

ELITE PROGRAMS – 2009-2010 SWIM YEAR
YEAR “2” IN THE 4 YEAR PLAN - LEADS TO LONDON 2012

PRINCIPLES:

We are looking at the swim year from September until August. The primary and most important objective for the year is excellence in the 2010 Summer Championships in July and early August Championships. We will have two steps leading to this summer peak. Each step will have an increased level of importance. The first peak in December will not include any taper and only a little rest and no shave. The second peak in March will provide both a taper and shave, and not as much rest as in summer. The third peak will have a full taper and shave, based on August Championships. For those swimming boys' Missouri High School, they will have a taper and shave early November. The Kansas High School boys and Missouri High School girls will proceed our March peak. Kansas girls will treat their May meet like our December championships.

The year is broken into three phases and each is built on the principle of preparing for the next phase. Phase I objectives: The first half is to develop stroke and race mechanics. We also will be getting our overall body in total shape to prepare for the competitive training cycle. The last half of this phase is to have our training center on endurance and setting the foundation for the swim year. There will be a minimum of rest in early December to prepare our Phase I major meet. Goal is to be ahead of March Championship of previous year. Phase I will emphasize EN1-EN2 with some preparation of EN3 and SP1, SP2 and SP3. You must work all parts of Energy System in all Phases.

Phase II objectives: Training will emphasize EN3, SP1, SP2, SP3, as primary and maintaining our aerobic base (EN1, EN2). This will be the phase that we will have a major emphasis on quality and endurance in the early part for approximately six weeks. The rest of the phase will focus on competitive racing shape and skills. This will culminate with a taper/rest with the emphasis on taper, rest being secondary. This phase will culminate with the early March Championships.

There will be a one week break between Phase II and Phase III it will include a week off based on your spring break schedule with school. Then two weeks that we will train 4 to 6 sessions per week. We will focus on reviewing the race fundamentals, stroke skills center on aerobic base training. (REC, EN1, EN2).

Phase III objectives: The primary goal of Phase III is to pull Phase I and Phase II together to a total culmination of excellence. This phase you will refer to as the “Competitive and Championship Phase”. This phase will center on performance level in practice and meets. The rest/taper period will be a major priority, based on we have completed 11 months of preparation. Now we are ready to reach our maximum potential for the year and to conclude this year's swim plan.

SUMMER INTERSEASON 2009:

There is an inter-season that is specific for this group that will be from late August until mid-September after your Championship meet. We will train in the pool 3-5 sessions per week until mid September. (August 24 till September 12)

SCHEDULE 2009 -2010:

Phase I	-August 31 st until December 26 th – 17 weeks
Phase II	-December 28 th until March 14 th 11 weeks
Inter-season	-March 15 th until April 3 rd – 3 weeks (Swimming 2-weeks and 1 week off-Spring Break)
Phase III	-April 5 th until August 15 th – 19 weeks
This is the year which leads to maximum potential in 2012. Can London be part of your dream?	
Inter-season	-August 23 th thru September 10 th – 3 weeks

TRAINING SCHEDULE EMPHASIS: 2008 - 2009

A. FALL AND WINTER PROGRAM PHASE I AND II - 2008-2009

I. Aerobic – Instructional Period – September 13th thru October 10th – 4 weeks – Phase I

The emphasis will be on developing race fundamentals, stroke skills, turn skills and starts. The training will center on getting in good overall physical fitness and state of mind to pursue the major base training for the entire swim year. We will be doing a lot of natural body strength exercises on deck. Drill work, stroke and race work and aerobics level training in the pool. We will be doing 80% of work based on (Rec) or EN1-EN2 training and then at Threshold Training and Max Velocity (Max Vo2). The final 10% will be on lactate peak and Power (SP3) performance. Refer to Chart “A” for terms and Chart “B” for Micro Training Cycle (weekly pattern). Yardage to range from 5,000-6,500 yards. Weight program begins during the last two weeks of the Period. Stroke Inspection will take place during the first few weeks of the next period for each athlete with an individual stroke filming of a strokes and turns. There will be magnified emphasis to kick training both volume and intensity in this period and continue through the end of December.

