Custom Schedule Construction Guide
By Jim Frolick

I'm very excited about the construction of a new schedule for our Winter Challenge League. I've been dissatisfied with our computer generated schedules since the beginning. Yes, schedule building is a time intensive, complicated affair. It's like putting together a 1281 piece Rubik's cube. However, now that the league seems to have a stable base of 16 league members, it seems worthwhile to invest the time to build a schedule that we can use for years ahead. And so I press onward into Schedule Land...

I'm going to describe the process of schedule building here in the hope that it might inspire others to improve this aspect of their netplay draft leagues.

The first step was to come up with a general plan. To help with this, I consulted our friends at Start Forum who told me many wise things. Like how to do English and math!

DocJambo
"Asparagus Apparatus"
●●●

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🗓 15 Years, 3 Months and 17 Days

Posted Tuesday at 01:40 PM   •••

> On 1/12/2021 at 1:24 PM, blubbablubbablubba said:
>
> Is there someone out there with schedule making expertise? We have a 16 team league with two divisions. We'd like a 160 game schedule where each team plays 14 inter-division games (two 4 game series and two 3 game series) and 8 games agains out of division opponents (two 4 game series). We'd also like the schedule to end with all inter-division games. Thanks to anyone who can help us!

Wouldn't you want the season to end with intra (within) division games ?
What would your days off be ? and/or you using blocks (aka start clean series on the 1st of a month ?

7 × 4 = 28
7 × 3 = 21
4 × 7 = 28
3 × 7 = 21
    Intra = 98
8 × 4 = 32
4 × 8 = 32
    Inter = 64

That makes it 162 total games (not 160)

➕   Quote   👍

It did help though to know the correct words and math, so being revealed as a simpleton didn't hurt too badly. Other guys gave helpful hints also. I'm glad I did it. These guys launched me actually. Somehow, from my interaction with these guys I got the idea I could build a schedule from scratch. Don't ask

me how. No one knows how my mind works.

So, here's the first plan I came up with. I added to it later on as you will see. This was the headwaters of our cool new schedule

General plan							
14 games vs inter division opponents (2 4 game, 2 3 game)				28 series	14 4 game	14 3 game	7 x 4 = 28
8 games vs intra division opponents (two 4 game)				16 series	16 4 game		7 x 3 = 21
							4 x 7 = 28
April- In division games							3 x 7 = 21
							Intra =
May- Mix							98
June- Mix							8 x 4 = 32
July- Mix							4 x 8 = 32
							Inter =
August- Mix							64
Sept- in division games							

Next, I figured out every series that had to be played. The plan was to build the schedule from these series.

