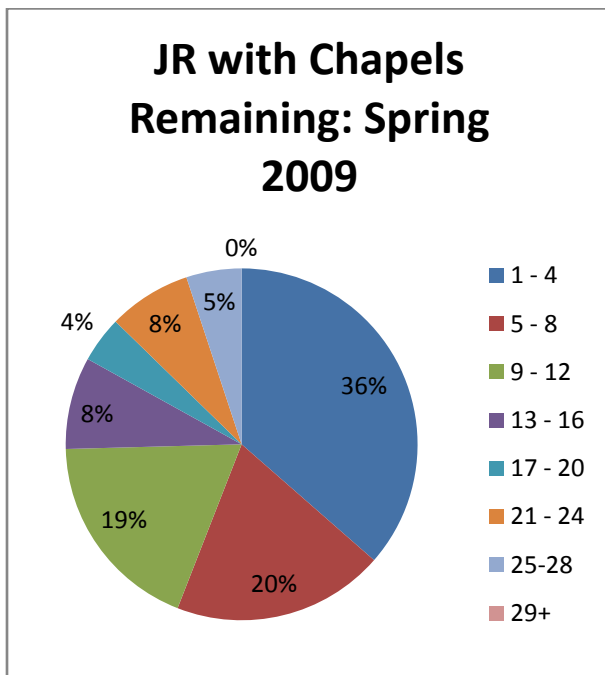


Figure 23K

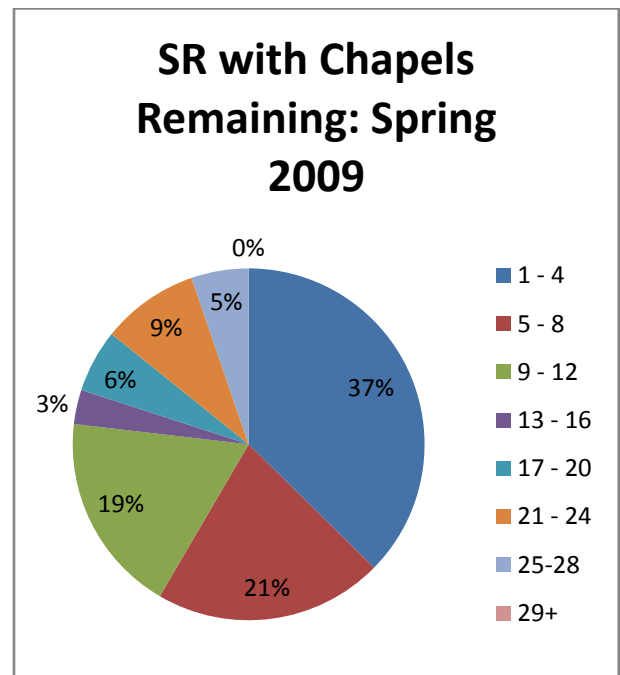


Figure 24K

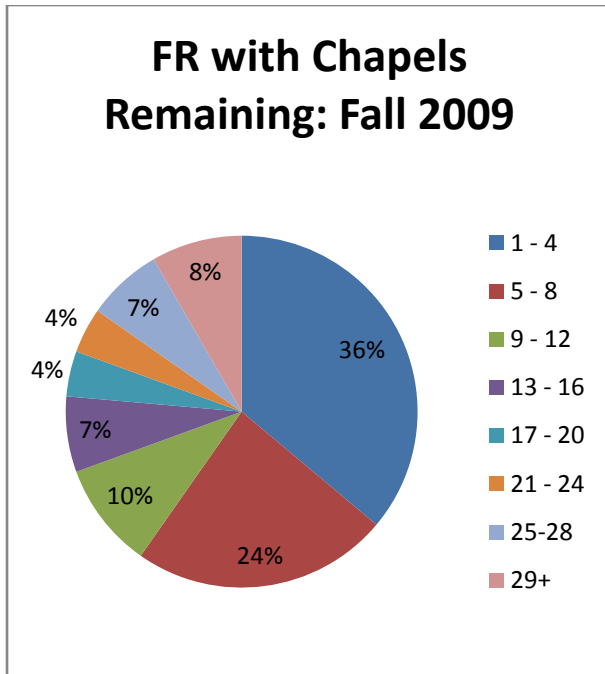


Figure 25K

