Comprehensive Scheduling For Student Success

Academic Affairs Retreat

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Workgroup Members

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Workgroup Focus

- Comprehensive scheduling fosters student retention and completion by scheduling at the intersection of demands of curriculum pathways and students' availability.

- Creating a student-friendly schedule that eliminates inefficiencies and increases retention rates is an institutional priority.

Workgroup Tasks

▶ Develop comprehensive program advising and multi-year scheduling

▶ Establish Collegewide schedule protocol

▶ Offer entire degree programs on each campus, in each unit, with non-traditional scheduling (DL, evening, weekend)

▶ Investigate schedule-building software/consulting firm

▶ Reduce Parts of Term (POT)

▶ Standardize year-round terms

▶ Offer guaranteed schedules

Desired Outcomes

▶ Identify and remove conflicts and roadblocks for student progression and completion.

▶ Identify and address unintended consequences of current scheduling practices on students.

▶ Enable students to easily register for courses they need.

▶ Significantly reduce class cancellations.

▶ Align course offerings with program requirements.

Timeline & Priorities

▶ Reduce Number of Class Cancellations (Fall 17)

▶ Reduce Parts of Term (Spring 18)

▶ Standardize Start Times (Spring 18)

▶ Recommend Schedule Building Software (AY 17-18)

▶ Confirm evening, weekend, and DL Programs (AY 17-18)

▶ Establish Collegewide Scheduling Protocol (AY 17-18)

The Numbers: Seat Utilization & Class Cancellations

Seat Utilization Goal – 85% in Fall and Spring

Seat Offerings

▶ Spring '17 - we had 84,910 seats with 70,142 students (82.6%).

▶ Spring '18 we have 84,720 seats.

▶ Summer I '16 – 73.3%

▶ Summer I '17 – 85.7%

Class Cancellations

▶ In Spring 17 we had about 300 classes cancelled impacting 1,500 students.

▶ In Summer 1 we had over 100 classes cancelled impacting over 440 students.

Academic Year Comparison

As of 7/31/17 (including all 9 parts of term)	CRN COUNT*	MAX SEATS	SEATS FILLED	% FILLED	TOTAL BILL HOURS	TOTAL CREDIT HOURS	TOTAL INSTRUCTIONAL ESH
Fall 2014 (201520)	3,954	86,696	70,499	81.30	229,529	224,942	12,933
Spring 2015 (201530)	3,843	82,656	66,642	80.60	216,099	211,773	12,686
Fall 2015 (201620)	4,012	86,192	69,473	80.60	226,575	221,844	13,256
Spring 2016 (201630)	3,816	81,007	63,246	78.10	205,973	201,692	12,636
Fall 2016 (201720)	3,800	80,875	65,667	81.20	214,704	210,163	12,581
Spring 2017 (201730)	3,434	72,663	59,819	82.30	195,729	191,592	11,606

*Active CRN's with enrollment. Excluding all labs and discussions with 0 credit.

Summer Seat Utilization Summer I – 2016 and 2017

	COURSE COUNT*	MAX SEATS	ENROLLMENT	% FILLED	TOTAL BILLED HOURS**	TOTAL CREDIT HOURS**
Summer I 2016 (201640)	467	10,643	7,804	73.3	30,362	29,694
Summer I 2017 (201740)	422	9,434	8,082	85.7	31,520	30,913

*Excluding all labs ,discussions, and STSU courses
**Including all credit courses
As of 5/30/17

