Using Astra Schedule Course Analysis and Lecture Room Utilization Reports to Support Capacity Management and Efficient Scheduling

Space Management has highlighted 4 strategies that will help the University maximize facility utilization, minimize scheduling conflicts and bottlenecks, and facilitate an optimal class schedule for student success. Key Astra Schedule reports support each of these strategies and are designed to help colleges and departments be proactive with changes to current and upcoming class schedules.

Key Strategies for Improving Classroom Utilization:

Strategy 1 – Spread class offering out over the entire scheduling week.

Strategy 2 – Reduce unused seats by scheduling classes into appropriately sized rooms.

Strategy 3 – Minimize class offerings that use non-standard meeting patterns.

Strategy 4 – Reduce the offering of unnecessary sections.

Process Steps and Astra Schedule Reports Used to Address These Key Strategies:

1. Identify the campus primetime (times/days when classes are disproportionally compacted, such as M-F, 9am-2pm) and less-utilized timeslots outside of primetime hours that colleges and departments can offer sections. (**Strategy 1)**
    a. **Percent of Rooms In Use by Day and Time**
    b. **Percent of Rooms In Use by Room Size**

2. Identify room type/size bottlenecks during prime time. **(Strategy 1)**
    Note: 80% or higher utilization is considered a bottleneck, potentially limiting future growth potential.
    a. **Space Utilization by Room Type and Size with Primetime**

3. Identify prime time usage (prime ratio) by subject area. **(Strategy 1)**
    Note: Campus scheduling standards allow 65% or less 3-unit lecture courses to be offered during prime time.
    a. **Prime Time Usage Ratio**

4. Identify when rooms are used for classes (and when they are open) by time of day/day of week. **(Strategy 1)**
   Note: CO target average utilization is 35 Weekly Station Hours (WSH) for lecture rooms; 23.4 WSH for lower division labs, and 17.6 WSH for upper division/graduate labs.
   a. **Scheduled Hours By Room and Time of Day**

5. Review seat fill by room type/size and subject. **(Strategy 2**)
   Note: CO target average station fill is 66% or greater for lecture rooms.
   a. **Space Utilization by Room Type and Size with Seat Fill**
   b. **Low Seat Fill Sections by Subject**

6. Review prime time usage and seat fill for specific buildings and rooms. (**Strategy 1 and Strategy 2**)
   Note: CO target average lecture room utilization is 75% during the 70 hour scheduling week. CO target average station fill is 66% or greater for lecture rooms.
   a. **Space Utilization by Building and Room with Primetime**
   b. **Space Utilization by Building and Room with Seat Fill**

7. Review Meeting Pattern usage. (**Strategy 3**)
   Note: Campus approved Meeting Patterns are available to view in the Class Scheduling Standards and Policies document located on the Space Management Compliance webpage.
   a. **Meeting Patterns in Use**
   b. **Meeting Patterns in Use with Subjects**

8. Identify sections that could potentially be removed from the schedule. (**Strategy 4**)
   a. **Low Enrollment Sections by Subject**
   b. **Low Enrollment Course Analysis**

Astra Schedule Course Analysis and Lecture Room Utilization Report Information & Samples

- Reports listed on the following pages for current terms are available to view and download on the Space Management Astra Schedule webpage.

Percent of Rooms in Use by Day and Time

Purpose of this Report:
This report shows the percent of lecture rooms used for sections during a selected date range. Usage is broken down by time of day and day of the week.

Common Use Scenario:
This report can be used to assist in identifying primetime and bottlenecks (when certain types of rooms are used at a disproportionate level at certain times). This information can be used to help enforce an academic scheduling policy emphasizing the spreading of classes throughout the entire scheduling week.

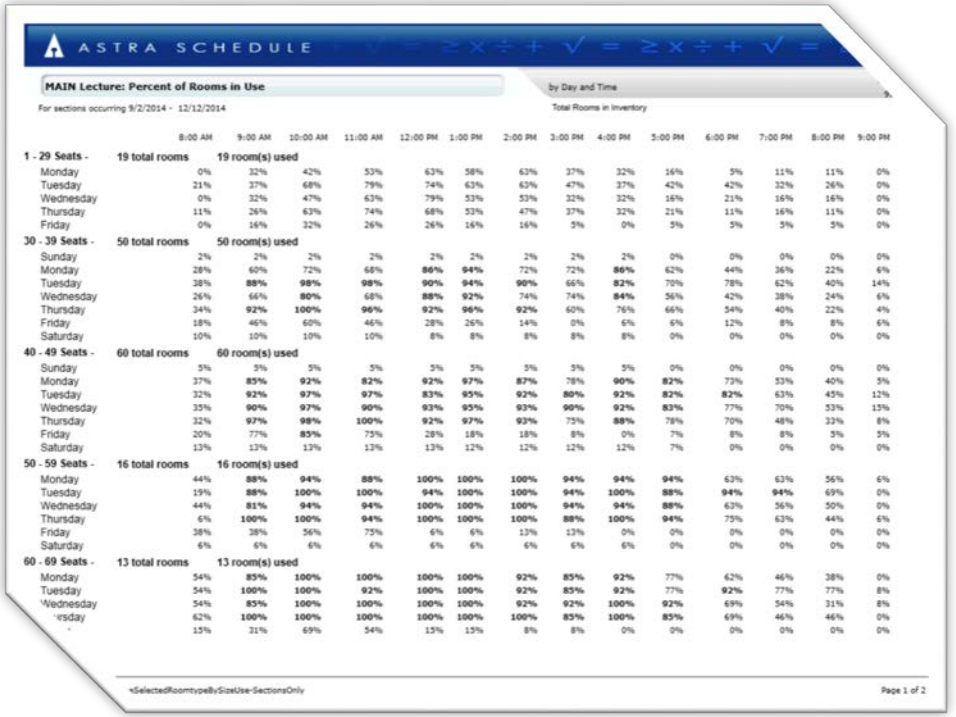
Supports Strategy 1 – Spread class offering out over the entire scheduling week.

Percent of Rooms in Use by Room Size

Purpose of this Report:
Similar to the Percent of Rooms in Use by Day and Time report, this report shows the percent of lecture rooms used for sections during a selected date range. The rooms are further grouped by size category. Usage is broken down by time of day, day of the week.

Common Use Scenario:
This report can be used to assist in pinpointing bottlenecks (when certain types of rooms are used at a disproportionate level at certain times) in a particular size of rooms. This information can be used to help enforce an academic scheduling policy emphasizing the spreading of classes throughout the entire scheduling week.

Supports Strategy 1 – Spread class offering out over the entire scheduling week.



ASTRA SCHEDULE

MAIN Lecture: Percent of Rooms in Use by Day and Time

For sections occurring 9/2/2014 - 12/12/2014 Total Rooms in Inventory

		8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
1 - 29 Seats -	**19 total rooms**	**19 room(s) used**													
Monday		0%	32%	42%	53%	63%	58%	63%	37%	32%	16%	5%	11%	11%	0%
Tuesday		21%	37%	68%	79%	74%	63%	63%	47%	37%	42%	42%	32%	26%	0%
Wednesday		0%	32%	47%	63%	79%	53%	53%	32%	32%	16%	21%	16%	16%	0%
Thursday		11%	26%	63%	74%	68%	53%	47%	37%	32%	21%	11%	16%	11%	0%
Friday		0%	16%	32%	26%	26%	16%	16%	5%	0%	5%	5%	5%	5%	0%
30 - 39 Seats -	**50 total rooms**	**50 room(s) used**													
Sunday		2%	2%	2%	2%	2%	2%	2%	2%	2%	0%	0%	0%	0%	0%
Monday		28%	60%	72%	68%	**86%**	**94%**	72%	72%	**86%**	62%	44%	36%	22%	6%
Tuesday		38%	**88%**	**98%**	**98%**	**90%**	**94%**	**90%**	66%	**82%**	70%	78%	62%	40%	14%
Wednesday		26%	66%	**80%**	68%	**88%**	**92%**	74%	74%	**84%**	56%	42%	38%	24%	6%
Thursday		34%	**92%**	**100%**	**96%**	**92%**	**96%**	**92%**	60%	76%	66%	54%	40%	22%	4%
Friday		18%	46%	60%	46%	28%	26%	14%	0%	6%	6%	12%	8%	8%	6%
Saturday		10%	10%	10%	10%	8%	8%	8%	8%	8%	0%	0%	0%	0%	0%
40 - 49 Seats -	**60 total rooms**	**60 room(s) used**													
Sunday		5%	5%	5%	5%	5%	5%	5%	5%	5%	0%	0%	0%	0%	0%
Monday		37%	**85%**	**92%**	**82%**	**92%**	**97%**	**87%**	78%	**90%**	**82%**	73%	53%	40%	5%
Tuesday		32%	**92%**	**97%**	**97%**	**83%**	**95%**	**92%**	**80%**	**92%**	**82%**	**82%**	63%	45%	12%
Wednesday		35%	**90%**	**97%**	**90%**	**93%**	**95%**	**93%**	**90%**	**92%**	**83%**	77%	70%	53%	15%
Thursday		32%	**97%**	**98%**	**100%**	**92%**	**97%**	**93%**	75%	**88%**	78%	70%	48%	33%	8%
Friday		20%	77%	**85%**	75%	28%	18%	18%	8%	0%	7%	8%	8%	5%	5%
Saturday		13%	13%	13%	13%	13%	12%	12%	12%	12%	7%	0%	0%	0%	0%
50 - 59 Seats -	**16 total rooms**	**16 room(s) used**													
Monday		44%	**88%**	**94%**	**88%**	**100%**	**100%**	**100%**	**94%**	**94%**	**94%**	63%	63%	56%	6%
Tuesday		19%	**88%**	**100%**	**100%**	**94%**	**100%**	**100%**	**94%**	**100%**	**88%**	**94%**	**94%**	69%	0%
Wednesday		44%	**81%**	**94%**	**94%**	**100%**	**100%**	**100%**	**94%**	**94%**	**88%**	63%	56%	50%	0%
Thursday		6%	**100%**	**100%**	**94%**	**100%**	**100%**	**100%**	**88%**	**100%**	**94%**	75%	63%	44%	6%
Friday		38%	38%	56%	75%	6%	6%	13%	13%	0%	0%	0%	0%	0%	0%
Saturday		6%	6%	6%	6%	6%	6%	6%	6%	6%	0%	0%	0%	0%	0%
60 - 69 Seats -	**13 total rooms**	**13 room(s) used**													
Monday		54%	**85%**	**100%**	**100%**	**100%**	**100%**	**92%**	**85%**	**92%**	77%	62%	46%	38%	0%
Tuesday		54%	**100%**	**100%**	**92%**	**100%**	**100%**	**92%**	**85%**	**92%**	77%	**92%**	77%	77%	8%
Wednesday		54%	**85%**	**100%**	**100%**	**100%**	**100%**	**92%**	**92%**	**100%**	**92%**	69%	54%	31%	8%
rsday		62%	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**85%**	**100%**	**85%**	69%	46%	46%	0%
		15%	31%	69%	54%	15%	15%	8%	8%	0%	0%	0%	0%	0%	0%