- II. Quantity 80% / Quality 20% / Period of October 12th thru December 26th – 11 weeks – Phase I
 The emphasis will be on developing our foundation for the swim year. The program design will focus on long-range growth and development with special emphasis on the En 2 and 3 levels of the energy system. We will have 50% on the En 2 category and in the En 3 levels. Then 30% on the (Rec) and EN1. Then SP1, SP2, and SP3 areas will have the remaining - 20%. We will back down for few days near the Mid-Western meet, exams, and Kerr McGee meet. The percentages are based on weekly training cycles.
- III. Quantity 60%/Quality 40% Period– December 28th thru January 23rd –4 weeks – Phase II
 The emphasis for this period will be to evaluate where we are at as a result of our performance in meets and training results. We will develop a Christmas schedule that will provide for maximum training time and some quality time rest and recovery over the holidays mentally. We will get back to the normal training schedule January 4th. During this holiday training time our emphasis will stay the same. We will take this 3 weeks and emphasize 60% on Quantity and 40% on Quality. That means we will have 50% on EN2 and EN 3 and 10% on SP1 and 10% on SP2 and the final 30% on (Rec) and EN 1 and EN 2. These percentages are based on weekly training cycles. Our volume will be up in pool for all parts of group 30-50% per week because of all athletes on double while out of school.
- IV. Quantity 70%/Quality 30% – January 25th thru February 13th – 3 weeks – Phase II
 The emphasis for this period will be to balance EN 2 work and EN 3 work, and SP1 and SP2 becoming a higher priority. We will also pay attention to preparation for each meet in this period. We will have 30% emphasis on E Level Training. We will spend 35% emphasis on anaerobic work, EN3 and SP1 areas equally, 10% on SP2 and SP3 and the final 25% on (Rec) – EN1. Some attention is given to taper and rest. Proportional decreasing will occur in areas (kicking, pulling weight training, and amount of deck program). We will be watching very closely recovery amount of high level performance work. The first two weeks of this Phase will be designated as over reaching work. The goal is to do everything better than we have ever done. We will have an increased emphasis to quality of all training areas and increase focus to quality of kick training and pull training as well. Really will elevate breaststroke training for all breaststrokers.
- V. Quantity 40%/Taper 40%/Rest 20% – February 16th thru March 15th – 4 wks– Phase II
 The taper emphasis will be 40% of what will take place. The quality emphasis will be 40% and rest emphasis is 20%. Rest is different for sprinters than it is for middle distance and distance swimmers. Sprinters should be passive and have limited activity to very specific high performance repeats. The middle distance and distance swimmers should be active rest, and they maintain a level of yardage which is 60% aerobic work with stroke development a race skill level practicing. We must realize the age of the athlete is critical. The pre-adolescents do not need rest taper the same as an older more mature athlete, due to physiological factors as they relate to muscular strength and energy system operations. We also must realize that male and females are also very different, physiological difference in body structure and energy system operations and metabolic rates. Distance swimmers need pace oriented sets and with appropriate rest to train at race speed and more aerobic endurance to protect the base for the longer races. We will shave all at Sectionals for a long course meet followed a week later with our LSC Championships short course yards.

We must be very careful to maintain our weekly training cycle (micro cycle) through this Phase. We must make sure that we properly taper and rest all the different parts of our program. We must keep addressing all aspects of the energy system development, but the emphasis is to peak not to lay foundation. This means maintaining the same amount of sets but, cut back in quantity and stress levels with a great deal of emphasis on recovery. Let the body peak, let energy stores collect and let the mind be ready for the best performances of their life over this 11 day period.

Finally, we must realize the level of performance we are reaching for and what their long range potential might be. Remember we function on a 4 year General Plan that is applied to the person's growth cycle and performance level. We also are on a year's training plan with 3 phases. Phase I and Phase II are steps to getting to Phase III Championships, which is the most important of the year.

B. SPRING/SUMMER PROGRAM – PHASE III – 2010

- I. Inter-season – March 15th to April 3rd – 3 weeks – Phase III – 2 weeks swim/1 week off based on spring break.
 Plan:
 They have one week off after Division I. The emphasis for the two weeks is 90% on quantity type training (Rec), EN1, and EN2. This will be an inter-season philosophy that is low stress high emphasis on stroke and race skill developments. The final 10% will be on EN3, SP3. In these 2 weeks, we will build emphasis on kick training, which will carry thru the next period the highest level of year. We will spend 1 week where kicking will be 60% of total practice time emphasize the importance of legs and core conditioning in the pool.
- II. Quantity 80%/ Quality 20% Period–April 5th to May 8th – 5 weeks – Phase III
 This period will copy the program in November/December, but will be a step-up due to that we are in better shape and higher performers at this point.

III. Quantity 60%/Quality 40% – May 10th to June 5th – 4 weeks – Phase III
 The emphasis will be on 60% quantity and 40% quality work for first 2 weeks. The last 2 weeks we will have emphasis 50% quantity and 50% quality. Refer to winter notes for more explanation of Phase. Kick training will be at their highest level of importance thru this period of the year, both volume and performance level.
 Special Note: World Trial swimmers at this point will enter a quality taper rest phase for Championship and also focus on August.

IV. Quality/Quantity – June 7th to July 10th – 5 weeks – Phase III

The two weeks will be 60% quality, 40% quantity and two weeks quality 70%/quantity 20%/Taper 10%. Refer to winter notes. The first two weeks of this Phase will be our over-reaching phase (2 weeks). The last two weeks of phase will start the taper for the end of the year. We will stop out of pool weight training by July 3rd.

V. Quality/Taper/Rest July 12th to August 15th – 5 weeks – Phase III

The emphasis in this part is 30% rest, 40% taper and 30% on quality. One way we will ensure rest is to cut down number of practices. We will also cut back extensively the out of pool training and we will have dropped weight training. It is very important in this final phase of the plan to provide enough quality work. Please also realize you trained them all year so let them get rest. Stand back and believe you have provided and they have done the work. Now give them a chance to be completely ready in the last 7-10 days before their big meet. Let rest be big factor in plans balanced with quality work based on all elements of energy systems. The older, the males, the more Elite L need more rest. The younger people climbing to Elite, need work and less rest. Please refer to other notes in this period in Phase II.