Parts of Term
Data from Spring 2017

P.O.T.	Sections	Students	% filled	Disciplines
1 (Full)	3,250	56,552	82%	All
2 (1st half)	99	1,590	80%	
3 (2nd half)	152	2,196	74%	
4 (1st third)	6	75	90%	STSU, ANTH, HLTH, SONO
5 (2nd third)	7	125	79%	BSAD, LNTP, ANTH, WMST, BIOL
6 (3rd third)	3	24	32%	STSU, IDES, BLDG
7 (Week 2)	281	4,470	84%	
8 (Week 3)	237	3,807	77%	
9 (Week 4)	82	1,335	79%	
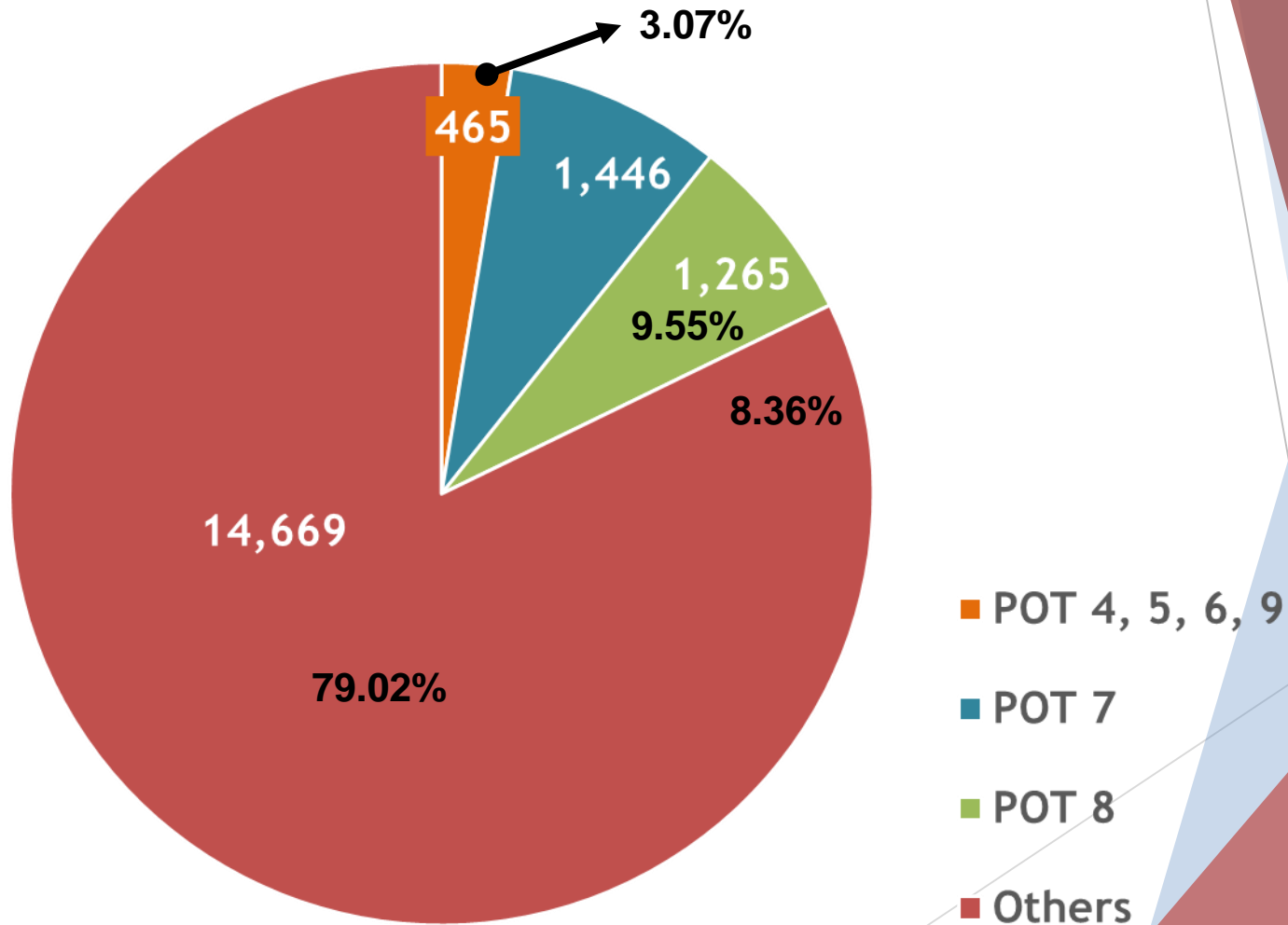
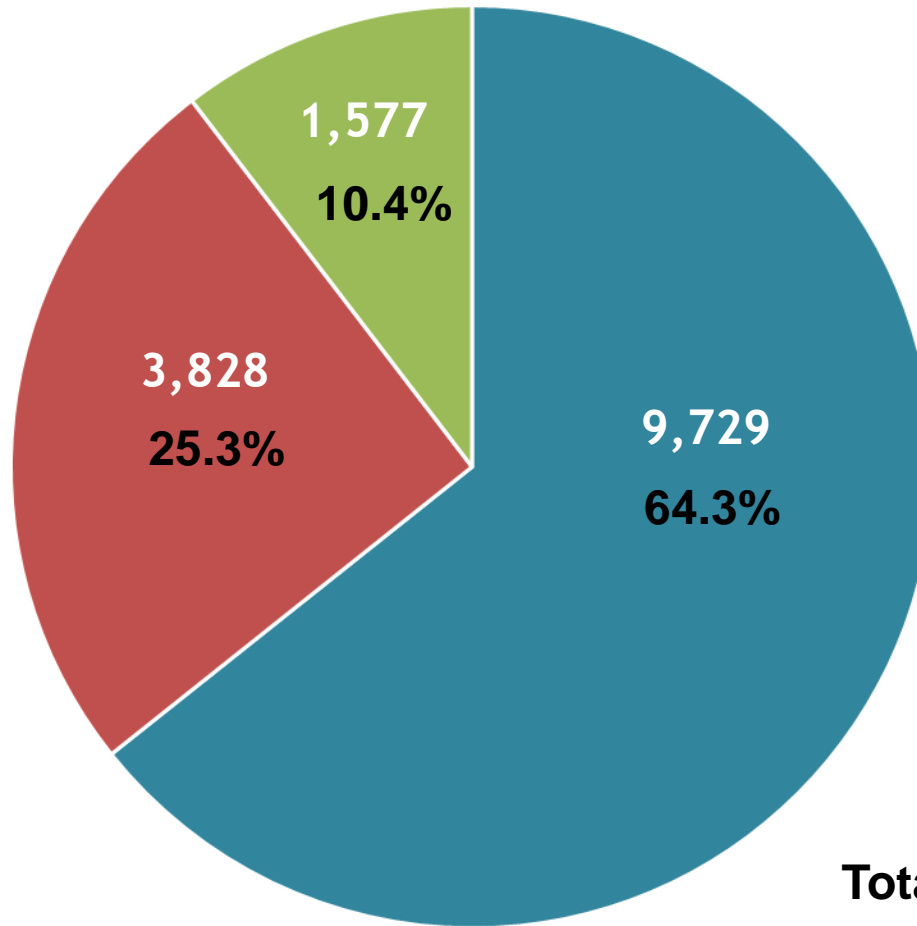# POT Recommendations