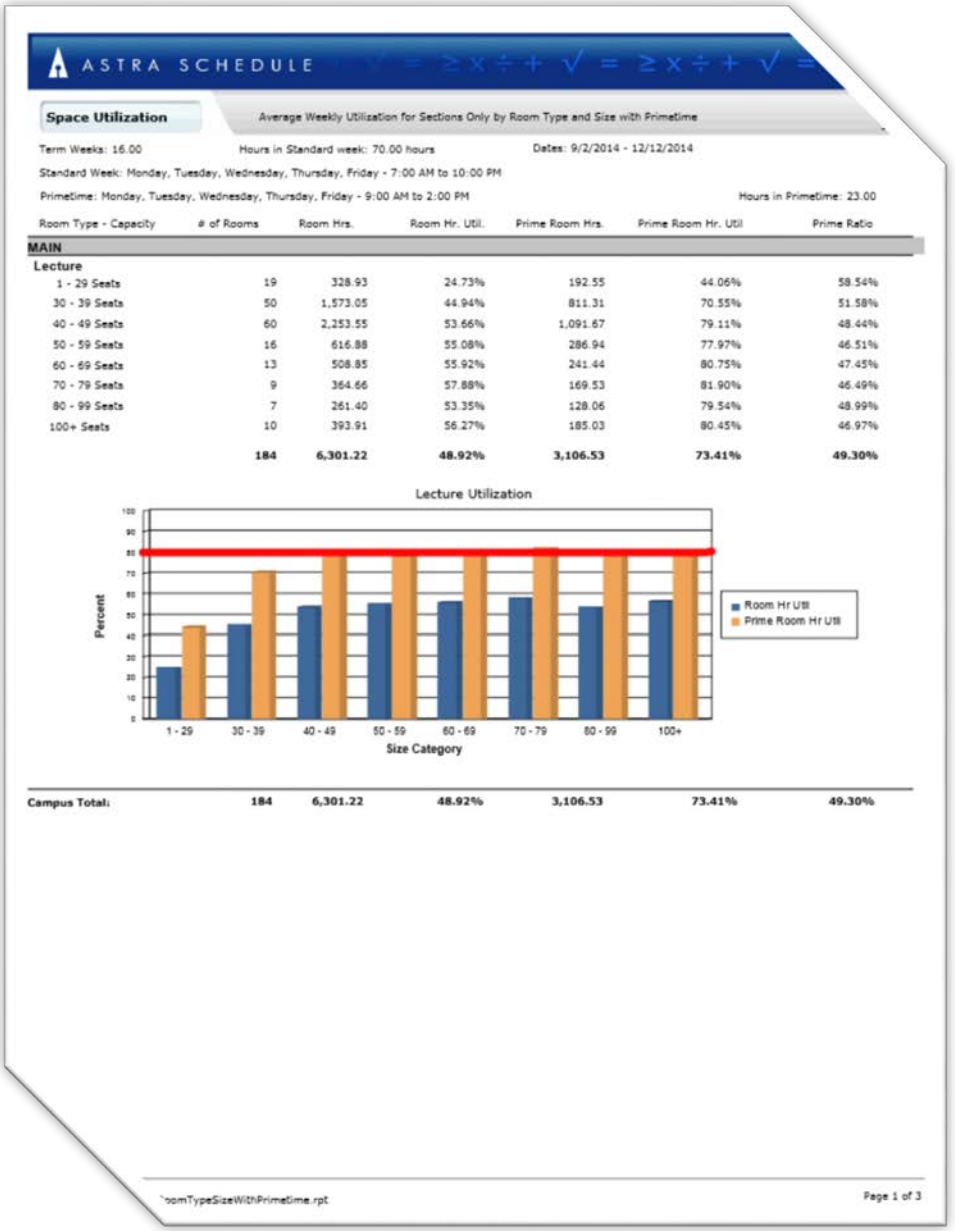
«SelectedRoomtypeBySizeUse-SectionsOnly Page 1 of 2

Space Utilization by Room Type and Size with Primetime

Purpose of this Report:
This report shows average weekly room hours from academic sections by room type (with rooms grouped by seating capacity groups) highlighting overall room hour utilization and utilization during primetime. Space utilization calculations are based on the user specified number of hours in a standard scheduling week. Additional parameters allow a user to specify a "prime time" subset of hours where classes are often compacted (for example, M - R, 10:00 a.m. to 2:00 p.m.). Hours used by double books and crosslists are counted only once. Enrollments and max enrollments for double books and crosslists are added together.

Common Use Scenario:
This report can be used to compare overall space utilization compared to utilization during primetime, and find room type/size combinations that are a “bottleneck” (utilized 80 percent or higher, potentially limiting future growth potential). It can be used to measure how efficiently different types and sizes of rooms are scheduled in terms of hours per week and how evenly class offerings are spread throughout the entire week as opposed to being compacted during primetime. Note – This report only includes academic section data.

Supports Strategy 1 – Spread class offering out over the entire scheduling week.


ASTRA SCHEDULE

Space Utilization

Average Weekly Utilization for Sections Only by Room Type and Size with Primetime

Term Weeks: 16.00 Hours in Standard week: 70.00 hours Dates: 9/2/2014 - 12/12/2014

Standard Week: Monday, Tuesday, Wednesday, Thursday, Friday - 7:00 AM to 10:00 PM

Primetime: Monday, Tuesday, Wednesday, Thursday, Friday - 9:00 AM to 2:00 PM Hours in Primetime: 23.00

Room Type - Capacity	# of Rooms	Room Hrs.	Room Hr. Util.	Prime Room Hrs.	Prime Room Hr. Util	Prime Ratio
MAIN						
Lecture						
1 - 29 Seats	19	328.93	24.73%	192.55	44.06%	58.54%
30 - 39 Seats	50	1,573.05	44.94%	811.31	70.55%	51.58%
40 - 49 Seats	60	2,253.55	53.66%	1,091.67	79.11%	48.44%
50 - 59 Seats	16	616.88	55.08%	286.94	77.97%	46.51%
60 - 69 Seats	13	508.85	55.92%	241.44	80.75%	47.45%
70 - 79 Seats	9	364.66	57.88%	169.53	81.90%	46.49%
80 - 99 Seats	7	261.40	53.35%	128.06	79.54%	48.99%
100+ Seats	10	393.91	56.27%	185.03	80.45%	46.97%
	184	6,301.22	48.92%	3,106.53	73.41%	49.30%

Lecture Utilization

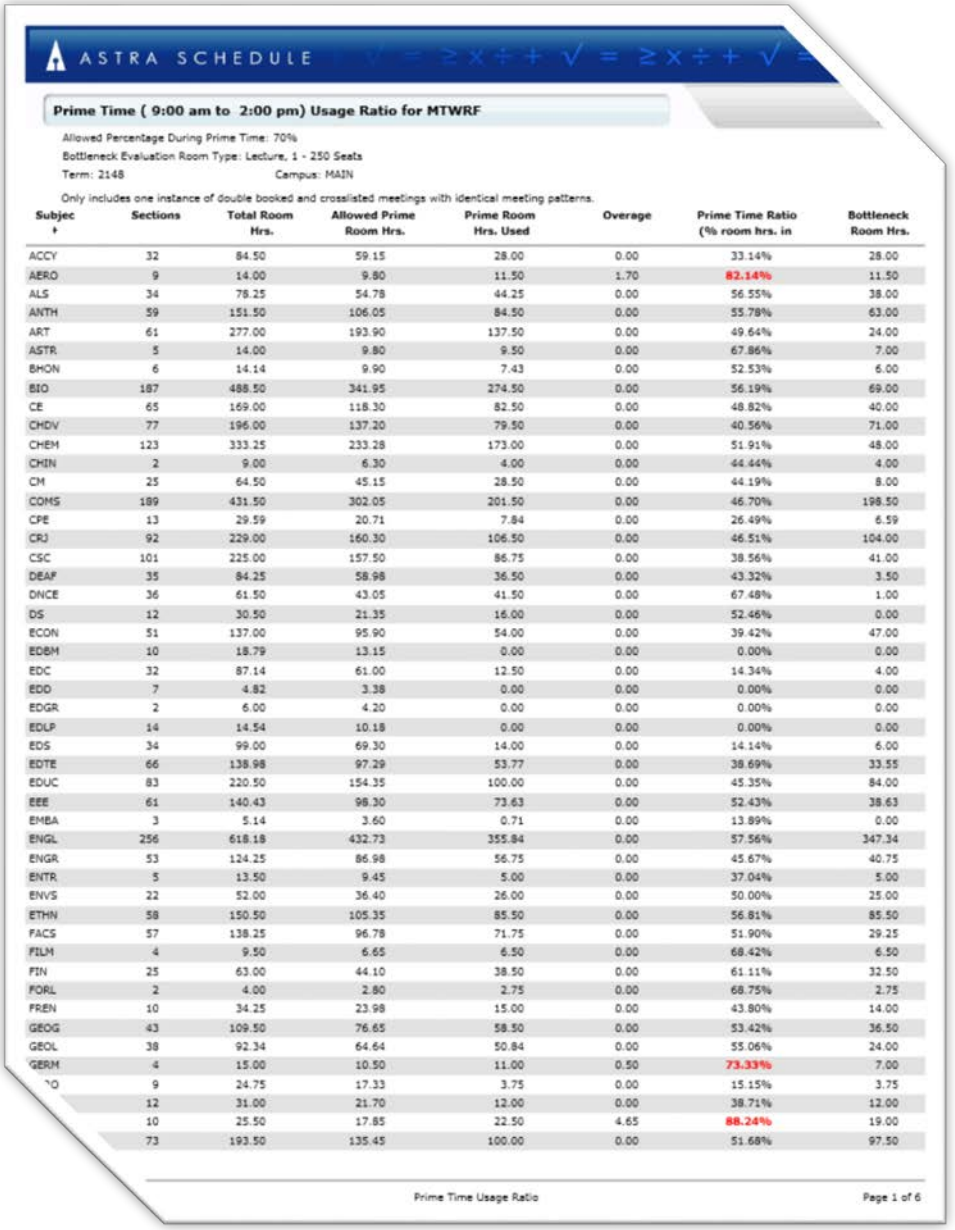
Campus Total:	184	6,301.22	48.92%	3,106.53	73.41%	49.30%

Prime Time Usage Ratio

Purpose of this Report:
This report allows a user to enter specific "prime time" parameters and view average weekly room hours used by subject code. Primetime is defined as a subset of the standard scheduling week that shows disproportionately higher utilization (i.e. 10:00 a.m. to 2:00 p.m., Monday through Thursday). This report highlights the total room hours offered of any given subject, how many of those hours are offered during primetime, and how many primetime hours are scheduled into the user defined bottleneck room type and size.

Common Use Scenario:
This report can be used to help enforce an academic scheduling policy outlining usage guidelines for what percentage of class offerings are allowed during primetime, and how many hours can be scheduled in highly desired, bottlenecked rooms

Supports Strategy 1 – Spread class offering out over the entire scheduling week.