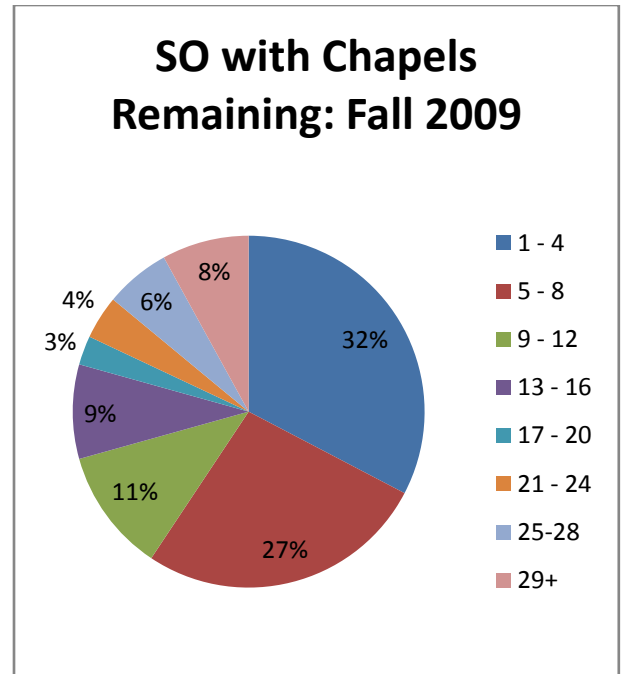


Figure 26K

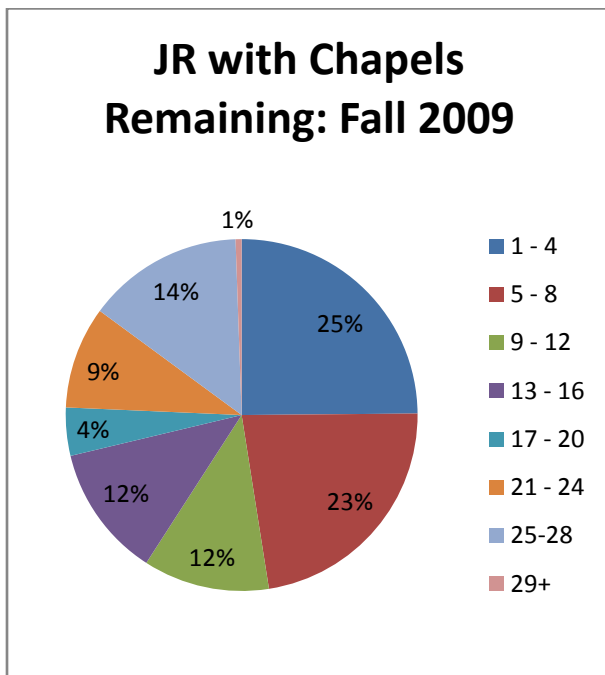


Figure 27K

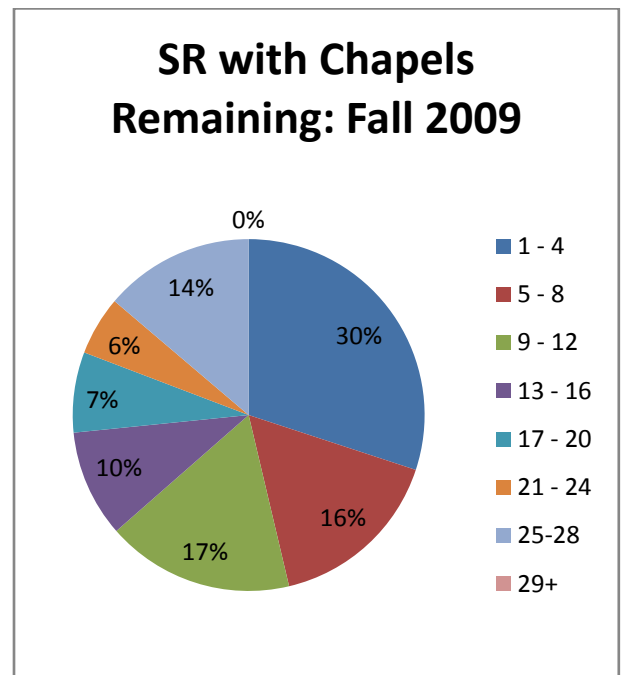


Figure 28K