Retain

- **POT 1 – Full Term**
    15 weeks

- **POT 2 – First ½ Term**
    7 weeks

- **POT 3 – Second ½ Term**
    7 weeks

- **POT 7 – Week 2 Start**
    13 weeks

Eliminate

- **POT 4 – First 1/3 Term**
    5 weeks

- **POT 5 – Second 1/3 Term**
    5 weeks

- **POT 6 – Third 1/3 Term**
    5 weeks

- **POT 8 – Week 3 Start**
    12 weeks

- **POT 9 – Week 4 Start**
    11 weeks

Standardize Start Time

Total CRNs=15,134

Pie chart segments:
- 9,729 — 64.3% — Started on an hour
- 3,828 — 25.3% — Started on a half-hour
- 1,577 — 10.4% — "odd" starting times

Odd-starting Times
201620 - 201730

▶ 1577 sections (10% of courses have "odd" starting times)

▶ 61 - taught in high schools

▶ 639 - discussion or lab sections

▶ 636 - early morning / late evening classes including some labs, discussions, or high school classes

▶ 557 - on campus, start between 9am and 5 pm, and not discussion or laboratory sections

▶ 387 - English and American English Language courses

▶ 3.7% of all of the CRNs run were weekday, daytime, not lab or discussion, and had an unusual starting time

Offer Alternative Scheduling and Delivery

▶ Students, especially non-traditional students, have been drawn to the convenience of online and hybrid courses, evening and weekend degree programs, lockstep cohort programs, and accelerated degrees.

▶ Offer entire degree programs by developing an evening/weekend cohort or other scheduling strategy designed to decrease average time to completion.

▶ Create and market flex-term courses (*or degrees*) so students can begin at different standardized times of the semester (7 weeks)

Programs currently offered Evening/Weekend

Biochemistry

Biotechnology

Business

Chemistry

Community Health

Computer Science

Engineering

Graphic Design

Life Science

Mathematics and Statistics

Paralegal Studies

Public Health

Programs currently offered Online

Business

Computer Science and Technologies

    + Computer Science Track

    + Information Systems Track

Criminal Justice

General Studies

    Humanities, Arts, Comm and Lang (HACL Core)

    STEM (STEM Core)

    Social Sci, Administration, and Health (SSAH Core)

    Integrated Studies

Evening/weekend enrollment Fall 2013 – Spring 2017

19868 unique students took at least one (E/W) class in the disciplines below.

| #E/W Courses taken	BA/BSAD	BI/BIOL	BT/BIOT	CH/CHEM	GD/GDES	HE/HLTH	LA/LGST	MA/MATH
1	1074	4312	138	2014	531	3427	153	7864
2	84	1180	48	446	118	221	65	1921
3	5	371	29	110	62	28	42	509
4	0	149	14	23	24	5	25	148
5	0	40	4	3	8	1	33	47
6	0	11	4	0	8	2	29	7
7	0	1	0	0	6	0	21	2
8	0	1	0	0	2	2	9	0
9	0	0	0	0	0	0	5	0
10	0	0	0	0	0	0	2	0
11	0	0	0	0	0	0	2	0
# students	1163	6065	237	2596	759	3686	386	10498
# registrations	1257	8662	421	3343	1195	4006	1154	14116
#CRNs/student	1.1	1.4	1.8	1.3	1.6	1.1	3.0	1.3

The Student Perspective Survey Results

▶ 963 Responded

▶ 86% continuing students, 14% new students

▶ Where do you take classes?

   ▶ 17% Germantown

   ▶ 50% Rockville

   ▶ 21% Takoma Park/Silver Spring

   ▶ 8% More than one campus

   ▶ 3% Distance

# This semester I was able to register for all of the classes that I needed.

20.5%, No

79.5%, Yes
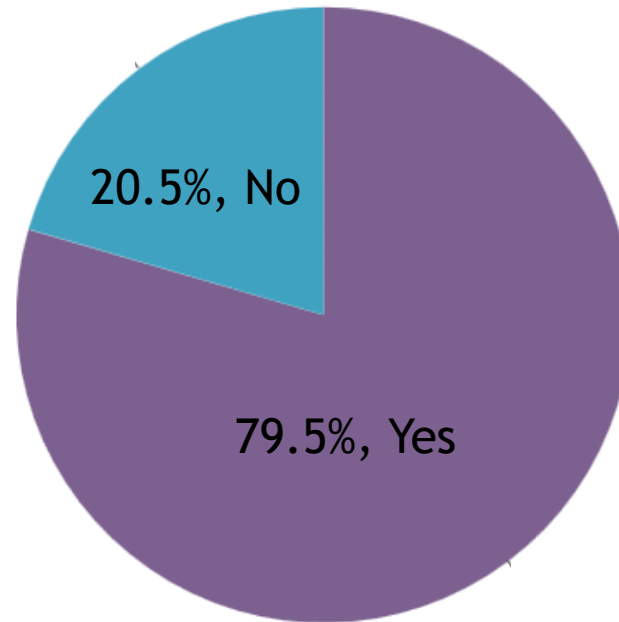
Value		Percent
Yes		79.5%
No		20.5%