ASTRA SCHEDULE

Prime Time (9:00 am to 2:00 pm) Usage Ratio for MTWRF

Allowed Percentage During Prime Time: 70%
Bottleneck Evaluation Room Type: Lecture, 1 - 250 Seats
Term: 2148 Campus: MAIN

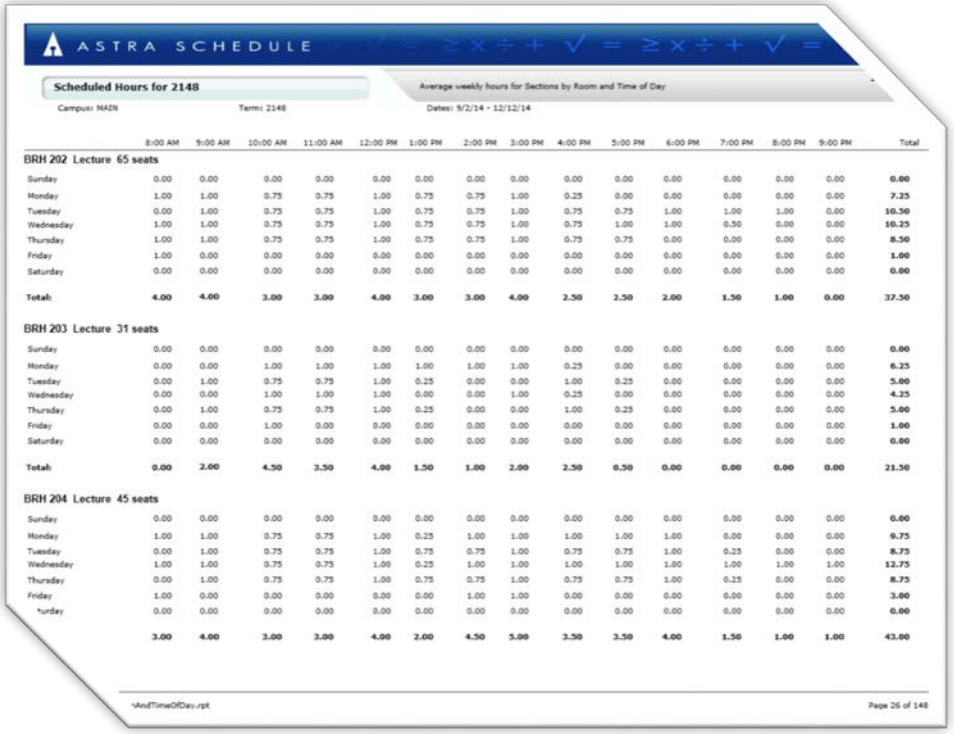
Only includes one instance of double booked and crosslisted meetings with identical meeting patterns.

Subjec +	Sections	Total Room Hrs.	Allowed Prime Room Hrs.	Prime Room Hrs. Used	Overage	Prime Time Ratio (% room hrs. in	Bottleneck Room Hrs.
ACCY	32	84.50	59.15	28.00	0.00	33.14%	28.00
AERO	9	14.00	9.80	11.50	1.70	82.14%	11.50
ALS	34	78.25	54.78	44.25	0.00	56.55%	38.00
ANTH	59	151.50	106.05	84.50	0.00	55.78%	63.00
ART	61	277.00	193.90	137.50	0.00	49.64%	24.00
ASTR	5	14.00	9.80	9.50	0.00	67.86%	7.00
BHON	6	14.14	9.90	7.43	0.00	52.53%	6.00
BIO	187	488.50	341.95	274.50	0.00	56.19%	69.00
CE	65	169.00	118.30	82.50	0.00	48.82%	40.00
CHDV	77	196.00	137.20	79.50	0.00	40.56%	71.00
CHEM	123	333.25	233.28	173.00	0.00	51.91%	48.00
CHIN	2	9.00	6.30	4.00	0.00	44.44%	4.00
CM	25	64.50	45.15	28.50	0.00	44.19%	8.00
COMS	189	431.50	302.05	201.50	0.00	46.70%	198.50
CPE	13	29.59	20.71	7.84	0.00	26.49%	6.59
CRJ	92	229.00	160.30	106.50	0.00	46.51%	104.00
CSC	101	225.00	157.50	86.75	0.00	38.56%	41.00
DEAF	35	84.25	58.98	36.50	0.00	43.32%	3.50
DNCE	36	61.50	43.05	41.50	0.00	67.48%	1.00
DS	12	30.50	21.35	16.00	0.00	52.46%	0.00
ECON	51	137.00	95.90	54.00	0.00	39.42%	47.00
EDBM	10	18.79	13.15	0.00	0.00	0.00%	0.00
EDC	32	87.14	61.00	12.50	0.00	14.34%	4.00
EDD	7	4.82	3.38	0.00	0.00	0.00%	0.00
EDGR	2	6.00	4.20	0.00	0.00	0.00%	0.00
EDLP	14	14.54	10.18	0.00	0.00	0.00%	0.00
EDS	34	99.00	69.30	14.00	0.00	14.14%	6.00
EDTE	66	138.98	97.29	53.77	0.00	38.69%	33.55
EDUC	83	220.50	154.35	100.00	0.00	45.35%	84.00
EEE	61	140.43	98.30	73.63	0.00	52.43%	38.63
EMBA	3	5.14	3.60	0.71	0.00	13.89%	0.00
ENGL	256	618.18	432.73	355.84	0.00	57.56%	347.34
ENGR	53	124.25	86.98	56.75	0.00	45.67%	40.75
ENTR	5	13.50	9.45	5.00	0.00	37.04%	5.00
ENVS	22	52.00	36.40	26.00	0.00	50.00%	25.00
ETHN	58	150.50	105.35	85.50	0.00	56.81%	85.50
FACS	57	138.25	96.78	71.75	0.00	51.90%	29.25
FILM	4	9.50	6.65	6.50	0.00	68.42%	6.50
FIN	25	63.00	44.10	38.50	0.00	61.11%	32.50
FORL	2	4.00	2.80	2.75	0.00	68.75%	2.75
FREN	10	34.25	23.98	15.00	0.00	43.80%	14.00
GEOG	43	109.50	76.65	58.50	0.00	53.42%	36.50
GEOL	38	92.34	64.64	50.84	0.00	55.06%	24.00
GERM	4	15.00	10.50	11.00	0.50	73.33%	7.00
[illegible]O	9	24.75	17.33	3.75	0.00	15.15%	3.75
	12	31.00	21.70	12.00	0.00	38.71%	12.00
	10	25.50	17.85	22.50	4.65	88.24%	19.00
	73	193.50	135.45	100.00	0.00	51.68%	97.50

Prime Time Usage Ratio Page 1 of 6

Scheduled Hours by Room and Time of Day

Purpose of this Report:
This report allows a user to view how each individual room is scheduled throughout an average week during a specified term on a specified campus. This report shows specifically when a room is used for academic classes by time of day/day of week. The total average hours by time and day are included as well. This report can be used to show when specific rooms are in use (and when they are open) throughout the scheduling week.


ASTRA SCHEDULE

Scheduled Hours for 2148

Average weekly hours for Sections by Room and Time of Day

Campus: MAIN Term: 2148 Dates: 9/2/14 - 12/12/14

	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	Total
BRH 202 Lecture 65 seats															
Sunday	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Monday	1.00	1.00	0.75	0.75	1.00	0.75	0.75	1.00	0.25	0.00	0.00	0.00	0.00	0.00	**7.25**
Tuesday	0.00	1.00	0.75	0.75	1.00	0.75	0.75	1.00	0.75	0.75	1.00	1.00	1.00	0.00	**10.50**
Wednesday	1.00	1.00	0.75	0.75	1.00	0.75	0.75	1.00	0.75	1.00	1.00	0.50	0.00	0.00	**10.25**
Thursday	1.00	1.00	0.75	0.75	1.00	0.75	0.75	1.00	0.75	0.75	0.00	0.00	0.00	0.00	**8.50**
Friday	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**1.00**
Saturday	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Totals	**4.00**	**4.00**	**3.00**	**3.00**	**4.00**	**3.00**	**3.00**	**4.00**	**2.50**	**2.50**	**2.00**	**1.50**	**1.00**	**0.00**	**37.50**
BRH 203 Lecture 31 seats															
Sunday	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Monday	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.00	0.00	0.00	0.00	0.00	**6.25**
Tuesday	0.00	1.00	0.75	0.75	1.00	0.25	0.00	0.00	1.00	0.25	0.00	0.00	0.00	0.00	**5.00**
Wednesday	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.25	0.00	0.00	0.00	0.00	0.00	**4.25**
Thursday	0.00	1.00	0.75	0.75	1.00	0.25	0.00	0.00	1.00	0.25	0.00	0.00	0.00	0.00	**5.00**
Friday	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**1.00**
Saturday	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Totals	**0.00**	**2.00**	**4.50**	**3.50**	**4.00**	**1.50**	**1.00**	**2.00**	**2.50**	**0.50**	**0.00**	**0.00**	**0.00**	**0.00**	**21.50**
BRH 204 Lecture 45 seats															
Sunday	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Monday	1.00	1.00	0.75	0.75	1.00	0.25	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	**9.75**
Tuesday	0.00	1.00	0.75	0.75	1.00	0.75	0.75	1.00	0.75	0.75	1.00	0.25	0.00	0.00	**8.75**
Wednesday	1.00	1.00	0.75	0.75	1.00	0.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	**12.75**
Thursday	0.00	1.00	0.75	0.75	1.00	0.75	0.75	1.00	0.75	0.75	1.00	0.25	0.00	0.00	**8.75**
Friday	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	**3.00**
*urday	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	3.00	**4.00**	**3.00**	**3.00**	**4.00**	**2.00**	**4.50**	**5.00**	**3.50**	**3.50**	**4.00**	**1.50**	**1.00**	**1.00**	**43.00**

*AndTimeOfDay.rpt Page 26 of 148

Common Use Scenario:
This report can be used to help enforce an academic scheduling policy emphasizing the spreading of classes throughout the entire scheduling week as well as outlining usage guidelines for minimum room hour usage.

Supports Strategy 1 – Spread class offering out over the entire scheduling week.