	Inter Divison												
BBS		vs COL 3	@ COL 4	@ COL 3	vs SRR 4	vs SRR 3	@ SRR 4	@ SRR 3	vs BUM 4	@ BUM 4	vs MIT 4	@ BUM 4
		vs DIN 3		@ DIN 3	vs TLF 4	vs TLF 3	@ TLF 4	@ TLF 3	vs CIR 4	@ CIR 4	vs MWB 4	@ CIR 4
	vs GTL 4	vs GTL 3	@GTL 4	@GTL 3	vs TOW 4	vs TOW 3	@ TOW 4	@ TOW 3	vs THD 4	@ THD 4	vs PBP 4	@ THD 4
	vs IMG 4	vs IMG 3	@ IMG 4	@IMG 3					vs MIN 4	@ MIN 4	vs SSL 4	@ MIN 4
COL	vs DIN 4	vs DIN 3	@ DIN 4	@ DIN 3	vs SRR 4	vs SRR 3	@ SRR 4	@ SRR 3	vs BUM 4	@ BUM 4	vs MIT 4	@ BUM 4
		vs GTL 3	@GTL 4	@GTL 3	vs TLF 4	vs TLF 3	@ TLF 4	@ TLF 3	vs CIR 4	@ CIR 4	vs MWB 4	@ CIR 4
	vs IMG 4	vs IMG 3		@IMG 3	vs TOW 4	vs TOW 3	@ TOW 4	@ TOW 3	vs THD 4	@ THD 4	vs PBP 4	@ THD 4
									vs MIN 4	@ MIN 4	vs SSL 4	@ MIN 4
DIN		vs GTL 3	@GTL 4	@GTL 3	vs SRR 4	vs SRR 3	@ SRR 4	@ SRR 3	vs BUM 4	@ BUM 4	vs MIT 4	@ BUM 4
	vs IMG 4	vs IMG 3	@ IMG 4	@IMG 3	vs TLF 4	vs TLF 3	@ TLF 4	@ TLF 3	vs CIR 4	@ CIR 4	vs MWB 4	@ CIR 4
					vs TOW 4	vs TOW 3	@ TOW 4	@ TOW 3	vs THD 4	@ THD 4	vs PBP 4	@ THD 4
									vs MIN 4	@ MIN 4	vs SSL 4	@ MIN 4
GTL	vs IMG 4	vs IMG 3	@ IMG 4	@IMG 3	vs SRR 4	vs SRR 3	@ SRR 4	@ SRR 3	vs BUM 4	@ BUM 4	vs MIT 4	@ BUM 4
					vs TLF 4	vs TLF 3	@ TLF 4	@ TLF 3	vs CIR 4	@ CIR 4	vs MWB 4	@ CIR 4
					vs TOW 4	vs TOW 3	@ TOW 4	@ TOW 3	vs THD 4	@ THD 4	vs PBP 4	@ THD 4
									vs MIN 4	@ MIN 4	vs SSL 4	@ MIN 4
IMG		vs SRR 3	@ SRR 4	@ SRR 3	vs BUM 4	@ BUM 4	vs MIT 4	@ BUM 4				
	vs TLF 4	vs TLF 3		@ TLF 3	vs CIR 4	@ CIR 4	vs MWB 4	@ CIR 4				
		vs TOW 3	@ TOW 4	@ TOW 3	vs THD 4	@ THD 4	vs PBP 4	@ THD 4				
					vs MIN 4	@ MIN 4	vs SSL 4	@ MIN 4				
SRR		vs TLF 3	@ TLF 4	@ TLF 3	vs BUM 4	@ BUM 4	vs MIT 4	@ BUM 4				
	vs TOW 4	vs TOW 3			@ TOW 3	vs CIR 4	@ CIR 4	vs MWB 4	@ CIR 4			
					vs THD 4	@ THD 4	vs PBP 4	@ THD 4				
					vs MIN 4	@ MIN 4	vs SSL 4	@ MIN 4				
TLF		vs TOW 3	@ TOW 4	@ TOW 3	vs BUM 4	@ BUM 4	vs MIT 4	@ BUM 4				
					vs CIR 4	@ CIR 4	vs MWB 4	@ CIR 4				

Then I came up with the Series Distribution plan. Notice that Block 1 and Block 6 are entirely made up of inter-divisional games. FUN! FUN! FUN!

Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
April	May	June	July	Aug	Sep
4 inter	4 intra	4 intra	4 intra	4 intra	4 inter
4 inter	4 intra	4 intra	4 intra	4 intra	4 inter
4 inter	4 intra	4 intra	4 intra	4 intra	4 inter
4 inter	4 intra	4 intra	4 intra	4 intra	4 inter
4 inter	4 inter	4 inter	4 inter	4 inter	4 inter
3 inter	3 inter	3 inter	3 inter	3 inter	3 inter
3 inter	3 inter	3 inter	3 inter	3 inter	3 inter
3 inter					3 inter

Isn't the symmetry beautiful?

Then I started messing around with the schedule. I realized that without days off, the games end sometime around Sep 15. Why is that bad? Well, because of weather effects power teams get an advantage because more games get played in Jun/Jul/Aug than in Apr/May/Sep. Could we fix this? Yes!

	Dates	Games	Days off
April	30	27	3
May	31	27	4
Jun	30	27	3
Jul	31	27	4
Aug	31	27	4
Sep	30	27	3

I'll tell you, this one little improvement made me proud to be a Strat-o-Nerd. Now, we not only will have an even distribution of games through the different weather conditions, we'll also have a fair system of days off that we can use for teams to rest pitchers an extra day after every two series.