**Major Sets and Tests Schedule
 FALL – WINTER – PHASE I of 2009-2010
Second Year in “4” Year Plan - 2012 London**

Note: All Saturday AM long course meters during the school year and most Friday nights from November on.

Phase I – August 31 through December 26 – 17 weeks

Note: From August 24 till September 11 has been our inter-season high focus to aerobic training and very special focus to kick training.

Friday	October 2	Wk 4	1. 1650 series-contest #1 1000 Kick – 2 min after 1650
Thursday	October 8	Wk 5	2. Kick 2000 series #1
Friday	October 9	Wk 5	3. 1650 series – contest #2 Kick 1000 – 2 min. after 1650
Wednesday	October 14	Wk 6	4. Max vo2 8x200 free/IM/ short rest-3:00/100 tech 1:30
Thursday	October 15	Wk 6	5. Kick 2000 series #2
Friday	October 16	Wk 6	6. 1650 series – contest #3 Kick 1000- 2 min. after 1650
Wednesday	October 21	Wk 7	7. Goal set 16X100 on 1:30 go 100fly/100I.M. alt-50 free 1:30 tech
Thursday	October 22	Wk 7	8. Kick 2000 series #3
Friday	October 23	Wk 7	9. 1650 series – contest #4 Kick 1000- 2 min. after 1650
Monday	October 26	Wk 8	10. T-30 #1-30 minute swim
Tuesday	October 27	Wk 8	11. A) Stairway set 20X200 Odd 200 IM -Threshold (20 sec off best) Even all out Free 15 sec off best-IM 3:00 or 3:10 or 3:20/ Free 2:00 2:05 10 15 20 25 30
Wednesday	October 28	Wk 8	12. Lactate test #1, 3X200 on 12 min.
Thursday	October 29	Wk 8	13. Kick 2000 series #4
Friday	October 30	Wk 8	14. 1650 series – contest #5/kick 1000 2 min. after 1650
Saturday	October 31	Wk 8	15. A) Goal set- 20X100

Tuesday	November 3	Wk 9	odd all swim 2:00- Even Kick Board-specialty 3:00 16. A) Stairway set 10X500 1-5 #5 and #10 goal- 20 Sec. off best-for developing Elite swimmers B) Top Elite 12X500 1-2-3 descending interval
Wednesday	November 4	Wk 9	17. 5x200 IM/Short Rest Alt. with 5x100 kick 2:00
Thursday	November 5	Wk 9	18. Kick +2000 series #5
Friday	November 6	Wk 9	19. 1650 series – contest #6/kick 1000 2 min. after 1650
Tuesday	November 10	Wk 9	20. Challenge set 500 speed 15X300 1-2-3 – get 500 speed + 3 sex/100 max start 5 sec/100
Wednesday	November 11	Wk 10	21. A) Max Vo 2 3x100 tight interval 1:00 up 1:15 then 100 easy 3:00 Free/Spec/IM do 4 times B) Kick 4x200 all-out 4:00 desc. interval
Saturday	November 14	Wk 10	22. Goal set 20X100 3:00 A) Swim long course – 100 fly/100 Specialty – alternate on odd number B) Kick specialty / zoomers Stick and snorkel/kick will be short course meters
Wednesday	November 18	Wk 11	23. A) Goal set 2X100 2:30-2:00 then 50 easy 1:30 X5 go one round each stroke or 3 rounds spec. 2 Rd weakest stroke.
Saturday	November 21	Wk 11	24. . A) 200 I.M. – 100% - 3:30 4X50 spec. spec 200 Speed 1:00- last 50 1:30. Do 4 rotations of set-100 easy 3:00. B) major kick performance set C) major distance pace set with 100's
Monday	November 23	Wk 12	25. T-30 #2 – 10X300 on 4 th red mark or 30x100 base plus 5 sec
Tuesday	November 24	Wk 12	26. Challenge set– 3X400 1-2-3 / 3X100 avg.- 3 rounds. Tight interval 1-2 on 100's #3 2:00
Wednesday	November 25	Wk 13	27. A) Max vo2 5x100/4x100/3x100 with 200 easy 5:00 B) Kick 2x500 for time 9:00
Friday	November 27	Wk 12	28. Special Training set based on what is needed at this point as relates to December Phase I meets.
Wednesday	December 2	Wk 13	29. A) Goal set 10X100 2:00 After each 100, 50 d/sw 1:30 B) High performance kick set
Saturday	December 5	Wk 13	30. 1x100/100% -10 sec off best 2:00 then 2x50 200 speed 1:00 then 100 easy 3:00 do 8 rounds
Friday	December 23	Wk 16	31. 100x100 Hall Of Fame set.

Note: We will during the weeks of November 30 and December 7 we will do all sets to complement long term but also balance with short term goals of the December meets. Meets are the primary focus.

Note: A. We will increase SP3 Energy System work to 3-4 times/week Nov.2 as part of first set and also at end of practice. We will also be doing race specific speed and broken work will be started, Nov. 5 doing 2 per week (SP2)

B. We will only recover for meets in December not taper or rest or shave.

Note: Stroke inspection – individual stroke review will be scheduled for late October.