Space Utilization by Room Type and Size with Seat Fill

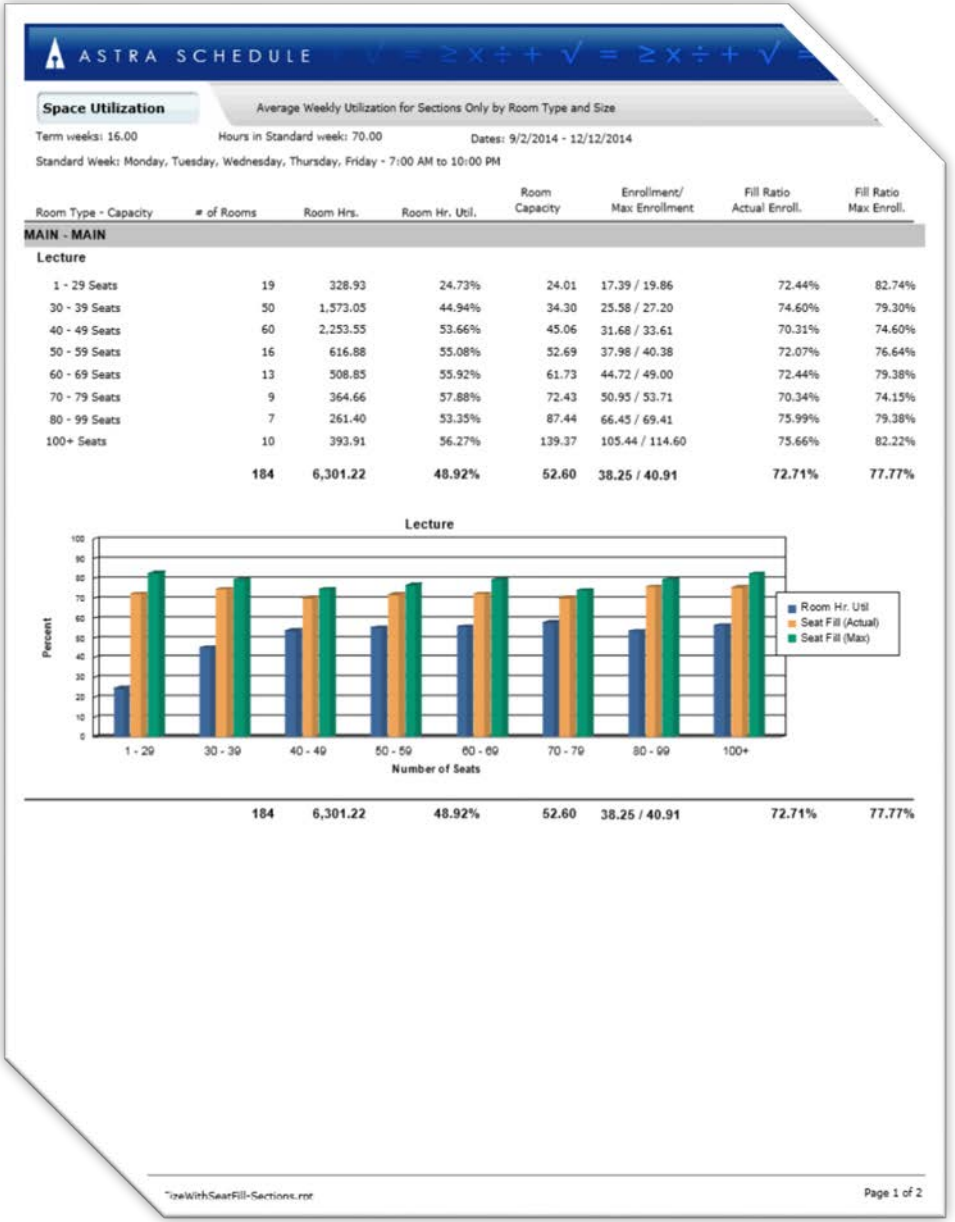
Purpose of this Report:

This report shows average weekly room hours from academic sections by room type (with rooms grouped by seating capacity groups) highlighting room hour utilization and station fill (students in seats). Space utilization calculations are based on the user specified number of hours in a standard scheduling week. Additional fields show a station fill calculation on either max enrollment or actual enrollment of a section. Hours used by double books and crosslists are counted only once. Enrollments and max enrollments for double books and crosslists are added together.

Common Use Scenario:

This report can be used to measure how efficiently different types and sizes of rooms are scheduled both in terms of hours per week, and the seat fill of those rooms when scheduled. It can be used to help enforce an academic scheduling policy outlining usage guidelines for minimum room hour usage as well as seat fill requirements. Note – This report only includes academic section data.

Supports Strategy 2 – Reduce unused seats by scheduling classes into appropriately sized rooms.



ASTRA SCHEDULE

Space Utilization — Average Weekly Utilization for Sections Only by Room Type and Size

Term weeks: 16.00 Hours in Standard week: 70.00 Dates: 9/2/2014 - 12/12/2014

Standard Week: Monday, Tuesday, Wednesday, Thursday, Friday - 7:00 AM to 10:00 PM

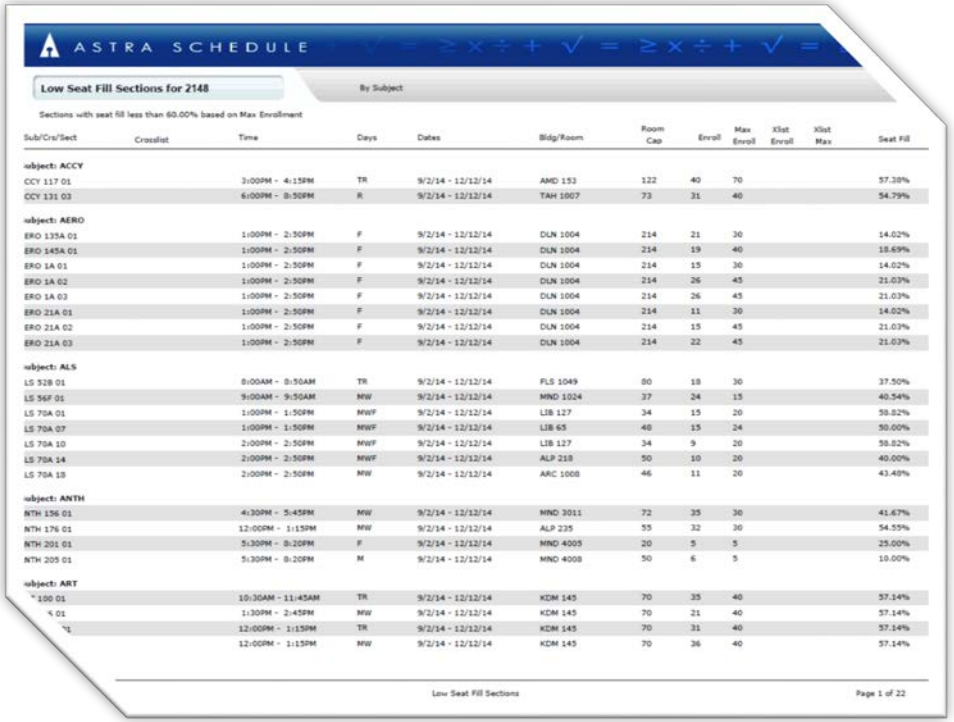
Room Type - Capacity	# of Rooms	Room Hrs.	Room Hr. Util.	Room Capacity	Enrollment/ Max Enrollment	Fill Ratio Actual Enroll.	Fill Ratio Max Enroll.
MAIN - MAIN							
Lecture							
1 - 29 Seats	19	328.93	24.73%	24.01	17.39 / 19.86	72.44%	82.74%
30 - 39 Seats	50	1,573.05	44.94%	34.30	25.58 / 27.20	74.60%	79.30%
40 - 49 Seats	60	2,253.55	53.66%	45.06	31.68 / 33.61	70.31%	74.60%
50 - 59 Seats	16	616.88	55.08%	52.69	37.98 / 40.38	72.07%	76.64%
60 - 69 Seats	13	508.85	55.92%	61.73	44.72 / 49.00	72.44%	79.38%
70 - 79 Seats	9	364.66	57.88%	72.43	50.95 / 53.71	70.34%	74.15%
80 - 99 Seats	7	261.40	53.35%	87.44	66.45 / 69.41	75.99%	79.38%
100+ Seats	10	393.91	56.27%	139.37	105.44 / 114.60	75.66%	82.22%
	184	**6,301.22**	**48.92%**	**52.60**	**38.25 / 40.91**	**72.71%**	**77.77%**

	184	**6,301.22**	**48.92%**	**52.60**	**38.25 / 40.91**	**72.71%**	**77.77%**

Low Seat Fill Sections by Subject

Purpose of this Report:

This report allows a user to view all sections for a selected term that do not meet a minimum seat fill requirement. A user defined parameter allows the seat fill calculation to be based on either the actual enrollment or max enrollment of the section. Additional parameters allow a user to only include sections of a specific subject that are scheduled into specific room types. Crosslisted classes will use the Crosslist Enrollment and Crosslist Max Enrollment fields to calculate seat fill.


ASTRA SCHEDULE

Low Seat Fill Sections for 2148 — By Subject

Sections with seat fill less than 60.00% based on Max Enrollment

Sub/Crs/Sect	Crosslist	Time	Days	Dates	Bldg/Room	Room Cap	Enroll	Max Enroll	Xlist Enroll	Xlist Max	Seat Fill
ubject: ACCY											
CCY 117 01		3:00PM - 4:15PM	TR	9/2/14 - 12/12/14	AMD 153	122	40	70			57.38%
CCY 131 03		6:00PM - 8:50PM	R	9/2/14 - 12/12/14	TAH 1007	73	31	40			54.79%
ubject: AERO											
ERO 135A 01		1:00PM - 2:50PM	F	9/2/14 - 12/12/14	DLN 1004	214	21	30			14.02%
ERO 145A 01		1:00PM - 2:50PM	F	9/2/14 - 12/12/14	DLN 1004	214	19	40			18.69%
ERO 1A 01		1:00PM - 2:50PM	F	9/2/14 - 12/12/14	DLN 1004	214	15	30			14.02%
ERO 1A 02		1:00PM - 2:50PM	F	9/2/14 - 12/12/14	DLN 1004	214	26	45			21.03%
ERO 1A 03		1:00PM - 2:50PM	F	9/2/14 - 12/12/14	DLN 1004	214	26	45			21.03%
ERO 21A 01		1:00PM - 2:50PM	F	9/2/14 - 12/12/14	DLN 1004	214	11	30			14.02%
ERO 21A 02		1:00PM - 2:50PM	F	9/2/14 - 12/12/14	DLN 1004	214	15	45			21.03%
ERO 21A 03		1:00PM - 2:50PM	F	9/2/14 - 12/12/14	DLN 1004	214	22	45			21.03%
ubject: ALS											
LS 52B 01		8:00AM - 8:50AM	TR	9/2/14 - 12/12/14	FLS 1049	80	18	30			37.50%
LS 56F 01		9:00AM - 9:50AM	MW	9/2/14 - 12/12/14	MND 1024	37	24	15			40.54%
LS 70A 01		1:00PM - 1:50PM	MWF	9/2/14 - 12/12/14	LIB 127	34	15	20			58.82%
LS 70A 07		1:00PM - 1:50PM	MWF	9/2/14 - 12/12/14	LIB 65	40	15	24			50.00%
LS 70A 10		2:00PM - 2:50PM	MWF	9/2/14 - 12/12/14	LIB 127	34	9	20			58.82%
LS 70A 14		2:00PM - 2:50PM	MWF	9/2/14 - 12/12/14	ALP 218	50	10	20			40.00%
LS 70A 18		2:00PM - 2:50PM	MW	9/2/14 - 12/12/14	ARC 1008	46	11	20			43.48%
ubject: ANTH											
NTH 156 01		4:30PM - 5:45PM	MW	9/2/14 - 12/12/14	MND 3011	72	35	30			41.67%
NTH 176 01		12:00PM - 1:15PM	MW	9/2/14 - 12/12/14	ALP 235	55	32	30			54.55%
NTH 201 01		5:30PM - 8:20PM	F	9/2/14 - 12/12/14	MND 4005	20	5	5			25.00%
NTH 205 01		5:30PM - 8:20PM	M	9/2/14 - 12/12/14	MND 4008	50	6	5			10.00%
ubject: ART											
100 01		10:30AM - 11:45AM	TR	9/2/14 - 12/12/14	KDM 145	70	35	40			57.14%
01		1:30PM - 2:45PM	MW	9/2/14 - 12/12/14	KDM 145	70	21	40			57.14%
		12:00PM - 1:15PM	TR	9/2/14 - 12/12/14	KDM 145	70	31	40			57.14%
		12:00PM - 1:15PM	MW	9/2/14 - 12/12/14	KDM 145	70	26	40			57.14%

Low Seat Fill Sections — Page 1 of 22

Common Use Scenario:

This report can be used to identify individual sections that do not meet a minimum seat fill metric. If certain room type/size categories are bottlenecked, ensuring that the classes that are using those rooms are filling the seats is important. This report will help identify the sections that aren't filling rooms sufficiently, and could potentially be moved to smaller rooms.