Why weren't you able to register for all of the classes that you needed this semester?
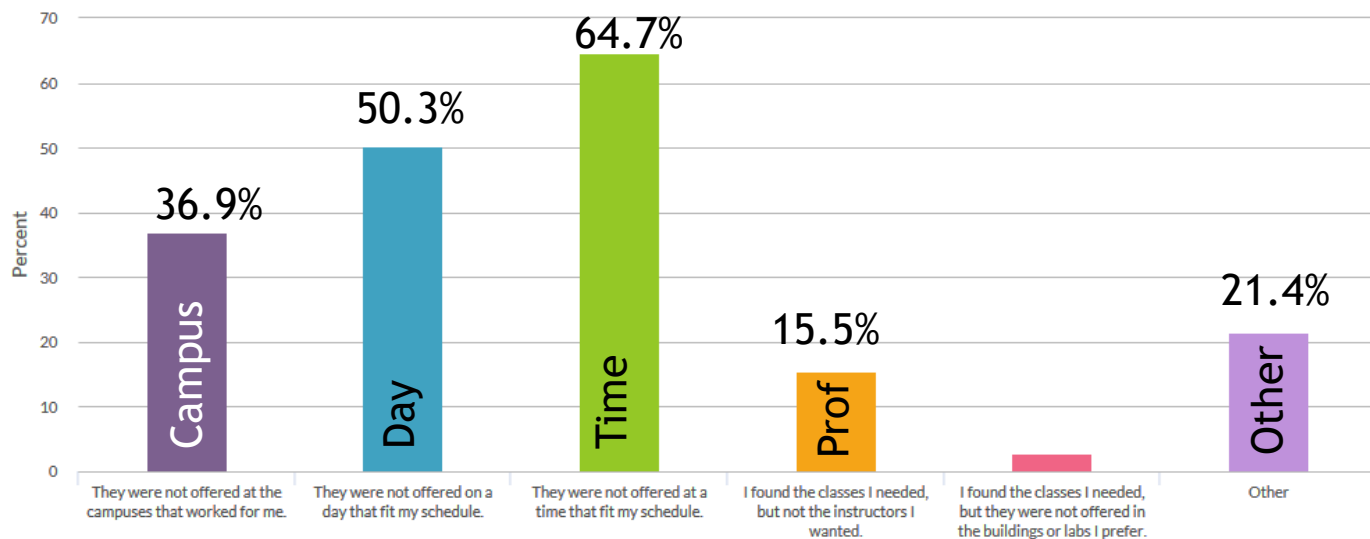
Value		Percent	Responses
They were not offered at the campuses that worked for me.		36.9%	69
They were not offered on a day that fit my schedule.		50.3%	94
They were not offered at a time that fit my schedule.		64.7%	121
I found the classes I needed, but not the instructors I wanted.		15.5%	29
I found the classes I needed, but they were not offered in the buildings or labs I prefer.		2.7%	5
Other (click to view)		21.4%	40