**MAJOR SETS AND TEST SCHEDULE
PHASE II OF 2010 SWIM YEAR
SECOND YEAR IN "4" YEAR PLAN – 2012 LONDON**

PHASE II DECEMBER 29 THROUGH MARCH 15 (11 WEEKS)

	<u>December 21 – January 2</u>		<u>Long Course Training Camp – special schedule –</u> Set the stage for Phase II
Monday	December 28pm	Wk 1	1. Distance pace set or 20x100 2:30 100 spec./100 Free and major kick training set for both groups at end of practice AM set.
Wednesday	December 30pm	Wk 1	2. 2X100 on 2:30/2:00 then 100 K/1:30 then 100 D/S Rec. 2:30 do set 6 times – go 1 set each stroke – or 1 Rd. weakest 1 spec
Thursday	December 31am	Wk 1	3. Test Set 4X400 on 15:00 go in groups – L.C.
Saturday	January 2am	Wk 1	4. A) Goal set 8X50X4 on Rd. 1 /45 Rd.2 50/Rd. 3 1:00/ Stroke each set. Do 100 D/S 3:00 after each set. B) Major kicks performance sets
Rd. 4 1:10			
NOTE 1:	January 4 week we will start the injection of broken race, pace work (SP2) and specific Drill work during next 7-10 weeks and more Power (SP3) work. Bring back high emphasis to stroke drills – turn drills, etc. The athletes must shift mind set to stroke effectiveness and turn with speed.		
Monday	January 4	Wk 2	5. T-30 #3 – 10X300 – 4 red mark measure opening of Phase II
Tuesday	January 5	Wk 2	6. Stairway set 30 X 2001-2-3 desc. Interval & Time Alt. with set of 200 IM + 1-2-3 Generous intervals on the IM Sets /the free set tight intervals/possibly spec/IM option.
Wednesday spec/even kick	January 6	Wk 2	7. Goal set 20X100 with 50 easy – add swim
Saturday 30x100	January 9	Wk 2	8. Follow same sets as January 2/ Do distance pace set
NOTE 2:	January 11 week and January 18 week is an over-reaching period. Goal to expect athletes In all elements to ask themselves to perform above and beyond previous expectations. The word, "quality" becomes a dominant factor in all training thru March.		
Tuesday	January 12	Wk 3	9. 2x400 1 tech 1 race than 200 kick race x5
Wednesday	January 13	Wk 3	10. Max VO ₂ set 5x100/4x100/ 3x100/ 2x100
Saturday each 100	January 16	Wk3	11. Do over 100's x5 LC 9:00 300 KDS recovery after
Tuesday	January 19	Wk 4	12. Stairway set 12X500 1-3 Goal 30 sec. off best is good excellent – is 25 sec. off Set interval to provide quality generous #1 tight #3
best.			
Wednesday	January 20	Wk 4	15. Goal Set 5X100on 9:00 300 KDS
Saturday Do 1-2-3	January 23	Wk 4	14. 3X100 on 1:45/2:15/2:00 then 200 D/S on 5:00 3 sets –

- A) swim where each 100 comes down 5 sec.
- B) Do kick set between each set 3 after #3 about 200/300 m

Wednesday January 27 Wk 5
 Thursday January 28 Wk 5
 swimmers

- 13. Lactate Test #2 3X200 on 12:00 min.
- 16. 5000 for time 80% to 100% for distance

To be decided by coach –The rest of the group will go core Th. night set.

Saturday January 30 Wk 5
 D/S 3:00 after each set of 50's think 200 race go 2 rounds.

- 17. A) 8x50 on 40sec/6x50 on 50 sec/ 4x50 on 1:00 100
- B) Distance swimmers do this set 30x100 on 1:30 1:20 1:15 or 1:10 #2 6 Sec. #3 Goal be at 1500 speed.

Monday February 1 Wk 6
 rest phase. Look at lactate test and Plano meet.

- 18. T-30 #4 30 min. swim –Evaluation going into taper-

Wednesday February 3 Wk 6
 Wednesday February 10 Wk 7
 Wednesday February 17 Wk 8
 Saturday February 20 Wk 8
 6x50/45sec/4x50/1:00sec/2x50/1:15 100d/s 3:00 after each set do 2 rounds. Think 200 speed

- 19. Goal set 5X100/ 300 K/D/S on 9:00
- 20. Max VO₂ 4x100x3 1:00 to 1:30 go 200 easy 5:00
- 21. Goal set 4x100 on 9:00 with 300 kds
- 22. goal set max VO₂

Wednesday February 24 Wk 9
 Saturday February 27 Wk 9
 needed

- 22. Goal set 3x100 on 9:00 300kds
- 23. A) Goal set 3X200 IM or Spec 1-3 9:00 200 KDS or what is needed
- B) Distance 15x100 1-2-3 Pac +3 +2 Pace

****NOTE: March 1st week is Sectionals week. We will rest and just get race ready M-T. Meet starts Thursday PM – We travel Wednesday after school.**

Note: March 8th Week is Division I week – We will take Monday off after Sectionals and prepare T-W-Th.

Wednesday March 11 Wk 11

- 24. Goal set –4x100 max VO₂ on 1:05 -1:30
- We will decide on one or two rounds.