Supports Strategy 2 – Reduce unused seats by scheduling classes into appropriately sized rooms.

Space Utilization by Building and Room with Primetime

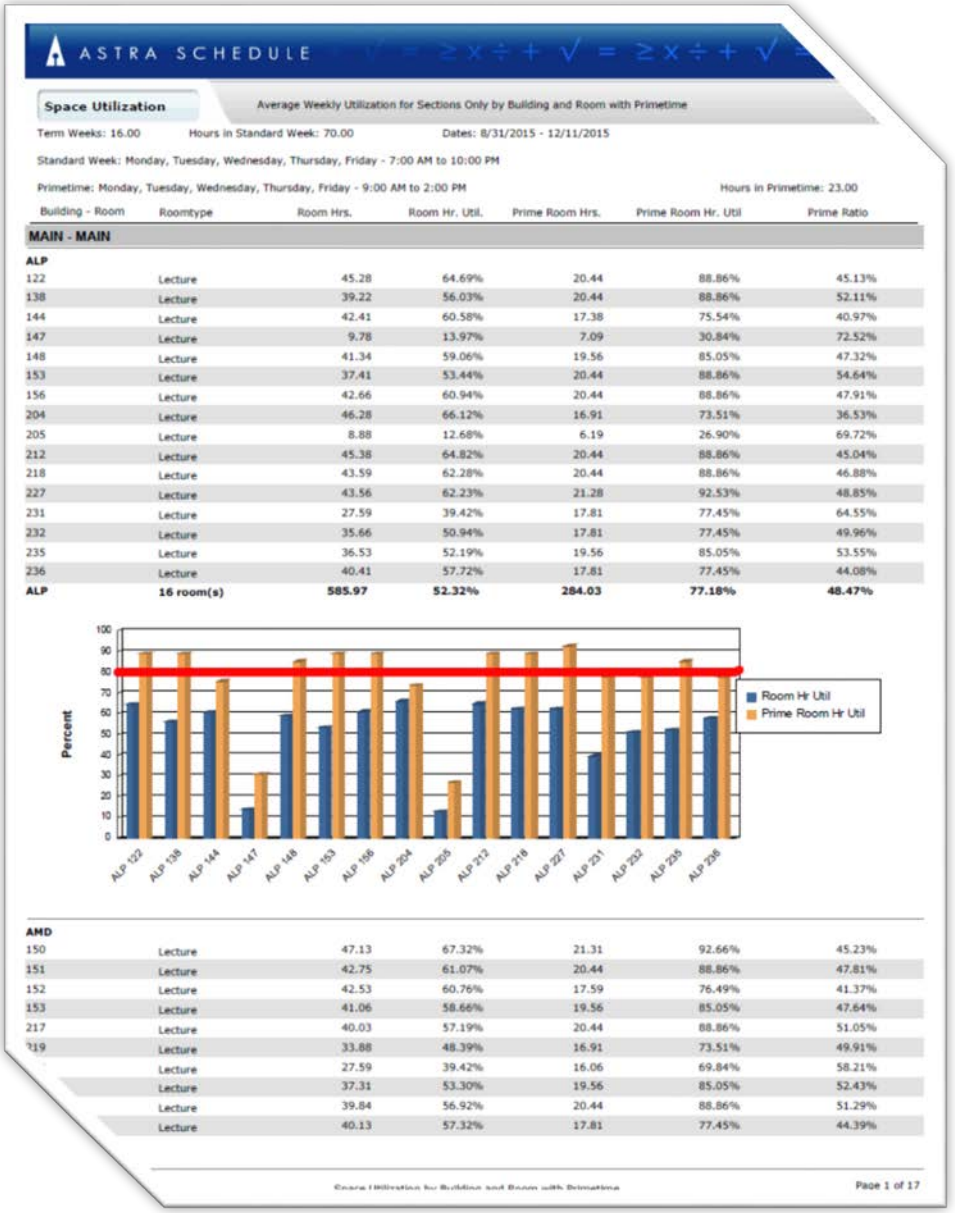
Purpose of this Report:

This report shows average weekly room hours of academic sections by building and room, highlighting room hour utilization during the standard week and primetime. Space utilization calculations are based on the user specified number of hours in a standard scheduling week. Additional parameters allow a user to specify a "prime time" subset of hours where classes are often compacted (for example, M - R, p.m.10:00a to 2:00p). Hours used by double books and crosslists are counted only once. Enrollments and max enrollments for double books and crosslists are added together. The 80% utilization line (bottleneck indicator) is highlighted in red on each graph.

Common Use Scenario:

This report can be used to compare overall space utilization to utilization during primetime for specific rooms. It can be used to measure how efficiently different buildings and rooms are scheduled in terms of hours per week and how evenly class offerings are spread throughout the entire week as opposed to being compacted during primetime. Note – This report only includes academic section data.

Supports Strategy 1 & 2 - Spread class offering out over the entire scheduling week; reduce unused seats by scheduling classes into appropriately sized rooms.



ASTRA SCHEDULE

Space Utilization — Average Weekly Utilization for Sections Only by Building and Room with Primetime

Term Weeks: 16.00 Hours in Standard Week: 70.00 Dates: 8/31/2015 - 12/11/2015

Standard Week: Monday, Tuesday, Wednesday, Thursday, Friday - 7:00 AM to 10:00 PM

Primetime: Monday, Tuesday, Wednesday, Thursday, Friday - 9:00 AM to 2:00 PM Hours in Primetime: 23.00

Building - Room	Roomtype	Room Hrs.	Room Hr. Util.	Prime Room Hrs.	Prime Room Hr. Util	Prime Ratio
MAIN - MAIN						
ALP						
122	Lecture	45.28	64.69%	20.44	88.86%	45.13%
138	Lecture	39.22	56.03%	20.44	88.86%	52.11%
144	Lecture	42.41	60.58%	17.38	75.54%	40.97%
147	Lecture	9.78	13.97%	7.09	30.84%	72.52%
148	Lecture	41.34	59.06%	19.56	85.05%	47.32%
153	Lecture	37.41	53.44%	20.44	88.86%	54.64%
156	Lecture	42.66	60.94%	20.44	88.86%	47.91%
204	Lecture	46.28	66.12%	16.91	73.51%	36.53%
205	Lecture	8.88	12.68%	6.19	26.90%	69.72%
212	Lecture	45.38	64.82%	20.44	88.86%	45.04%
218	Lecture	43.59	62.28%	20.44	88.86%	46.88%
227	Lecture	43.56	62.23%	21.28	92.53%	48.85%
231	Lecture	27.59	39.42%	17.81	77.45%	64.55%
232	Lecture	35.66	50.94%	17.81	77.45%	49.96%
235	Lecture	36.53	52.19%	19.56	85.05%	53.55%
236	Lecture	40.41	57.72%	17.81	77.45%	44.08%
ALP	**16 room(s)**	**585.97**	**52.32%**	**284.03**	**77.18%**	**48.47%**

AMD						
150	Lecture	47.13	67.32%	21.31	92.66%	45.23%
151	Lecture	42.75	61.07%	20.44	88.86%	47.81%
152	Lecture	42.53	60.76%	17.59	76.49%	41.37%
153	Lecture	41.06	58.66%	19.56	85.05%	47.64%
217	Lecture	40.03	57.19%	20.44	88.86%	51.05%
219	Lecture	33.88	48.39%	16.91	73.51%	49.91%
	Lecture	27.59	39.42%	16.06	69.84%	58.21%
	Lecture	37.31	53.30%	19.56	85.05%	52.43%
	Lecture	39.84	56.92%	20.44	88.86%	51.29%
	Lecture	40.13	57.32%	17.81	77.45%	44.39%

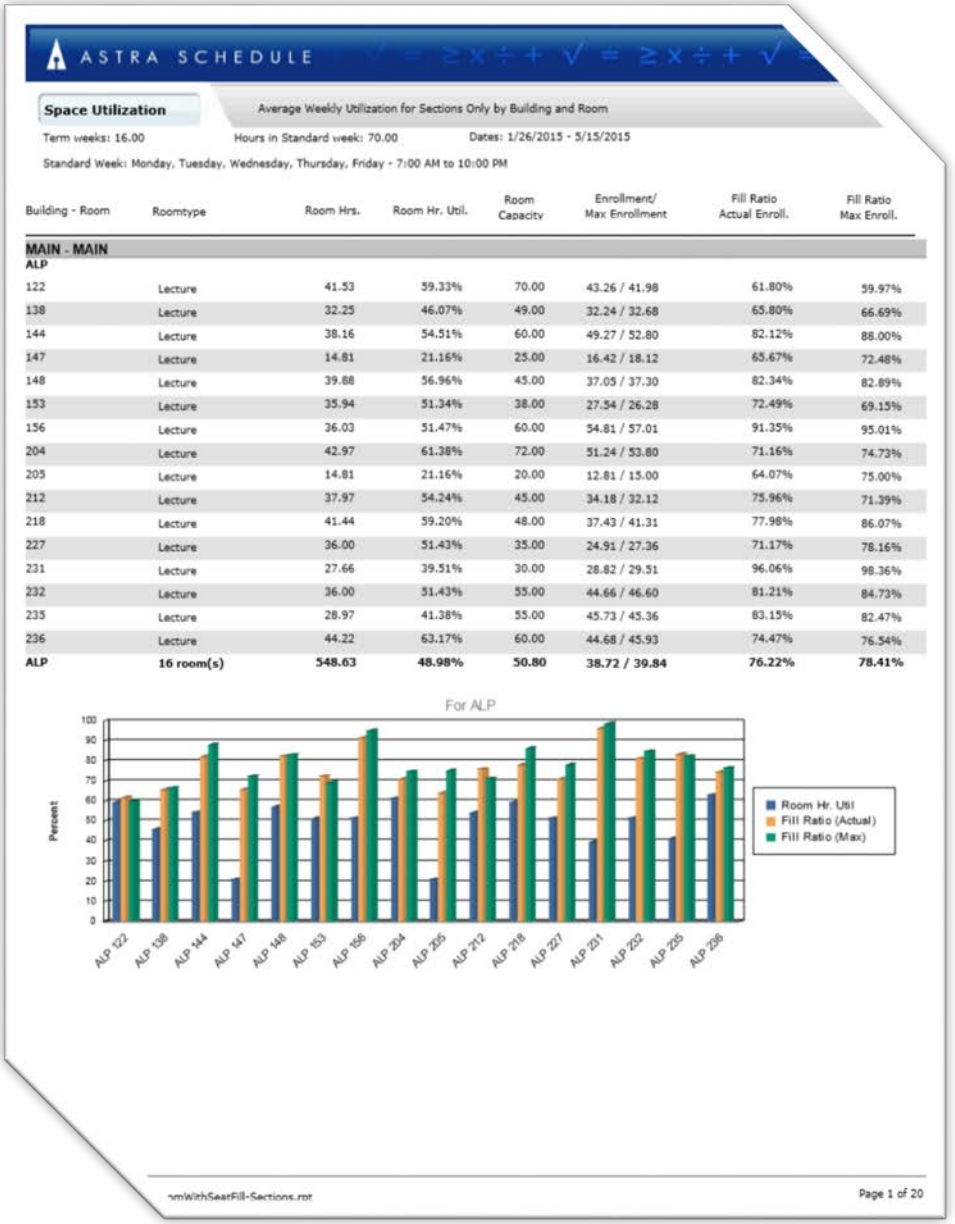
Page 1 of 17

Space Utilization by Building and Room with Seat Fill

Purpose of this Report:
This report shows average weekly room hours of academic sections by building, highlighting room hour utilization and seat fill (students in seats). Space utilization calculations are based on the user specified number of hours in a standard scheduling week. Additional fields show station fill calculation on both max enrollment and actual enrollment of a section. Hours used by double books and crosslists are counted only once. Enrollments and max enrollments for double books and crosslists are added together.