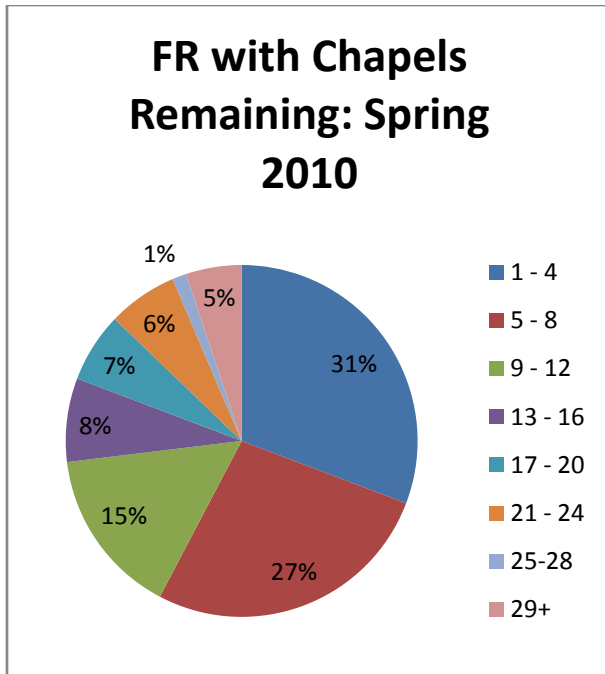


Figure 29K

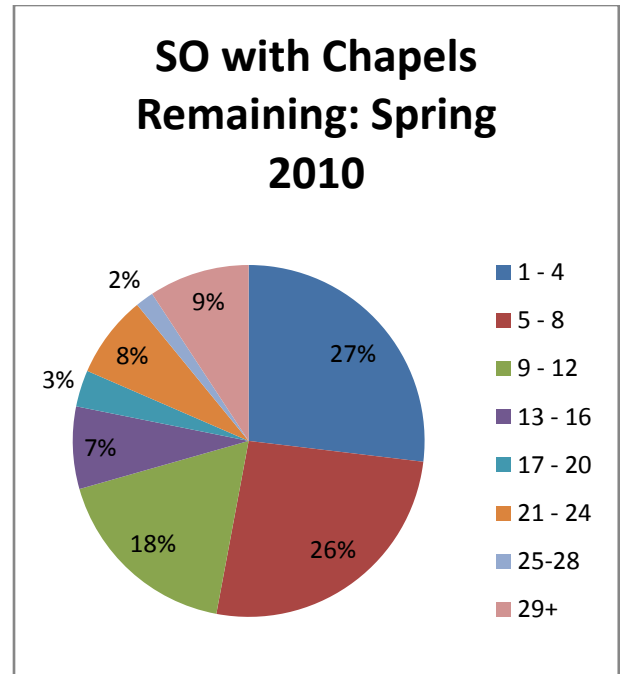


Figure 30K

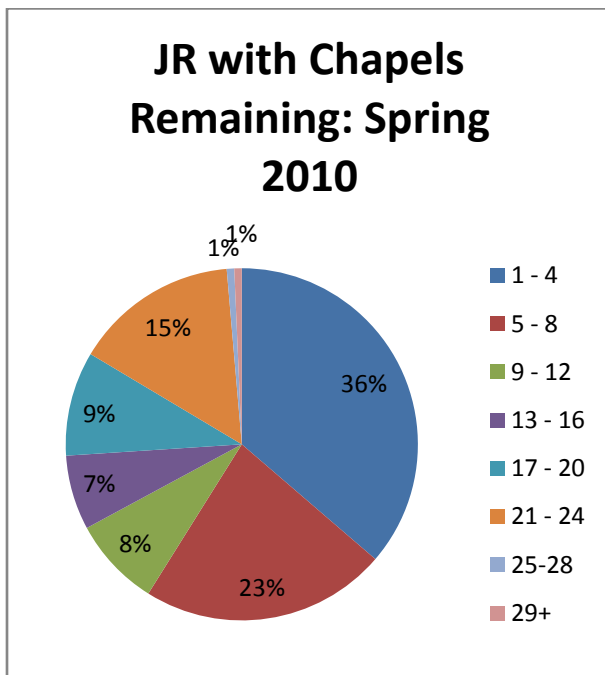


Figure 31K