NOTE:

- 1) Sectional taper rest starts February 15th week – This week is a small step. Then Feb. 22nd week, there will be a big step down.
- 2) Focus #1 Priority –August Championships
 #2 March Championships are a major step towards long range potential.
- 3) We will all travel to Sectionals Wednesday PM. We will practice Thursday am. and rest all day Thursday. The 800 Free is Thurs. pm.
- 4) We will take the Monday off (March 8th) after Sectionals.
- 5) We all will not practice the week of March 15 after the Division I meet.
- 6) We will resume training and preparing for August Championships the week of March 22. That week we will train M-T-W-TH and take the weekend off.

**MAJOR SETS AND TEST SCHEDULE
PHASE III OF 2010 SWIM YEAR
SECOND YEAR IN "4" YEAR PLAN LEADS TO LONDON 2012**

Phase III

The group will start Phase III March 15th week with a very gradual build up until April 3. We will take the week off during Spring Break and have special schedule thru this period. We will offer practice for those that want and need to train as they prepare for their peak potential.

April 5th through August 15th – 19 weeks- Nationals/Junior National/Senior Zone

NOTE: Sectional Week #16/Nationals/Senior Zone Championship week #18/Junior National Week #19

NOTE: April 5th Stroke Inspection starts (2 weeks)

Monday Phase III	April 5	Wk 1	1. T-30 #5 – 30 minute test-Evaluate where we are in
Wednesday 200kds	April 7	Wk 1	2. Max VO ₂ - 5x100(1:00 to 1:20)200 kds/4x100 300kds/3x100 Alt. free/Spec 2x100 200 kds
Thursday	April 8	Wk 1	3. Kick 2000 #1-Snorkle/Zoomers/stick Breast no pullout no zoomers.
Tuesday Free/IM	April 13	Wk 2	4. Stairway set 28X200 1-3then #4 200 kick alt Free – times/intervals descend in each set. Kick
on 4:00 Wednesday	April 14	Wk 2	5. A) Goal set 10X100 2:30 100 Fly/100 Spec. B)Major kick performance set.
Thursday	April 15	Wk 2	6. Kick 1500 - for time #2-same format as #1
Wednesday	April 21	Wk 3	7. A) Goal set 5X200 I.M. or spec. 5:00 -8:00, 50 ez On 1 and 2 then 100 easy #3 - #4 - #5. B) 5x200 kick the same
Thursday	April 22	Wk 3	8. Kick 1000 series #3
Friday meters 25 kick streamline fast 25 swim tech 200 after each 400	April 23	Wk 3	9. 4x400 LC on 18:00-free or IM then 16x25 SC
Tuesday	April 28	Wk 4	10. Stairway set 12X500 1-3 goal #3, 30 sec. off best #4 & 5 kick or 15X500 1-2-3 generous to tight interval.
Wednesday	April 28	Wk 4	11. Lactate Test #3
Thursday	April 29	Wk 4	12. Kick 500 series #4
Monday	May 3	Wk 5	13. T-30 #6 – 10X300 – 4 th red mark
Wednesday to 1:30	May 5	Wk 5	14. max VO ₂ 4x100x3 200d/s 5:00 max vo2 intervals 1:00
Saturday	May 8	Wk5	15. 9x1500 warm-up 1-2 the 3-8 program #9 recover
Saturday	May 8	Wk 5	16. A) 4X50 on 40 or 45 at 200 speed – use boards 4X50's kick after each set on 1:00 Then 100 D/S 4:00 recovery –4 rounds

Wednesday	May 12	Wk 6	17. 10x100 4:00 100 D/S Go 100 IM/100 Specialty alt.
Tuesday	May 18	Wk 7	18. Major 100's set to be determined
Wednesday	May 19	Wk 7	19. A) Max VO ₂ 5x100 200 kds/ 4x100 200 kds/3x100 then 200 kds 2x100 200 kds

SPECIAL NOTE: A) School is out by June 2 for most – 6 weeks to prepare for Sectionals, 8 weeks to Nationals and Zones, 8 weeks to Division I, and 9 weeks Junior Nationals.
B) We will start (SP 1,2,3) broken race speed performance sets gradually starting May

26 week

over next few weeks – 2 per week to 3-5 per week and back to 2 per week in final couple of weeks into Championship Meet season.

Tuesday	May 25	Wk 8	20. Special EN2 set with Heavy kick emphasis
Wednesday	May 26	Wk 8	21. Max VO ₂ 3x200 IM then 300 kds/3x200 Free or spec. then 3x200 kick followed by 300 kds recovery
Saturday	May 29	Wk 8	22. A) Goal set 5X200 IM or Spec. 5:00-9:00 50 D/S – After 1& 2 250 D/S after 3-4-5 B) 1500 Freestyles 28X100 #1 tech 1 pace/tech-2 pace/1 Tech 3Pace 1 tech 4 pace – two rounds on 1:30

Wednesday	June 2	Wk 9	23. A) Goal set P.M. 20X100 100 Fly/100 Specialty Alt with 100 d/s on 4:00 B) Kick set with fast kick 25 mixed vertical blast off work
Wednesday AM	June 9	Wk 10	24. Stairway set 24x200 1-2-3 or 30X200 - make decision in IM/Free combination and even some peak kick mixed in

NOTE: We are going into our second period of 3 weeks of over reaching at this point for non trial swimmers. Goal to expect and reach within ourselves in all aspects of program – to perform and reach beyond what we have ever done before. We will really elevate focus and preparation to race pace quality training.