Common Use Scenario:
This report can be used to help enforce an academic scheduling policy outlining usage guidelines for minimum room hour usage as well as seat fill requirements. Note – This report only includes academic section data.

Supports Strategy 1 & 2 – Spread class offering out over the entire scheduling week; reduce unused seats by scheduling classes into appropriately sized rooms.



ASTRA SCHEDULE

Space Utilization — Average Weekly Utilization for Sections Only by Building and Room

Term weeks: 16.00 Hours in Standard week: 70.00 Dates: 1/26/2015 - 5/15/2015

Standard Week: Monday, Tuesday, Wednesday, Thursday, Friday - 7:00 AM to 10:00 PM

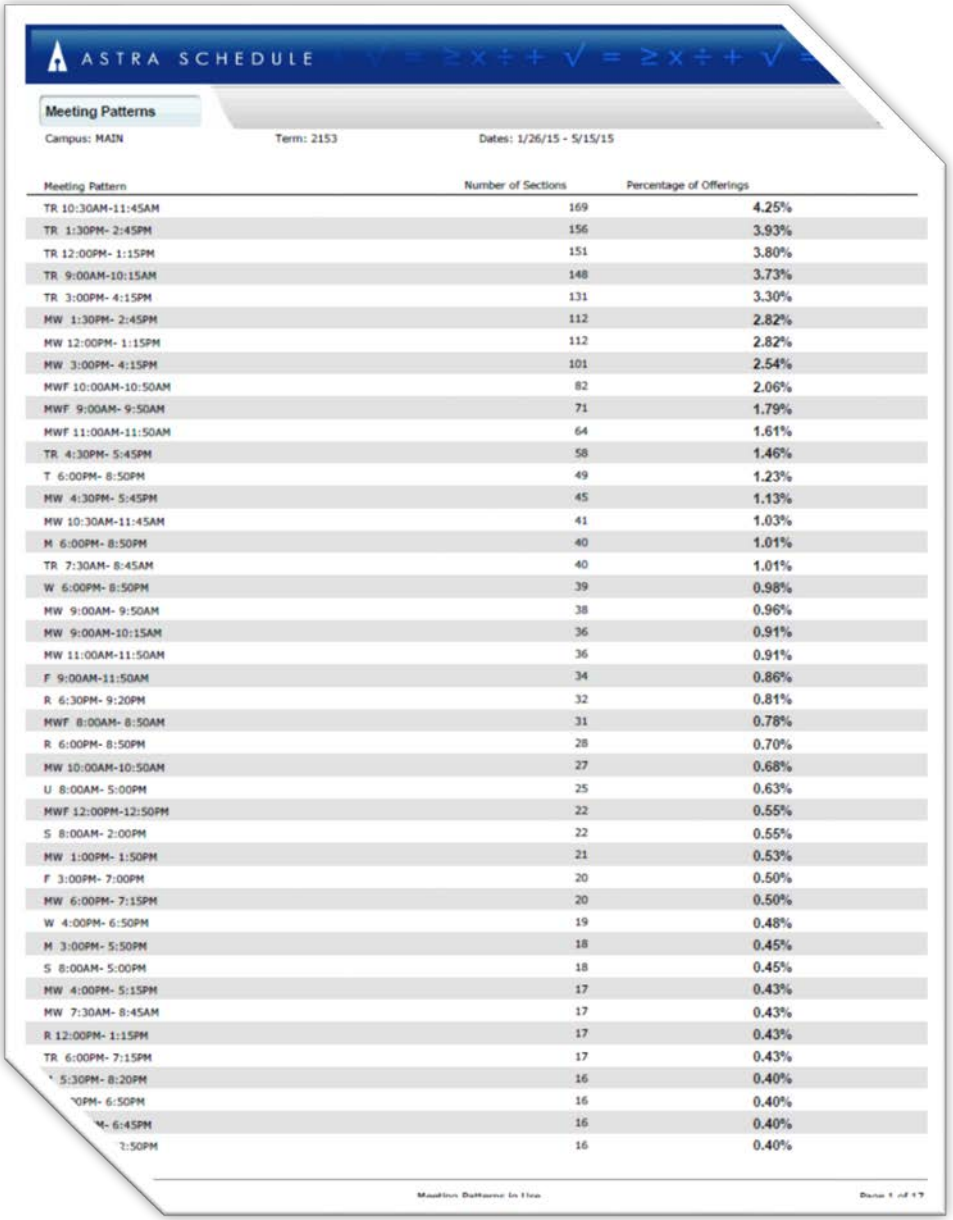
Building - Room	Roomtype	Room Hrs.	Room Hr. Util.	Room Capacity	Enrollment/ Max Enrollment	Fill Ratio Actual Enroll.	Fill Ratio Max Enroll.
MAIN - MAIN							
ALP							
122	Lecture	41.53	59.33%	70.00	43.26 / 41.98	61.80%	59.97%
138	Lecture	32.25	46.07%	49.00	32.24 / 32.68	65.80%	66.69%
144	Lecture	38.16	54.51%	60.00	49.27 / 52.80	82.12%	88.00%
147	Lecture	14.81	21.16%	25.00	16.42 / 18.12	65.67%	72.48%
148	Lecture	39.88	56.96%	45.00	37.05 / 37.30	82.34%	82.89%
153	Lecture	35.94	51.34%	38.00	27.54 / 26.28	72.49%	69.15%
156	Lecture	36.03	51.47%	60.00	54.81 / 57.01	91.35%	95.01%
204	Lecture	42.97	61.38%	72.00	51.24 / 53.80	71.16%	74.73%
205	Lecture	14.81	21.16%	20.00	12.81 / 15.00	64.07%	75.00%
212	Lecture	37.97	54.24%	45.00	34.18 / 32.12	75.96%	71.39%
218	Lecture	41.44	59.20%	48.00	37.43 / 41.31	77.98%	86.07%
227	Lecture	36.00	51.43%	35.00	24.91 / 27.36	71.17%	78.16%
231	Lecture	27.66	39.51%	30.00	28.82 / 29.51	96.06%	98.36%
232	Lecture	36.00	51.43%	55.00	44.66 / 46.60	81.21%	84.73%
235	Lecture	28.97	41.38%	55.00	45.73 / 45.36	83.15%	82.47%
236	Lecture	44.22	63.17%	60.00	44.68 / 45.93	74.47%	76.54%
ALP	**16 room(s)**	**548.63**	**48.98%**	**50.80**	**38.72 / 39.84**	**76.22%**	**78.41%**

Meeting Patterns in Use

Purpose of this Report:
This report shows meeting patterns in use of scheduled classes for a selected campus and term. The report is sorted in order of most used meeting patterns to the least used.

Common Use Scenario:
This report can be used to identify sections meeting in approved standard meeting patterns as well as find sections offered in non-standard patterns. It can be used to help enforce an academic scheduling policy that requires adherence to standard meeting patterns.

Supports Strategy 3 – Minimize class offerings that use non-standard meeting patterns.