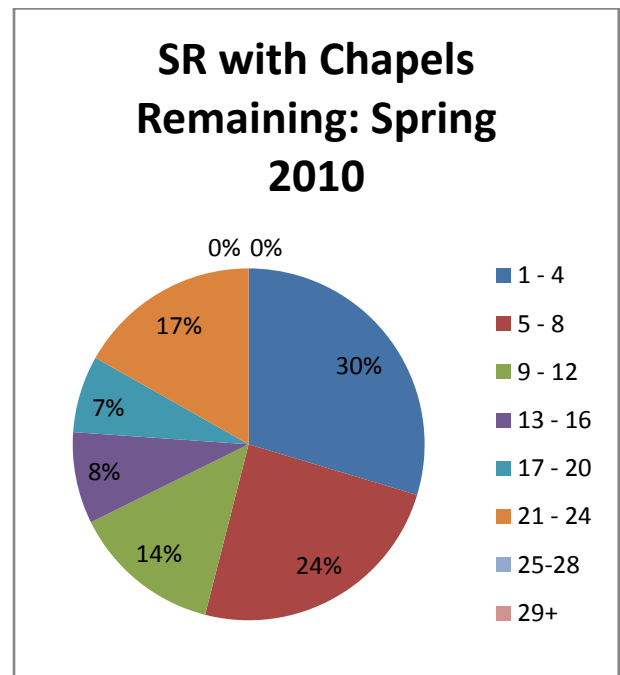


Figure 32K

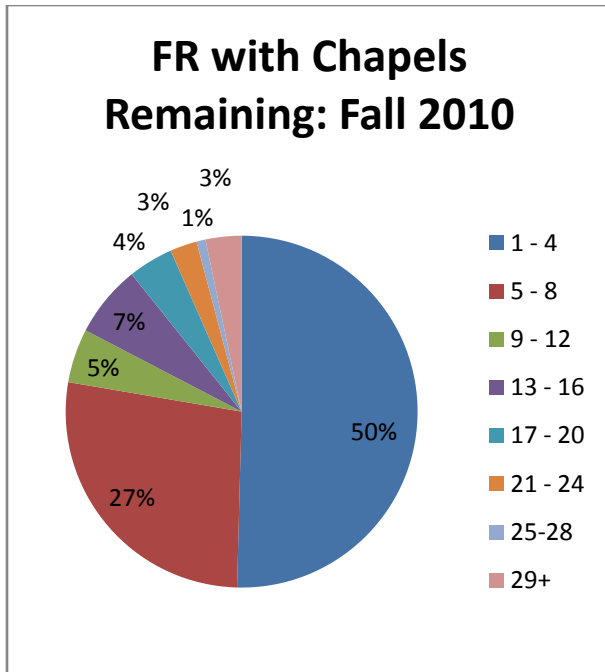


Figure 33K

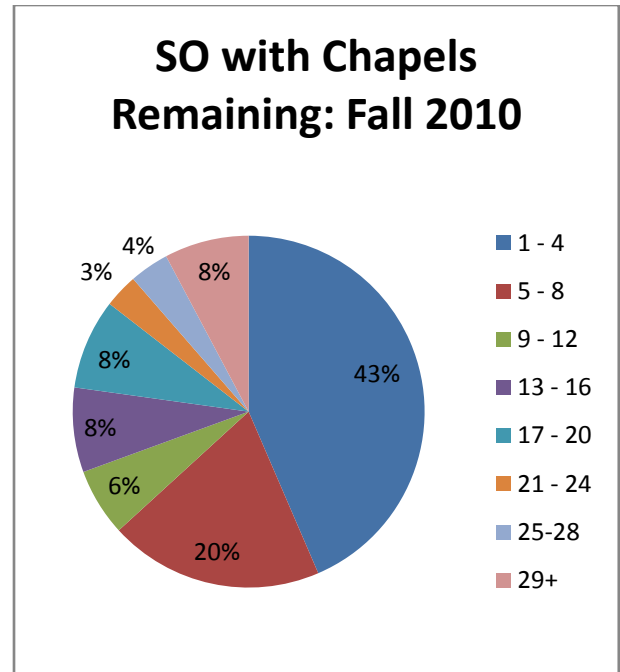


Figure 34K