Wednesday PM/	June 9	Wk 10	25. A) Goal set 5X100 on 9:00 – 300 KDS B) Kick 5X200 – 4:00 with 50 D/S
Saturday	June 12	Wk 10	26. A) Goal Set – 10X100 4:00 100 easy B) Performance Set OF KICK
Saturday	June 12	Wk 10	27. Special 10x800 set. first 3 warm-up then on set interval and swim faster than estimated time. Allow for 1 min.. Rest minimum.
Wednesday AM/	June 16	Wk 11	28. Stairway Set 12X400 1-2-3 all fun desc interval set up to race and perform.
Wednesday	June 17	Wk 11	30. A) Goal set 5X100 300 KDS on 9:00 – do over B) Special kick Performance set
Wednesday PM	June 23	Wk 12	29. Lactate #4 Test
Saturday	June 26	Wk 12	31. A) Goal set 4X200 8:00 1-2 IM/1-2 Spec or Free then 4x50 race pace and 200 D/S

B) 1500 Freestyles 28X100 all on 1:30 1Tech 1Pace 1 Tech 2 Pace 1 Tech 3 Pace 1 Tech 4 Pace Two Rounds then 20x50 kick all out peak performance.

Note 1: Starting June 28 week all swimmers start 3 doubles /week - M-T-Th PM or M-W-F PM. The T and F PM are the same and W-Th are the same.

Wed/Thurs.	June 20/July 1	Wk 13	32. A) goal set 3 or 4X100 on 9:00-300 KDS B) Kick Performance Set –
Saturday	July 3	Wk13	33. Max VO ₂ 3x100 1:15 to 1:30 200 d/s 5:00 x2
Wed/Thurs.	July 7/8	Wk 14	34. Same as June 30 or July 1

Note 2: After July 5 week we are in Taper/Rest for Swim Year. There will be a major emphasis on flatwall turns for August meets.

Wed/Thurs	July 14/15	Wk 15	35. 3x100 on 9:00 with 300 kds after each 100
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- At this point we will do goal sets as relate to the final taper rest for the end of swim year this will be determined by the final Championship meet for swimmers individually.
- At this point, we are on our major rest/taper quality phase of swim year. We are working for peak potential for the entire swim year.
 - 1) Sectional taper rest – starts July 12th depending on focus in August.
 - 2) Nationals, Junior Nationals and Zones - Taper/Rest – starts July 19th week.

**FOR 2009 – 2010 GUIDANCE
CORRECTIONS – THOUGHTS – ADDITIONS FROM 2000-2009 SWIM YEARS
THIS IS THE SECOND YEAR FOR THE FOUR YEAR PLAN. I TAKE INTO ACCOUNT ALL
WE HAVE DEVELOPED AND LEARNED OVER THE LAST 9 YEARS.**

I. GENERAL THOUGHTS FOR THIS QUADRENNIAL

1. **WORK TO GET ATHLETES TO MAINTAIN A WEEKLY TRAINING LOG. DURING LAST 4 WEEKS OF PHASE II AND PHASE III MAINTAIN A DAILY CHAMPIONSHIP DIARY TO HELP THEM LEARN AND GROW FROM YEAR-TO-YEAR FROM THEIR EXPERIENCE. THEY MUST GET MORE INVOLVED IN FEELING AND KNOWING THE PLAN AND PROGRAM. I HAVE BEEN UNSUCCESSFUL IN THIS. WE WILL CONTINUE TO WORK ON THIS IN THE NEXT QUAD.**
2. **Athletes must be able to teach the skills they want to do. Theme – “You will be able to teach it, so you can coach it and then you will be able to do it!”**
3. **Always remember “Principle of 3” – prevent clutter in the program. Always have 3 reasons why you are doing something, and also look to only having 3 major things in each practice.**
4. **I must bring a higher emphasis to acknowledging the actual training times as it relates to sets and**

goals. We must be more specific to times and relate to goals and ability, short term and long term. Look at recording and grading own sets on weekly and daily basis. Critical in Phase II and Phase III.