The old computer schedules had days off but I had no way of knowing if they were distributed evenly unless I tore the schedule apart and did some

figuring. I considered that a waste of time because computer generated schedules have other problems too. So, why bother? But with our Cool New Schedule all teams will rest on the same days and no team will be favored.

Next, I started working on Block 1. Aye, yie, yie... what a mess! I just started plugging in series. Not the best approach.

Block 1	4 inter	4 inter		4 inter	4 inter
April	1-4	5-8	9 Off	10-13	14-17
1	COL @ BBS 4	DIN @ BBS 4		GTL @ BBS 4	BBS @ IMG 4
2	GTL @ DIN 4	GTL @ COL 4		COL @ DIN 4	TLF @ COL 4
3	SRR @ IMG 4	IMG @ TLF 4		TOW @ IMG 4	TOW @ DIN 4
4	TLF @ TOW 4	SRR @ TOW 4		TLF @ SRR 4	SRR @ GTL 4
5	BUM @ CIR 4	THD @ BUM 4		MNL @ BUM 4	BUM @ MIT 4
6	MNL @ THD 4	MNL @ CIR 4		CIR @ MIT 4	CIR @ MWB 4
7	MWB @ MIT 4	PBP @ MWB 4		MWB @ SSL 4	PBP @ MNL 4
8	SSL @ PBP 4	MIT @ SSL 4		THD @ PBP 4	SSL @ THD 4

April (Block 1) was inter-divisional play. To enhance organization, I kept the divisions separate.

I figured out along the way that if you just plunk down series, some teams will have more home series than road series and vice versa. So I developed a grid to keep track of home and away games...

	BUM	CIR	THD	MNL	MIT	MWB	PBP	SSL	need h/A
BUM	h3	A4	h4	h4	A4	A4	A3	h3	14/15
CIR	h4	A3	h4	h4	A4	A4	A3	h3	15/14
THD	A4	A4	h3	h4	A3	h3	A4	h4	14/15
MNL	A4	A4	A4	h3	h3	A3	h4	h4	14/15
MIT	h4!	h4!	h3!	A3!	A3!	h4!	h4!	A4!	19/10
MWB	h4	h4	A3	h3	A4	A3	h4	A4	15/14
PBP	h3	h3	h4	A4	A4	A4	A3	h4	14/15
SSL	A3	A3	A4	A4	h4	h4	A4	h3	11/18

Believe me, this was a tough mess to untangle. I had to develop a method of experimenting with the schedule without getting mixed up over which changes I had made.

I mentioned earlier that I created a matrix of every series that needs to be played. When I want to add a series to the schedule, I cut and paste it from

the Series Matrix. You can see the holes from series I put into the schedule and edits from series that I added to the schedule but then returned to the matrix (e.g.- SRR @ BBS 4 as opposed to vs SRR 4).

	Inter Divison						
BBS		vs COL 3	@ COL 4	BBS @ COL 3	vs BUM 4	@ BUM 4	vs M
		vs DIN 3	BBS @ DIN 4	@ DIN 3	vs CIR 4	@ CIR 4	vs M
		vs GTL 3	@GTL 4	@GTL 3	vs THD 4	@ THD 4	vs Pl
	vs IMG 4	vs IMG 3		@IMG 3	vs MNL 4	@ MNL 4	vs S:
	SRR @ BBS 4			@ SRR 3			
	vs TLF 4	vs TLF 3	BBS @ TLF 4				
	vs TOW 4	TOW @ BBS 3	@ TOW 4				
COL	DIN @ COL 4	vs DIN 3		COL @ DIN 3	vs BUM 4	@ BUM 4	vs M
		vs GTL 3	@GTL 4		vs CIR 4	@ CIR 4	vs M
	vs IMG 4		COL @ IMG 4	@IMG 3	vs THD 4	@ THD 4	vs Pl
	vs SRR 4	vs SRR 3	@ SRR 4		vs MNL 4	@ MNL 4	vs S:
		vs TLF 3	@ TLF 4	@ TLF 3			
		vs TOW 3	COL @ TOW 4	@ TOW 3			
DIN		vs GTL 3	@GTL 4	@GTL 3	vs BUM 4	@ BUM 4	vs M
	vs IMG 4		@ IMG 4		vs CIR 4	@ CIR 4	vs M
	vs SRR 4	vs SRR 3	DIN @ SRR 4		vs THD 4	@ THD 4	vs Pl
	vs TLF 4	vs TLF 3		@ TLF 3	vs MNL 4	@ MNL 4	vs S:
		TOW @ DIN 3	@ TOW 4	@ TOW 3			
GTL		vs IMG 3	@ IMG 4	@ IMG 3	vs BUM 4	@ BUM 4	vs M