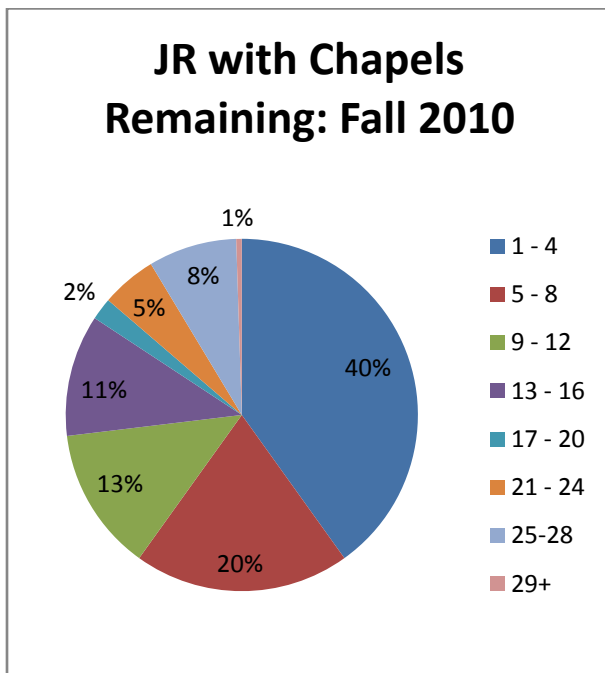


Figure 35K

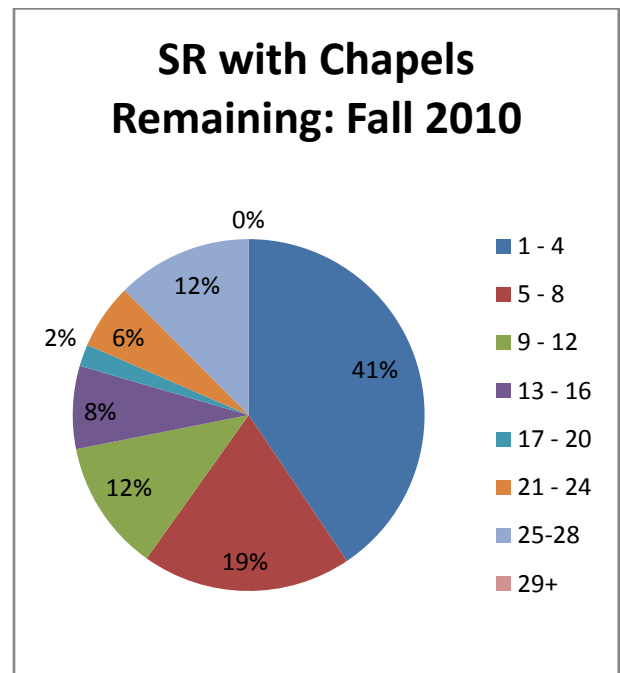


Figure 36K

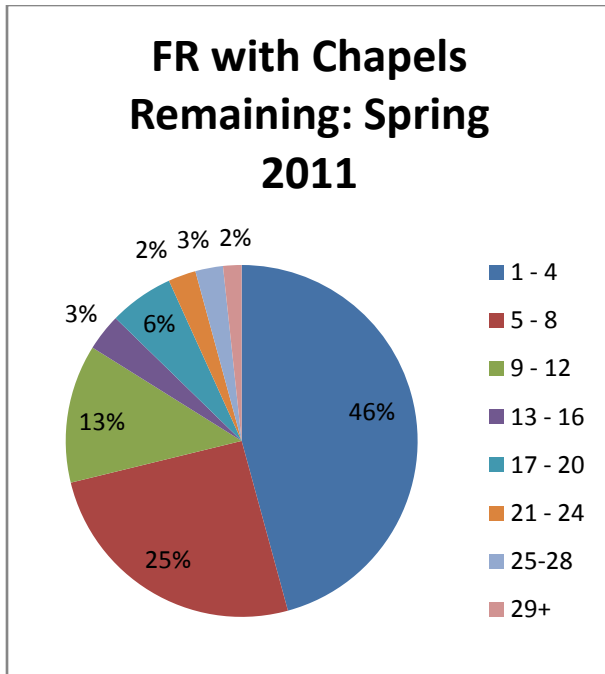


Figure 37K

