### JEB Stuart Crew Winter Conditioning

For those who don't have a winter sport and are interested in improving their fitness level the Stuart Crew Coaching Staff is offering a Winter Conditioning Program. We'll begin in November and run through late February. The program is designed to help improve your endurance, strength, and flexibility for the upcoming spring season. We view this as a 5-day plan ... 4 of the days will be organized activity at the school; 1 day will require outside activity, for example, getting together to run, bike, etc.

To start—the best way to get faster is to enable yourself to train consistently by eating right, getting enough sleep, not getting sick, injured or burned out. Someone participating in winter training should be honest with themselves about what they can sustain for the whole winter. If that means working only three times a week, that's better than training every day in November and then quitting until February because you burnout. You can get a decent level of fitness from as little as 45 minutes a day five days a week.

Cross training is also an important part of the winter plan. For the serious rower, the erg is your friend; however, adding running, cycling, spinning, stair climbing, or swimming in addition to erging can keep you from getting injured or bored. In all of these cases, use of a heart rate monitor will help you determine how hard to go. We'll also incorporate strength and off-erg conditioning into the plan. If everyone commits to get their heart rate above 140 for 45 minutes five times a week consistently through the winter, and works to improve strength and flexibility, we'll be faster as a team in the spring.

**Four Basic Erg Workouts:** A balanced selection of each type will maximize your rowing fitness.

## STEADY STATE (SS): Base of the pyramid. We'll do the majority of meters in this category

- 45-60 minute workout
- Lower heart rate (often 145-160, but varies by gender and age)

- If multiple pieces are completed, rest time should be 10% of the work time (i.e. if you are doing 10 minute pieces, you take 1 minute rest; 20 minute pieces, 2 minutes rest; etc.)
- If done on an erg, the stroke rate is 16-22
- If you know your 2k split time, these workouts should be done at 2k split + 20 (ex: 2:10 plus 20 seconds, = 2:30)
- Steady state can be substituted for by running, swimming, cycling, etc. If you want to do some cross training, it is best to substitute your steady state workouts so that you can do the harder workouts on the erg.

#### ANAEROBIC THRESHOLD (AT): Next level up the pyramid

- Approximately 6,000 to 12,000 meters of work or approximately 30-45 minutes of work
- Higher heart rate (often 160-180, but varies by gender and age)
- Usually done in 2 or 3 pieces (i.e. 3 x 3k) and has 50% rest time (i.e. if it takes you 12 minutes for a 3k, set the rest for 6 minutes)
- Stroke rates should be 24-28 strokes per minute
- If you know your 2k test split time, these workouts should be done at 2k split + 10

# LONG INTERVAL (LI): High intensity pieces that prepare you for sprint season

- Approximately 8,000 meters of work or approximately 25 minutes of work
- Higher heart rate (often 170+, but varies by gender and age)
- Usually done in 4 or 5 pieces (i.e. 4 x 2k or 5 x 5 minutes) with 100% rest time (i.e. if a 2k takes you 8 minutes, set 8 minutes of rest)
- Stroke rates should be 26-30 strokes per minute

 If you know your 2k test split, these workouts should be done at 2k split + 4

## SHORT INTERVAL (SI): Top of the pyramid to increase maximum power and speed

- Approximately 15-20 minutes of work
- Highest heart rate (180+, but varies by gender and age)
- Usually done in many short pieces (i.e. 8x500) with 200% rest time (if 500 meters takes you 2 minutes, then set 4 minutes rest)
- Stroke rates should be 28-32 strokes per minute
- If you know your 2k test split, this workout should be at less than your 2k split