Select the top 4 improvements you would most like to see made to the scheduling system.
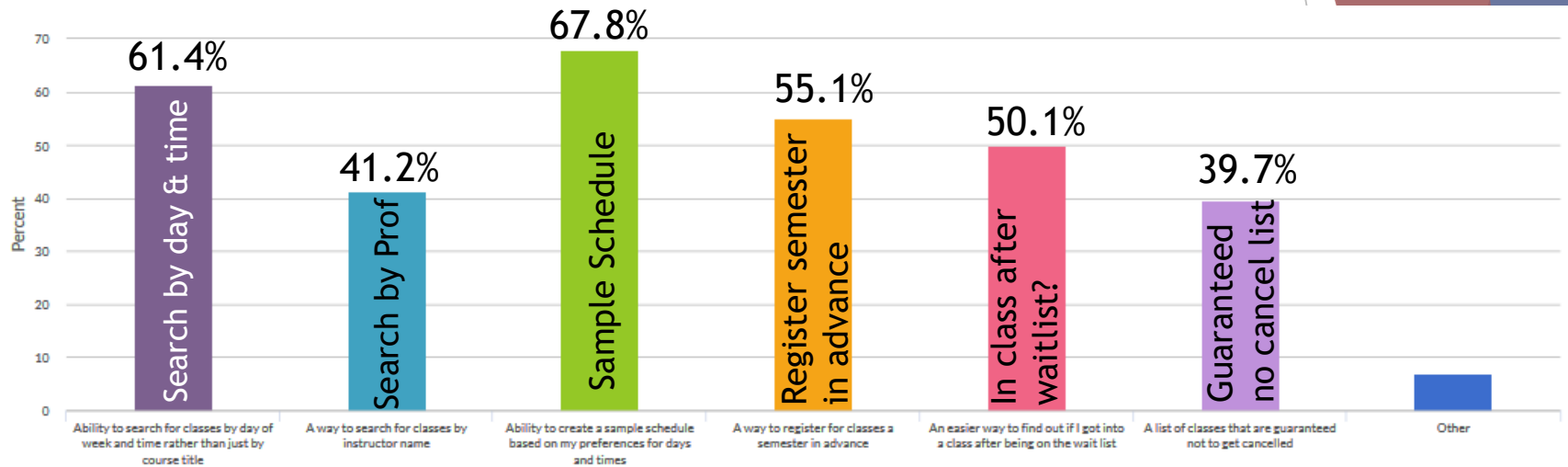
Value		Percent	Responses
Ability to search for classes by day of week and time rather than just by course title		61.4%	557
A way to search for classes by instructor name		41.2%	374
Ability to create a sample schedule based on my preferences for days and times		67.8%	615
A way to register for classes a semester in advance		55.1%	500
An easier way to find out if I got into a class after being on the wait list		50.1%	454
A list of classes that are guaranteed not to get cancelled		39.7%	360
Other (click to view)		6.8%	62

Student Comments

▶ Recommended classes to take based on major - more user friendly interface - ability to search all options without having to "select one"

▶ Being able to search all classes available at a certain time and day would make the process so much easier.

▶ Finding a given class at a decent time is pretty simple. Organizing a schedule of classes at reasonable hours, without overlap or huge gaps, is what is typically difficult.

Next Steps

1. Examine Spring 18 schedule and coordinate course offerings across campuses to eliminate duplication while ensuring students' abilities to complete.

2. Examine degree plans and align with course offerings.

3. Examine any courses offered at non-standard start times (i.e. not beginning on the hour or ½ hour).

4. Create request for proposal (RFP) for scheduling software vendor.

5. Invite college participation in selection process.

6. Market evening, weekend and DL programs.

7. Analyze student enrollment patterns and align with program requirements.

8. Create a multi-year, partially guaranteed schedule.

Questions?