I pasted spreadsheet cells out of the matrix into the schedule. I have to modify them along the way so that "vs SRR 4" becomes "SRR @ BBS 4" or "@ DIN 4" becomes "GTL @ DIN 4" when I add them to the schedule and stay that way when they've been returned from the schedule.

When I have problems to fix, I cut out the problem series and replace them with **lower case place holders**. This way I can move things around and experiment without getting too confused by all the moves.

3 inter	3 inter	
27-29	30-2	
BBS @ TOW 3	SRR @ BBS 3	
COL @ SRR 3	COL @ GTL 3	
DIN @ IMG 3	TOW @ TLF 3	
TLF @ GTL 3	IMG @ DIN 3	
SSL@ BUM 3	MWB @ BUM 3	
CIR @ PBP 3	Thd @ pbp 3	
THD @ MIT 3	MIT @ SSL 3	
MNL @ MWB 3	CIR @ MNL 3	
	PBP @ THD 3	

Again, when I want to experiment with changes, I make the experimental changes with **lower case place holders** (e.g.— Thd @ pbp 3). I set the actual schedule pieces aside (e.g.- PBP @ THD 3).

Eventually, I fixed all the problems with April (Block 1). I finished with an even distribution of home and away games and each team will face each division opponent plus an extra 3 gamer at the end. The good news? I can flip this schedule (e.g.- MWB @ BUM 3 becomes BUM @ MWB 3 etc.) and use it for Block 6.

Piecing a schedule together can be frustrating. First, there is no way to know starting out that everything will fit together properly. Will everything fit together as hoped? No way to know until you try. Sometimes you have to take a break from it and try again fresh another day.

One trick I tried saved my bacon. I put the whole schedule together but there were several holes. Why? Because no team can play two different opponents in the same day. Scheduling conflict! Duh, right? Here's how I resolved the conflicts (hope this makes sense): I figured out which teams needed to play on which dates to resolve the conflicts. Then, I took out ALL the series that involved those teams playing each other and moved them back into the places where they fit. Extra Hint: To fix a conflict you have to replace TWO series on a single day to make it work. Hope that helps. Keep at it! Eventually you'll figure it out.

Once I got the entire schedule settled, I stacked the entire schedule into one long column so I could convert it to the text file needed to import into the game.

April	1-3		1	BBS,TOW,D	04/01/21
1	BBS @ TOW 3		1	COL,SRR,D	
2	COL @ SRR 3		1	IMG,DIN,D	
3	IMG @ DIN 3		1	TLF,GTL,D	
4	TLF @ GTL 3		1	BUM,SSL,D	
5	BUM @ SSL 3		1	CIR,MWB,D	
6	CIR @ MWB 3		1	MIT,THD,D	
7	MIT @ THD 3		1	PBP,MNL,D	
8	PBP @ MNL 3		2	BBS,TOW,N	2
			2	COL,SRR,N	
			2	IMG,DIN,N	
			2	TLF,GTL,N	
			2	BUM,SSL,N	
			2	CIR,MWB,N	
			2	MIT,THD,N	
			2	PBP,MNL,N	
			3	BBS,TOW,N	3
			3	COL,SRR,N	
			3	IMG,DIN,N	
			3	TLF,GTL,N	
			3	BUM,SSL,N	
			3	CIR,MWB,N	
			3	MIT,THD,N	

How do you convert the spreadsheet into a text file? I'm not going there. If you need help, find an accountant or some other nerd who works with spreadsheets all the time. They're everywhere these days.

Hope this guide helps someone someday. I actually enjoyed the experience and having a Cool New Schedule can make your penance race extra exciting. Take the plunge! It's worth the adventure. Good luck!