#### Erg Workout Options (we'll include others)

STEADY STATE	ANAEROBIC THRESHOLD	LONG INTERVAL	SHORT INTERVAL
4 x 10', 1' rest	2 x 3k, 7' rest	4 x 5', 5 rest	3 x (5 cycles of 1' on/1' off), 5' rest
2 x 20', 2' rest	2 x 4k, 9' rest	6 x 4', 4' rest	6 x 500, 4' rest
40 minutes	3 x 3k, 7' rest	4 x 2k, 8' rest	8 x 500, 5' rest
3 x 20', 2' rest	3 x 4k, 9' rest	5 x 1500, 7' rest	3 x (8 cycles of 1' on 1' off), 6' rest
2 x 30', 3' rest	10k	4 x 1k, 4' rest	
4 x 20', 2' rest	12k		
50 minutes			

Example:  $4 \times 10'$ , 1' rest = 4 repetitions of 10 minutes of rowing with 1 min rest between reps. Over time select the longer more intense pieces for each workout.

### Weekly Workout Plan

We recommend that you train 5 times per week following the general outline below. The calendar reflects our intent to do SS, AT, and LI/SI workouts together on the ergs leaving 1 (or 2) of the SS workouts to occur "out of class." Doing something 6 days a week would by fine, but plan on at least one full day of rest.

### 5 workouts per week

- Day 1 Steady State
- Day 2 Anaerobic threshold
- Day 3 Steady State/Cross Train
- Day 4 Long interval or short interval
- Day 5 Steady State

To get started we've put together the training calendar below based on 4 structured workouts per week and 1 (or 2) outside "cross training" activities. The calendar also includes dates for events like the Mid-Atlantic Erg sprints.

We'll provide supplemental information on weight-room activity and descriptions of useful exercises and body circuits.

Stretching is integral to this plan – attached is a handout from Concept 2 the outlines some good stretches.

Concept 2 Holiday Challenge -26 Nov-24 Dec (100 or 200K)

*Mid-Atlantic Erg Sprints* looks like it will be 30 Jan (Sat) ... optional, but encouraged; we will also plan to participate in a Prince William Rowing Club (PWRC) Erg Sprint event again this year ... stay tuned.

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Sunday	М	onday	Tuesday	Wednesday	Thursday	Friday	Saturday	
1 At School	2	Note: Str	3	4	5	6 for the off-	7	
Outside of School		erg streng room activ is intende	th and conditioning vity; Tabata can be d to provide a top-l	th Training and Tabata references are place-keepers for the off- nd conditioning component. Strength training will involve weight Tabata can be viewed as high intensity body circuits. Erg activity provide a top-level plan for the rowing coaches steady state aerobic activity, 2K days, 5K days, etc.				
Red Day Period (no coaching contact 9-18)	g 	The attach related str	nments to this plan etching.	include body circu	it examples and so	me rowing	14 Commit to start working out today 30 Min jog & stretch	
15 Rest	16 30 Minu Stretch	te Jog &	17 30 Minute Jog & Stretch	18 30 Minute Jog & Stretch	19 Kickoff Day Discuss Program &	20 Steady State ~ 45 min	21 Cross Train Steady State ~ 60 min	
	Body Cii	rcuit – A	Body Circuit - B	Body Circuit - C	Set up Ergs at school	Weight Room Orientation		
22 Rest	min	State ~ 45 Saseline Fitr	24 Anaerobic threshold ness Testing	25 Cross Train Steady State ~ 60 min	26 Thanksgiving Holiday Concept 2 Holiday Challenge - Starts	27 Optional Activity – Do something to burn off the extra dessert from yesterday	28 Cross Train Steady State ~ 60 min	
29 Rest	30 Steady S min Tabata	5tate ~ 45	http://www.co	oncept2.com/indoc	view the erg/rowing or-rowers/training/te on in Dec led by C	echnique-videos		