ASTRA SCHEDULE

Meeting Patterns

Campus: MAIN Term: 2153 Dates: 1/26/15 - 5/15/15

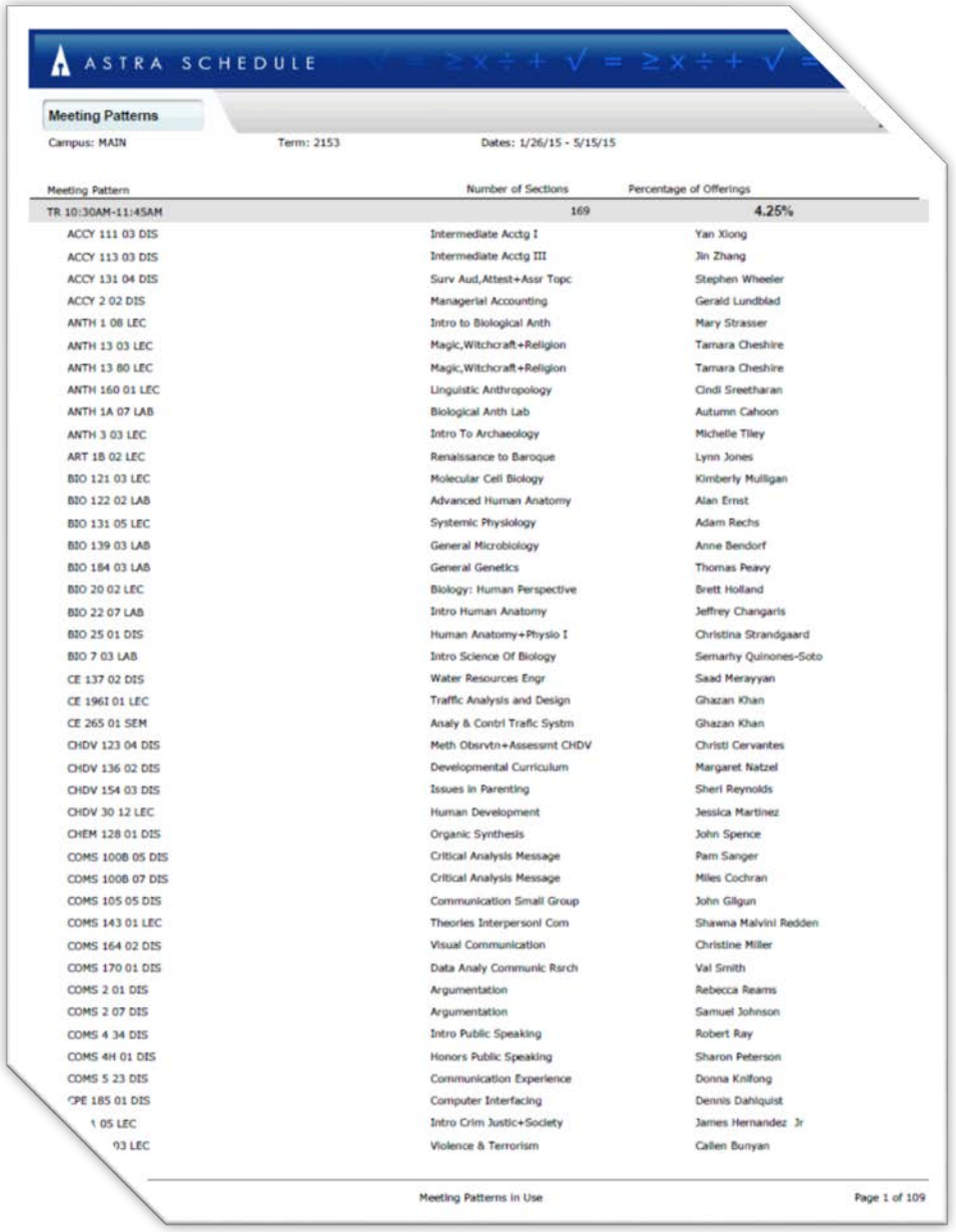
Meeting Pattern	Number of Sections	Percentage of Offerings
TR 10:30AM-11:45AM	169	4.25%
TR 1:30PM- 2:45PM	156	3.93%
TR 12:00PM- 1:15PM	151	3.80%
TR 9:00AM-10:15AM	148	3.73%
TR 3:00PM- 4:15PM	131	3.30%
MW 1:30PM- 2:45PM	112	2.82%
MW 12:00PM- 1:15PM	112	2.82%
MW 3:00PM- 4:15PM	101	2.54%
MWF 10:00AM-10:50AM	82	2.06%
MWF 9:00AM- 9:50AM	71	1.79%
MWF 11:00AM-11:50AM	64	1.61%
TR 4:30PM- 5:45PM	58	1.46%
T 6:00PM- 8:50PM	49	1.23%
MW 4:30PM- 5:45PM	45	1.13%
MW 10:30AM-11:45AM	41	1.03%
M 6:00PM- 8:50PM	40	1.01%
TR 7:30AM- 8:45AM	40	1.01%
W 6:00PM- 8:50PM	39	0.98%
MW 9:00AM- 9:50AM	38	0.96%
MW 9:00AM-10:15AM	36	0.91%
MW 11:00AM-11:50AM	36	0.91%
F 9:00AM-11:50AM	34	0.86%
R 6:30PM- 9:20PM	32	0.81%
MWF 8:00AM- 8:50AM	31	0.78%
R 6:00PM- 8:50PM	28	0.70%
MW 10:00AM-10:50AM	27	0.68%
U 8:00AM- 5:00PM	25	0.63%
MWF 12:00PM-12:50PM	22	0.55%
S 8:00AM- 2:00PM	22	0.55%
MW 1:00PM- 1:50PM	21	0.53%
F 3:00PM- 7:00PM	20	0.50%
MW 6:00PM- 7:15PM	20	0.50%
W 4:00PM- 6:50PM	19	0.48%
M 3:00PM- 5:50PM	18	0.45%
S 8:00AM- 5:00PM	18	0.45%
MW 4:00PM- 5:15PM	17	0.43%
MW 7:30AM- 8:45AM	17	0.43%
R 12:00PM- 1:15PM	17	0.43%
TR 6:00PM- 7:15PM	17	0.43%
5:30PM- 8:20PM	16	0.40%
0PM- 6:50PM	16	0.40%
M- 6:45PM	16	0.40%
:50PM	16	0.40%

Meeting Patterns in Use With Subjects

Purpose of this Report:
This report shows meeting patterns in use of scheduled classes for a selected campus and term. The report is sorted in order of most used meeting patterns to the least used.

Common Use Scenario:
This report can then be used to identify sections meeting in approved standard meeting patterns as well as find sections offered in non-standard patterns. It can be used to help enforce an academic scheduling policy that requires adherence to standard meeting patterns.

Supports Strategy 3 – Minimize class offerings that use non-standard meeting patterns.



ASTRA SCHEDULE

Meeting Patterns

Campus: MAIN Term: 2153 Dates: 1/26/15 - 5/15/15

Meeting Pattern	Number of Sections	Percentage of Offerings
TR 10:30AM-11:45AM	169	4.25%
ACCY 111 03 DIS	Intermediate Acctg I	Yan Xiong
ACCY 113 03 DIS	Intermediate Acctg III	Jin Zhang
ACCY 131 04 DIS	Surv Aud,Attest+Assr Topc	Stephen Wheeler
ACCY 2 02 DIS	Managerial Accounting	Gerald Lundblad
ANTH 1 08 LEC	Intro to Biological Anth	Mary Strasser
ANTH 13 03 LEC	Magic,Witchcraft+Religion	Tamara Cheshire
ANTH 13 80 LEC	Magic,Witchcraft+Religion	Tamara Cheshire
ANTH 160 01 LEC	Linguistic Anthropology	Cindi Sreetharan
ANTH 1A 07 LAB	Biological Anth Lab	Autumn Cahoon
ANTH 3 03 LEC	Intro To Archaeology	Michelle Tiley
ART 1B 02 LEC	Renaissance to Baroque	Lynn Jones
BIO 121 03 LEC	Molecular Cell Biology	Kimberly Mulligan
BIO 122 02 LAB	Advanced Human Anatomy	Alan Ernst
BIO 131 05 LEC	Systemic Physiology	Adam Rechs
BIO 139 03 LAB	General Microbiology	Anne Bendorf
BIO 184 03 LAB	General Genetics	Thomas Peavy
BIO 20 02 LEC	Biology: Human Perspective	Brett Holland
BIO 22 07 LAB	Intro Human Anatomy	Jeffrey Changaris
BIO 25 01 DIS	Human Anatomy+Physio I	Christina Strandgaard
BIO 7 03 LAB	Intro Science Of Biology	Semarhy Quinones-Soto
CE 137 02 DIS	Water Resources Engr	Saad Merayyan
CE 196I 01 LEC	Traffic Analysis and Design	Ghazan Khan
CE 265 01 SEM	Analy & Contrl Trafic Systm	Ghazan Khan
CHDV 123 04 DIS	Meth Obsrvtn+Assessmt CHDV	Christi Cervantes
CHDV 136 02 DIS	Developmental Curriculum	Margaret Natzel
CHDV 154 03 DIS	Issues in Parenting	Sheri Reynolds
CHDV 30 12 LEC	Human Development	Jessica Martinez
CHEM 128 01 DIS	Organic Synthesis	John Spence
COMS 100B 05 DIS	Critical Analysis Message	Pam Sanger
COMS 100B 07 DIS	Critical Analysis Message	Miles Cochran
COMS 105 05 DIS	Communication Small Group	John Gilgun
COMS 143 01 LEC	Theories Interpersonl Com	Shawna Malvini Redden
COMS 164 02 DIS	Visual Communication	Christine Miller
COMS 170 01 DIS	Data Analy Communic Rsrch	Val Smith
COMS 2 01 DIS	Argumentation	Rebecca Reams
COMS 2 07 DIS	Argumentation	Samuel Johnson
COMS 4 34 DIS	Intro Public Speaking	Robert Ray
COMS 4H 01 DIS	Honors Public Speaking	Sharon Peterson
COMS 5 23 DIS	Communication Experience	Donna Knifong
CPE 185 01 DIS	Computer Interfacing	Dennis Dahlquist
05 LEC	Intro Crim Justic+Society	James Hernandez Jr
03 LEC	Violence & Terrorism	Callen Bunyan

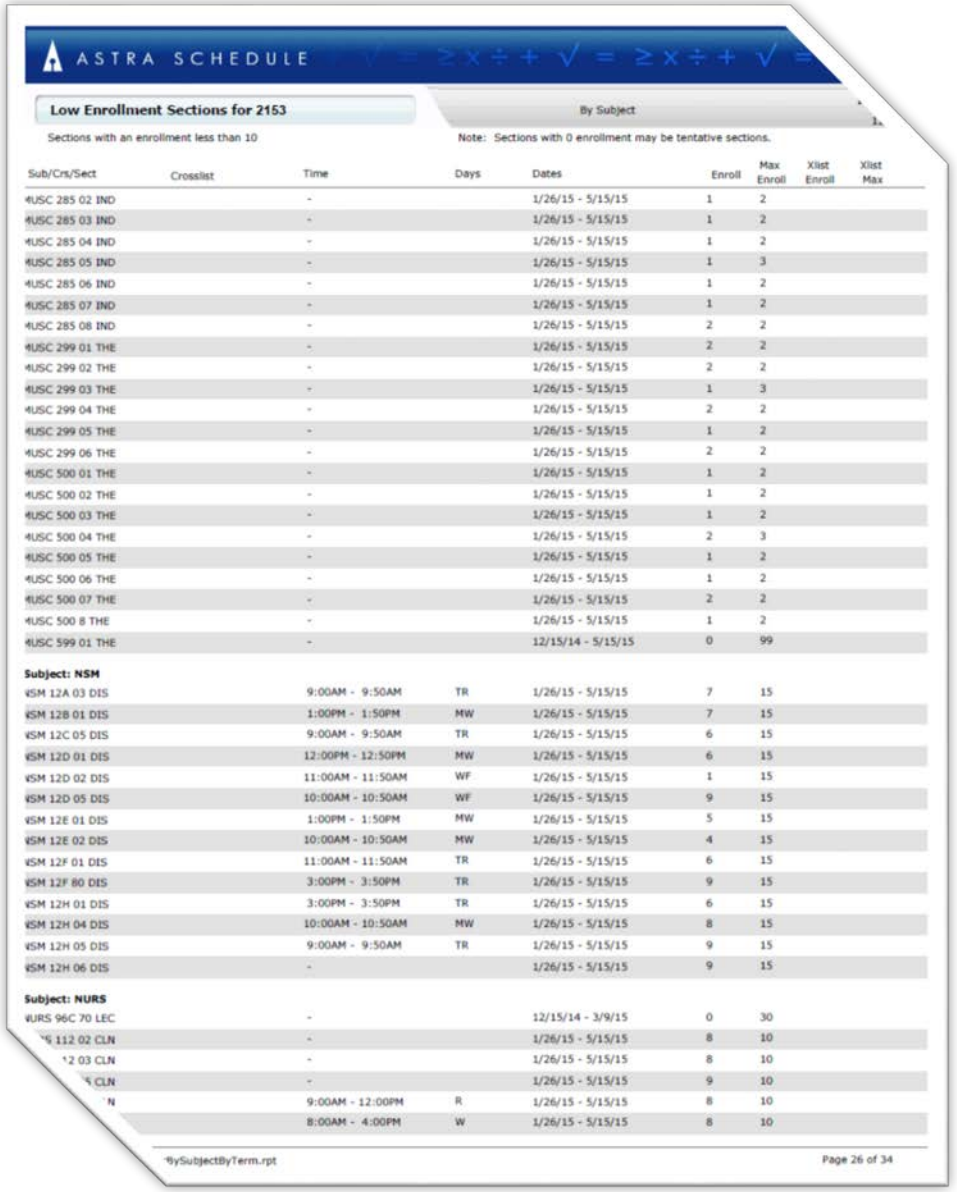
Meeting Patterns in Use Page 1 of 109

Low Enrollment Sections by Subject

Purpose of this Report:
This report allows a user to view all sections for a selected term that do not meet a minimum enrollment requirement.