Thank you –
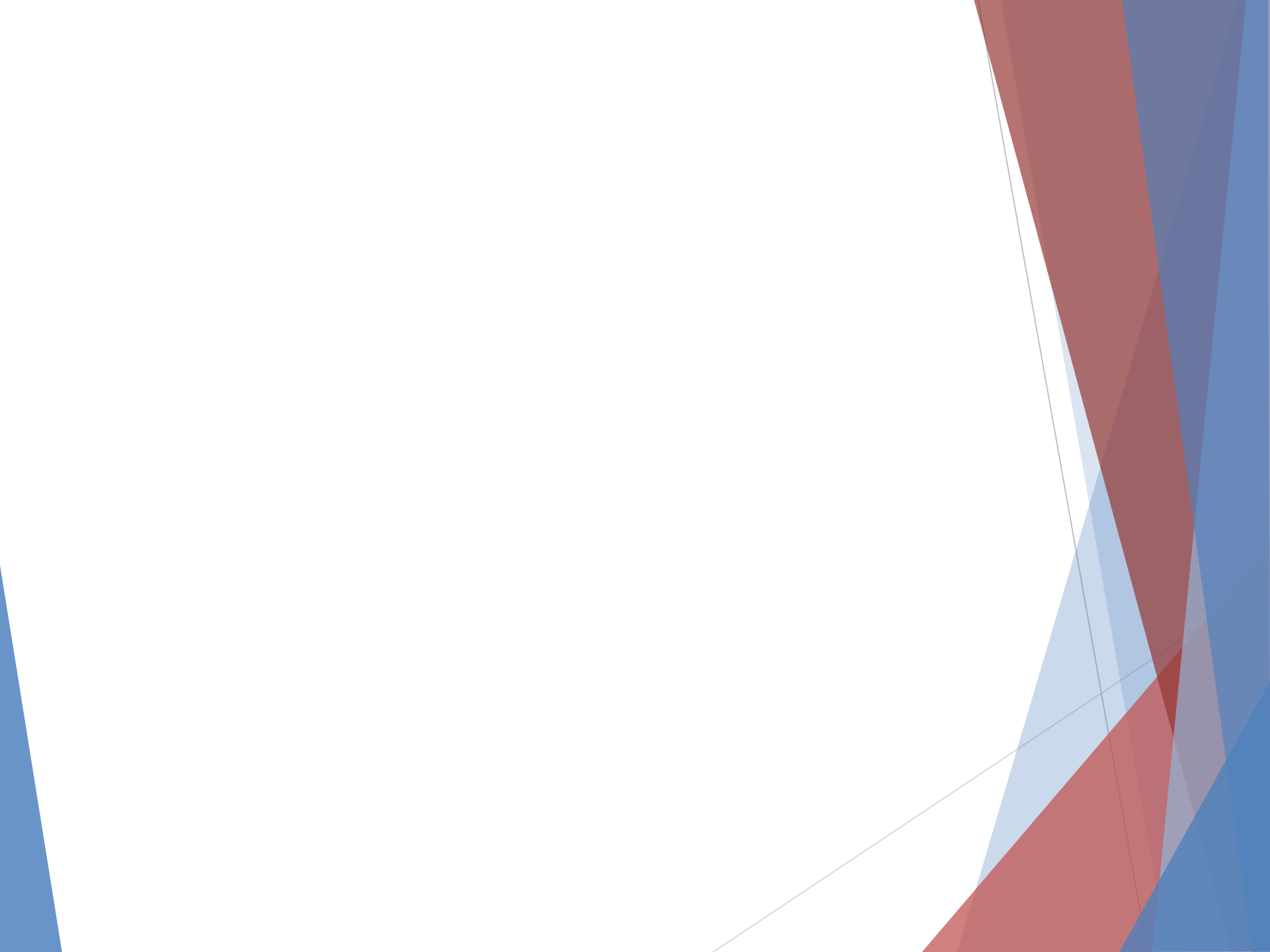
    Beatrice and Monica

    Work Group members

    Rick Penn

    Veronica Banh

"In the end, the academic scheduling process should feel less like roulette and more like chess – based on strategy, resource management and sound decision-making."

        - Tom Shaver, CEO, Ad Astra Information Systems

Academic Year Comparison

Academic Year	FALL				SPRING		
	Seats	Enrollment	%		Seats	Enrollment	%
2017-2018	89,381	53,799	60.2		84,655		
2016-2017	93,981	76,497	81.4		84,910	70,142	82.6
2015-2016	99,900	80,950	81.0		94,464	74,177	78.5