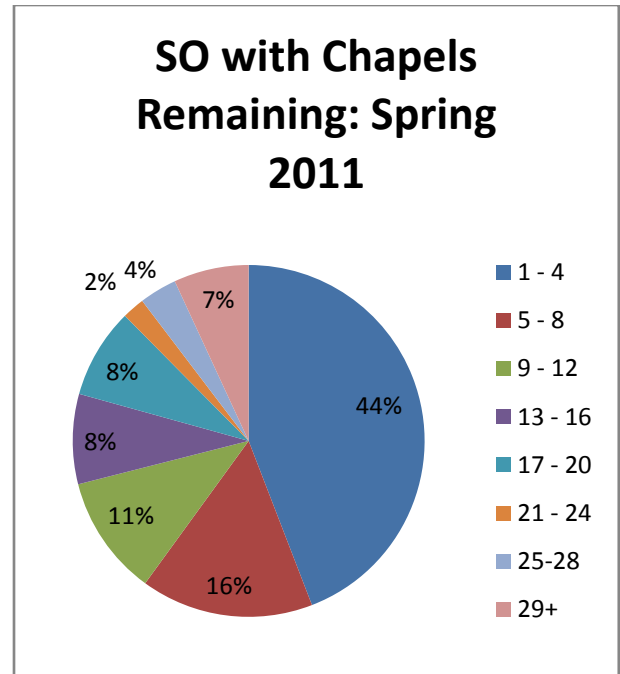


Figure 38K

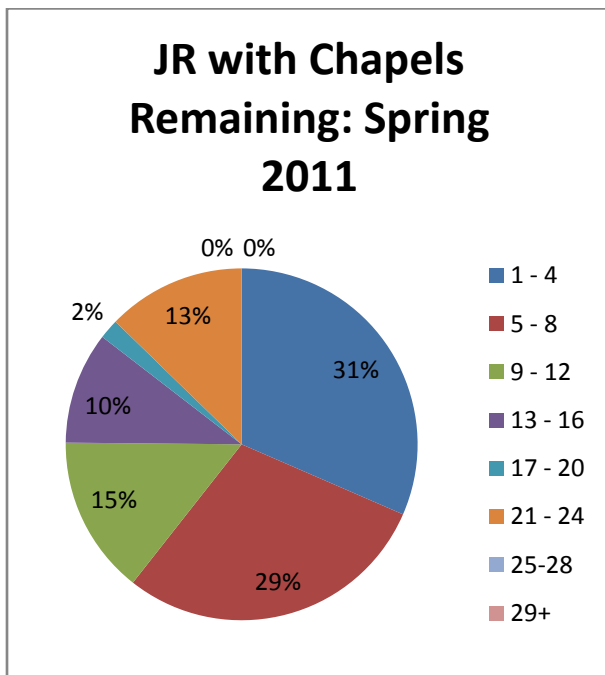


Figure 39K

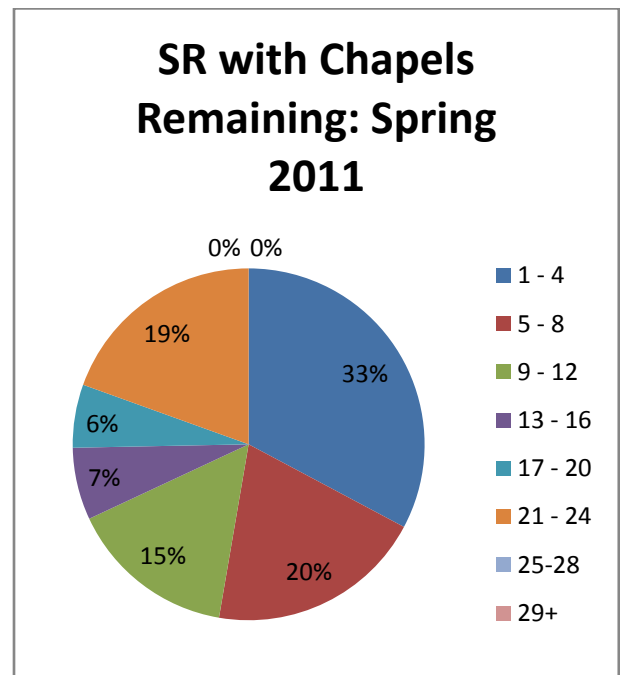


Figure 40K