Common Use Scenario:
This report will provide information to show which sections may not be cost effective to offer due to low enrollment.

Supports Strategy 4 - Identify sections that could potentially be removed from the schedule.



ASTRA SCHEDULE

Low Enrollment Sections for 2153 — By Subject

Sections with an enrollment less than 10

Note: Sections with 0 enrollment may be tentative sections.

Sub/Crs/Sect	Crosslist	Time	Days	Dates	Enroll	Max Enroll	Xlist Enroll	Xlist Max
USC 285 02 IND		-		1/26/15 - 5/15/15	1	2		
USC 285 03 IND		-		1/26/15 - 5/15/15	1	2		
USC 285 04 IND		-		1/26/15 - 5/15/15	1	2		
USC 285 05 IND		-		1/26/15 - 5/15/15	1	3		
USC 285 06 IND		-		1/26/15 - 5/15/15	1	2		
USC 285 07 IND		-		1/26/15 - 5/15/15	1	2		
USC 285 08 IND		-		1/26/15 - 5/15/15	2	2		
USC 299 01 THE		-		1/26/15 - 5/15/15	2	2		
USC 299 02 THE		-		1/26/15 - 5/15/15	2	2		
USC 299 03 THE		-		1/26/15 - 5/15/15	1	3		
USC 299 04 THE		-		1/26/15 - 5/15/15	2	2		
USC 299 05 THE		-		1/26/15 - 5/15/15	1	2		
USC 299 06 THE		-		1/26/15 - 5/15/15	2	2		
USC 500 01 THE		-		1/26/15 - 5/15/15	1	2		
USC 500 02 THE		-		1/26/15 - 5/15/15	1	2		
USC 500 03 THE		-		1/26/15 - 5/15/15	1	2		
USC 500 04 THE		-		1/26/15 - 5/15/15	2	3		
USC 500 05 THE		-		1/26/15 - 5/15/15	1	2		
USC 500 06 THE		-		1/26/15 - 5/15/15	1	2		
USC 500 07 THE		-		1/26/15 - 5/15/15	2	2		
USC 500 8 THE		-		1/26/15 - 5/15/15	1	2		
USC 599 01 THE		-		12/15/14 - 5/15/15	0	99		
Subject: NSM								
SM 12A 03 DIS		9:00AM - 9:50AM	TR	1/26/15 - 5/15/15	7	15		
SM 12B 01 DIS		1:00PM - 1:50PM	MW	1/26/15 - 5/15/15	7	15		
SM 12C 05 DIS		9:00AM - 9:50AM	TR	1/26/15 - 5/15/15	6	15		
SM 12D 01 DIS		12:00PM - 12:50PM	MW	1/26/15 - 5/15/15	6	15		
SM 12D 02 DIS		11:00AM - 11:50AM	WF	1/26/15 - 5/15/15	1	15		
SM 12D 05 DIS		10:00AM - 10:50AM	WF	1/26/15 - 5/15/15	9	15		
SM 12E 01 DIS		1:00PM - 1:50PM	MW	1/26/15 - 5/15/15	5	15		
SM 12E 02 DIS		10:00AM - 10:50AM	MW	1/26/15 - 5/15/15	4	15		
SM 12F 01 DIS		11:00AM - 11:50AM	TR	1/26/15 - 5/15/15	6	15		
SM 12F 80 DIS		3:00PM - 3:50PM	TR	1/26/15 - 5/15/15	9	15		
SM 12H 01 DIS		3:00PM - 3:50PM	TR	1/26/15 - 5/15/15	6	15		
SM 12H 04 DIS		10:00AM - 10:50AM	MW	1/26/15 - 5/15/15	8	15		
SM 12H 05 DIS		9:00AM - 9:50AM	TR	1/26/15 - 5/15/15	9	15		
SM 12H 06 DIS		-		1/26/15 - 5/15/15	9	15		
Subject: NURS								
URS 96C 70 LEC		-		12/15/14 - 3/9/15	0	30		
S 112 02 CLN		-		1/26/15 - 5/15/15	8	10		
2 03 CLN		-		1/26/15 - 5/15/15	8	10		
S CLN		-		1/26/15 - 5/15/15	9	10		
N		9:00AM - 12:00PM	R	1/26/15 - 5/15/15	8	10		
		8:00AM - 4:00PM	W	1/26/15 - 5/15/15	8	10		

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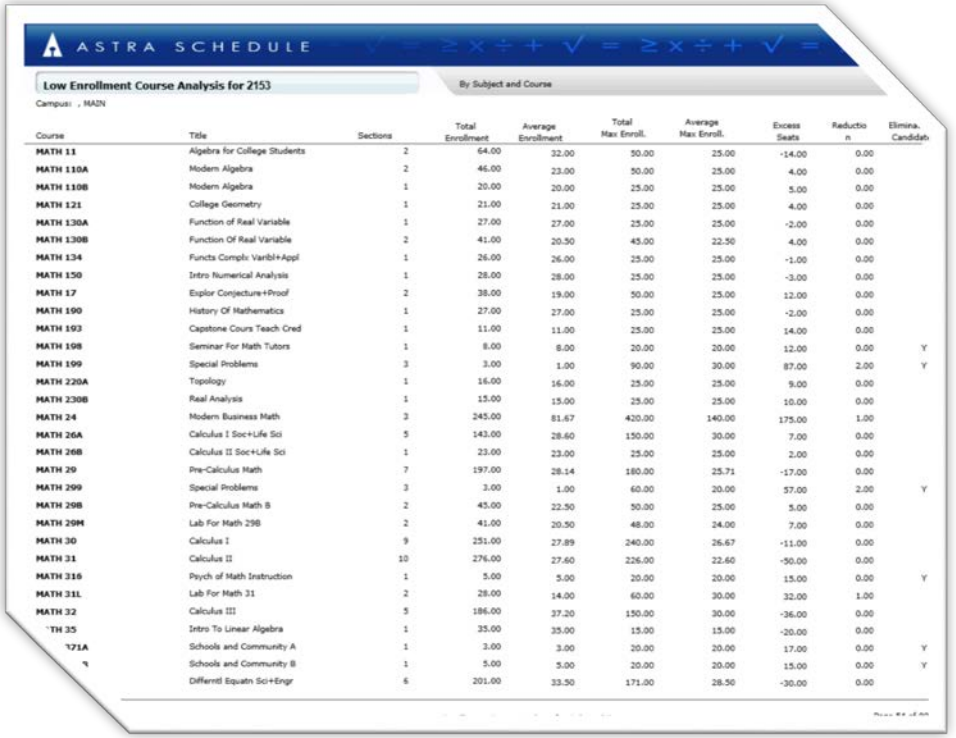
Low Enrollment Course Analysis

Purpose of this Report:
This report looks at the total and average enrollments and max enrollments for all sections of any given course for a selected term. Those numbers are then analyzed to calculate how many excess seats of that course are offered, how many sections of that course could potentially be eliminated (Reduction Candidates) and whether the entire course could potentially be eliminated (Elimination Candidate).


ASTRA SCHEDULE

Low Enrollment Course Analysis for 2153

By Subject and Course

Campus: , MAIN

Course	Title	Sections	Total Enrollment	Average Enrollment	Total Max Enroll.	Average Max Enroll.	Excess Seats	Reductio n	Elimina. Candidat
MATH 11	Algebra for College Students	2	64.00	32.00	50.00	25.00	-14.00	0.00	
MATH 110A	Modern Algebra	2	46.00	23.00	50.00	25.00	4.00	0.00	
MATH 110B	Modern Algebra	1	20.00	20.00	25.00	25.00	5.00	0.00	
MATH 121	College Geometry	1	21.00	21.00	25.00	25.00	4.00	0.00	
MATH 130A	Function of Real Variable	1	27.00	27.00	25.00	25.00	-2.00	0.00	
MATH 130B	Function Of Real Variable	2	41.00	20.50	45.00	22.50	4.00	0.00	
MATH 134	Functs Complx Varibl+Appl	1	26.00	26.00	25.00	25.00	-1.00	0.00	
MATH 150	Intro Numerical Analysis	1	28.00	28.00	25.00	25.00	-3.00	0.00	
MATH 17	Explor Conjecture+Proof	2	38.00	19.00	50.00	25.00	12.00	0.00	
MATH 190	History Of Mathematics	1	27.00	27.00	25.00	25.00	-2.00	0.00	
MATH 193	Capstone Cours Teach Cred	1	11.00	11.00	25.00	25.00	14.00	0.00	
MATH 198	Seminar For Math Tutors	1	8.00	8.00	20.00	20.00	12.00	0.00	Y
MATH 199	Special Problems	3	3.00	1.00	90.00	30.00	87.00	2.00	Y
MATH 220A	Topology	1	16.00	16.00	25.00	25.00	9.00	0.00	
MATH 230B	Real Analysis	1	15.00	15.00	25.00	25.00	10.00	0.00	
MATH 24	Modern Business Math	3	245.00	81.67	420.00	140.00	175.00	1.00	
MATH 26A	Calculus I Soc+Life Sci	5	143.00	28.60	150.00	30.00	7.00	0.00	
MATH 26B	Calculus II Soc+Life Sci	1	23.00	23.00	25.00	25.00	2.00	0.00	
MATH 29	Pre-Calculus Math	7	197.00	28.14	180.00	25.71	-17.00	0.00	
MATH 299	Special Problems	3	3.00	1.00	60.00	20.00	57.00	2.00	Y
MATH 29B	Pre-Calculus Math B	2	45.00	22.50	50.00	25.00	5.00	0.00	
MATH 29M	Lab For Math 29B	2	41.00	20.50	48.00	24.00	7.00	0.00	
MATH 30	Calculus I	9	251.00	27.89	240.00	26.67	-11.00	0.00	
MATH 31	Calculus II	10	276.00	27.60	226.00	22.60	-50.00	0.00	
MATH 316	Psych of Math Instruction	1	5.00	5.00	20.00	20.00	15.00	0.00	Y
MATH 31L	Lab For Math 31	2	28.00	14.00	60.00	30.00	32.00	1.00	
MATH 32	Calculus III	5	186.00	37.20	150.00	30.00	-36.00	0.00	
TH 35	Intro To Linear Algebra	1	35.00	35.00	15.00	15.00	-20.00	0.00	
171A	Schools and Community A	1	3.00	3.00	20.00	20.00	17.00	0.00	Y
	Schools and Community B	1	5.00	5.00	20.00	20.00	15.00	0.00	Y
	Differntl Equatn Sci+Engr	6	201.00	33.50	171.00	28.50	-30.00	0.00	

Reduction Candidates are defined as the number of sections of the course that could potentially be eliminated from the schedule. This is calculated by taking the total excess seats of the course, dividing it by the average max enrollment of sections in the course, and rounding down to a whole number (Excess Seats / Average Max Enroll). Elimination Candidates are defined as a course that could be considered for elimination from the schedule. The criteria used is any course with a total enrollment less than 10 and less than 50% enrollment ratio (total enrollment < 10 and ((total enrollment / max enrollment) < .5)).

Common Use Scenario:
This report will provide information to show which courses may be offering unnecessary sections. Eliminating sections offered increases efficiency and lowers costs.

Supports Strategy 4 - Identify sections that could potentially be removed from the schedule.