5. **Must do a better education in the importance of the Performance Pyramid and how it relates to the Energy System Pyramid. You must all be looking to raise the base of the pyramid up (swim faster more efficiently with a lower heart rate) from September thru January. This means your first sets and aerobic sets during this period are harder and faster with heart rates that do not fit the Energy System Pyramid. This causes adaptation and expands your potential. This same attitude goes with the April thru June period. The rest of the time you're focusing on maintaining your base while bringing controlled focus to expanding the limits of the top of the Energy System Pyramid.**
6. **Be aggressive in lane assignments policy – power ranking – year-round – take charge and assign mid October – Review December/April/June – reassign.**
7. **Pull training is important and we will have a major emphasis in Phase II and Phase III. Utilize a.m. practice in Phase I & II to accomplish this. Pulling will be planned in all facets of energy system, training and strokes. Also look to use all variations of equipment: full= Paddles-Buoy-Bands -Partial= Paddles-buoy or Paddles, Band, or Paddles only or Paddles-Zoomers or Band-Buoy use more snorkel work.**
8. **Kick training – must be major emphasis in all phases but special emphasis in early part of Phase I and III-format options:**
 - a. Zoomers training – all variations with boards-paddles/swimming- Streamline above and below water.
 - b. Snorkel/zoomer kick sets – Streamline with boards/with sticks.
 - c. Wall Kick – for variety – primarily breaststrokes
 - d. Vertical kick training sets mixed with other type kick sets.
 - e. Underwater kick – On Stomach, Back, right side and left side.
 - f. Dedicate 6 weeks in fall and spring (Sept/oct), (April/May) to heavy kick training.
 - g. Put more over distance kick in workouts mix with short fast kick and use in first set or mix with main set or as last set.
 - h. Start and Finish practices 1 to 3 times per week with an intense and fast kick set.
 - i. Blast-off kick sets along with vertical kick sets. More of this will be in June/July and some on Saturday a.m. throughout the school year.
 - j. Kick sets with shoots consider this for this quad plan.
 - k. Mix kick repeats with swim repeats. In major training sets. Both endurance and lactate.
 - l. Breaststrokes do all kick with stick not with boards.
9. **Work with more awareness that there are some differences between elite females and males (post puberty athletes). Need to reflect this in workout design. Realize women flourish under higher rep -short rest type training and the elite male needs to be more focused on higher speed and will need more rest and active recovery in workout design of major sets either endurance or lactate.**
10. **Have athletes develop personal training time at home: Emphasis to being self-reliant and are building their potential.**
 - A. **Theraband program daily for shoulder stability.**

- B. Family needs to plan weekly nutrition cycle and daily routine that maximizes training and creates opportunity to perform.**
 - C. Proper icing after training sessions and proper anti-inflammatory use.**
 - D. Encourage extra dryland exercises, such as pushups and core work, at home.**
11. Really bring an emphasis to the quality of the deck program in all facets:
- A. Leadership by athletes in conducting and by example
 - B. Concentration to form more than number of repeats – Better to do less correctly than more poorly.
 - C. Allow and expand the use of personal trainers to provide a more centered strength program to focus on the individual.
12. Backstroke turns must get swimmers to really be aggressive to attacking the turn.
- A. Roll over and take full swim stroke to go thru turn
 - B. Dive thru and tumble
 - C. Train and practice the underwater swimming feature of this turn. Develop dolphin kick or fish kicks. Get swimmers to practice and train how they will race. They need to define # of kicks off starts and turns and define for appropriate races, whether for long-course or short-course.
- 13. Increased emphasis and weekly commitment to flat wall turning skills – train with walls – Helps develop breast and fly turn for all, critical to those moving onto Olympic Trials and National level competition. Flat walls are required in all international competition.**
- 14. Develop the back to breast flip turn (not open) as the primary turn of choice for 200 I.M./400 I.M.**
15. Look to use break down drills for constant stroke development – must be more specific what to do and why and how it works. Use 1-2 core drills for each stroke.
- A. Backstroke – one arm drills helps feel body passing hand – Double arm drill for defining the catch position and prevent over reaching– wrist and fist drill to enhance water awareness.
 - B. Speed drills – muscle recruitment not technique – incorporate one arm and fist drills with speed drills.
 - C. High emphasis to hips and core strength as the center point to stroke development and power.
 - D. Expand the use of mid-pool turn work and especially tumble drill sets – use double spin
 - E. Free – use fist drill – single arm drills – with opposite arm up or down- high elbow/wrist drill.
 - F. Breast –one arm drills use crisscross Dbl or single arm / use 2K-1Pull or 2P-1Full or 2K-1Pull-1Full, etc.
 - G. Breast – Pull or swim or kick with breathing every 3 or 4 cycles to stress head position and body alignment/use snorkel- keep head in body line.
 - H. Fly – use 1 arm drill / with full stroke-various combinations use snorkel to help head in body line kick drills.
16. Develop and use more specific power/endurance race speed in pool (SP1-SP2)
- A. Distance people use 25's, 50's and 100's on short to medium rest high number repeats at race pace, race tempo and stroke count
 - B. Paddle/Zoomer/Snorkel combinations to race to full speed as training element – go faster than goal speed. Primarily 25-50 distances some 100's.
 - C. Develop a shoot program in later part of Phase I and all thru Phase II and III. Put this work at end of practice –Evaluate this try to develop thru this quad at the most Elite level of the Elite group.**