### December 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 Baseline 2K Erg Test J Nutrition 101 Strength Training	2 Cross Train Steady State ~ 60 min	3 Short Interval Tabata USRowing Annual Convention	4 Steady State ~ 45 min Strength Training (Philadelphia, PA)	5 Cross Train Steady State ~ 60 min
6 Rest	7 <b>5K Erg +</b> Steady State ~ 20 min Tabata	8 Anaerobic threshold Strength Training	9 Cross Train Steady State ~ 60 min	10 Long Interval Tabata	11 Steady State ~ 45 min Strength Training	12 Cross Train Steady State ~ 60 min
13 Rest	14 Steady State ~ 45 min Tabata	15 Anaerobic threshold  2K Erg  Strength Training	16 Cross Train Steady State ~ 60 min	17 Short Interval Tabata	18 Steady State ~ 45 min Strength Training	19 Cross Train Steady State ~ 60 min
20 Rest	21 Cross Train Steady State ~ 60 Body Circuit – A	22 Cross Train Steady State ~ 60 min Body Circuit – B	23 Optional Activity	24 Optional Activity Concept 2 Holiday Challenge - Ends	25 Christmas Holiday	26 Cross Train Steady State ~ 60 min
27 Rest	28 Cross Train Steady State ~ 60 Body Circuit – A	29 Cross Train Steady State ~ 60 Body Circuit – B	30 Cross Train Steady State ~ 60 min Body Circuit – C	31	At School  Outside of School	

# January 2015

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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
At School  Outside of School					1 New Year's Day Holiday	2 Cross Train Steady State ~ 60 min
3 Rest	4 Steady State ~ 45 min Tabata	5 <b>2K Erg</b> Strength Training	6 Cross Train Steady State ~ 60 min	7 Long Interval Tabata	8 Steady State ~ 45 min Strength Training	9 Cross Train Steady State ~ 60 min
10 Rest	11 <b>5K Erg +</b> Steady State ~ 20 min Tabata	12 Anaerobic threshold Strength Training	13 Cross Train Steady State ~ 60 min	14 Short Interval Tabata	15 Steady State ~ 45 min Strength Training	16 Cross Train Steady State ~ 60 min
17 Rest	18 Steady State ~ 45 min Tabata	19 Anaerobic threshold <b>2K Erg</b> Strength Training	20 Cross Train Steady State ~ 60 min	21 Long Interval Tabata	22 Steady State ~ 45 min Strength Training	23 Cross Train Steady State ~ 60 min
24 Rest	25 <b>5K Erg +</b> Steady State ~ 20 min Tabata	26 Anaerobic threshold Strength Training	27 Cross Train Steady State ~ 60 min	28 Short Interval Tabata	29 Steady State ~ 45 min Strength Training	30 Mid-Atlantic Erg Sprints http://www.ergsprint s.com/

# February 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31 Jan Rest	1 Steady State ~ 45 min Tabata	2 2K Erg Test (N/A if you did Erg Sprints) Anaerobic threshold Strength Training	3 Cross Train Steady State ~ 60 min	4 Long Interval Tabata	5 Steady State ~ 45 min Strength Training	6 PWRC HS Erg Sprints ? 2:00-6;00 pm
7 Rest	8 5K Erg + Steady State ~ 20 min Tabata	9 Anaerobic threshold Strength Training	10 Cross Train Steady State ~ 60 min	11 Short Interval Tabata	12 Steady State ~ 45 min Strength Training	13 Cross Train Steady State ~ 60 min
14 Rest	15 Steady State ~ 45 min	16 Anaerobic threshold 2K Erg ess Testing	17 Cross Train Steady State ~ 60 min	18 Long Interval Tabata	19 Steady State ~ 45 min Strength Training	20 Move Shells - Sandy Run to Lake Barcroft
21 <b>Rest</b>	22 First Day - On-Wa Practice Lake Barcroft-TBD	23 On-Water Practice Lake Barcroft-TBD	24 Cross Train Steady State ~ 60 min	25 On-Water Practice Lake Barcroft-TBD	26 On-Water Practice Lake Barcroft-TBD	27 On-Water Practice Lake Barcroft-TBD
28	29 On-Water Practice Lake Barcroft-TBD	Lightweight Swim Test	vork complete before ht Program Initiation this month (novice) < Safety Video – Requi	this Month (1 wk<, 3 v First On-Water Day		