17. **Backstroke watch breathing of athletes – relaxed facial muscle deep – not short – shallow rapid breathes. Keep kick inside body line. Work on steady shoulders and head. Focus on hip rotation. Focus on sweep out then press palm out and down on water then lift of water and throw water to feet. Hip rotation critical. (sweep)**
18. **Breaststroke Kick – must provide directional force and they must get feet turned out. Timing of kick critical – watch to not let be late – drive down-out-back, don't point toes at finish kickback. Keep kick line-up to drive hips down pool-directional force. Body line big.**
19. Breaststroke Pull – Stress crown of head to finish line – hands in same catch position as free and fly. Emphasize that elbows and shoulders must always be moving to the finish line. Hands must scull outside elbow before sweep down and in motion. Focus on this in catch/sweep and recovery phase. Lift lower to upper back and then lower back as drive kick – Shrug shoulders lung and drive forward line up with water surface.
20. Additional technical points in breaststroke to help swimmers to pay attention more to. Hands finish on water. Stress lifting with lower back up and forward and driving forward – not going up and down. Bring focus to head steady line of vision below the palms as you go forward. Get head to stay in body line. Stress thumbs up on sweep in and finger tips forward on recovery. Relate that every stroke is like a start – “dive through the hole out front”. Sneak in the breath – in the body line on the late part of in-sweep.
21. Must increase and follow through with a great deal of stroke specific training and break down sets for breaststroke. Special emphasis to training pull and kick and not just practicing stroke.
22. **Important ideas to consider – training aids – to increase usage.**
 - A. **Snorkel work– Be more creative use in kick sets and pull sets – doing.**
 - B. **Shoot training thru all the Elite Phases.**
23. **Work on freestyle kick – keeping feet in water. This is critical to maximize results of this driving force.**
24. **When doing high level performance sets – same intervals – spread the “A” Team throughout the pool to lead and encourage the rest of the group. Promotes team building and encourages all to higher level of accountability.**
25. **Major stroke issue to be considered with all strokes. Head is in bodyline-shoulders and elbows always moving towards the finish line.**
26. **Must do an overall better education of the importance of pre-race warm-up and equally important better education and use of proper warn-down after races.**
27. **VIP - All swimmers need to be on Vitamin C, Iron supplements and 1500 mg calcium with 400-600 IU for females split into two doses/day. Males can use calcium with “D” but 1000 mg calcium and 400-600 IU of “D” –also split into 2 doses/day - taking iron with vitamin C increases iron absorption. Females need to be on iron year round after age 13, increase during hard training. Need to better promote through year.**
28. Bring more structure to first set by using intervals also look to shortening first set and then doing same set as the last set.
29. Major emphasis to the women's team not shaving in Phase I &II in prep for March Championship and the same procedure in Phase III.
30. Do more max VO₂ type work and also be a risk taker.

31. Really need to be very conscious and demanding to training speed and race skills all the time. Must swim at speed and skill that parallel meet performance. If need to adjust interval up to do this. If need to do over do so. It must be REAL.
32. Commit to the Phase I&II&III AM practices on Monday AM. Do 50% of workout all kick training use all levels of training focuses T-Th 30% to 40% of workout. This applies during school year. In summer months, there will be a major focus on kick training T-Th and have kick training in all practices.

II. PHASE I REPORT: THINGS TO ADDRESS-THOUGHTS FOR 2009-2010

NOTE: PHASE I IN YEAR TWO OF THIS FOUR YEAR JOURNEY. What you read in this section is what we have learned from previous years of Phase I and what we want for this quad (2008 – 2012). This year we will be stepping up the intensity to all variables in this phase.

1. Maintain a high priority to stroke-turn-development. September - October should be high emphasis to change and expanding understanding of skills and development of skills. Athletes will be able To Teach It - Then Coach It - Then Do It.
2. Stay committed in September – October to 40-60 minutes aerobic sets daily also look to once or twice per week to shortening this and put at beginning of practice and other part at end of practice. Should challenge threshold intensity 3 per week in the first six weeks to drive performance levels for sustained Periods. Work to get them not to measure so much by effort but what are the times they are generating and are they relative to improving their energy system based on goals or merely maintaining level they are at. Use more structured sets – specific intervals and closer supervision and monitoring of pulse rates and actual times.
3. Need to have speed/power work (SP3) all through Phase I. Need to really have emphasis to the quality of this work in October and in. November/December really need to increase amount per week. The quality of performance in EN3 and SP1 in November/December must be measured. Need to monitor times and stroke counts. If not at expected level extend rest, get performance level.
4. Lactate and major endurance sets come into plans mid October. Start bringing Anaerobic – threshold work in two per week late October and in November 3 times per week.
5. Continue to use fly training inside our goal sets for all. Blend fly training with breast good mix.
6. Specific weakness areas to address with more details:
 - A. **Breaststroke training for breaststroke and I.M.'s must increase – kick volume needs to be brought up to help performance.**
 - B. Need to have middle distance sets for all in the 200-500 range medium rest to demand higher level performance must reach 90% of race speed or 1650 speed/1500 speed. Look at best times and also goal speed for this year.
 - C. **Look to keep turn work included in program all through year at least once a week. Really bring emphasis to breast and fly turns – hot walls and flat walls. Bring focus to emphasize the rotation and quickness of hands and knee lift – tuck knees up as hands go to wall not after hands on wall. Pinch butt muscles and keep head down and eyes in water. Hands attack walls when there are flatwalls.**
 - D. Really need to be committed to underwater training for all especially back stroke/breaststroke/ fly. Be creative, be attentive to coaching and enforcing quality.
 1. Larger emphasis to streamlining – decreased frontal resistance – Head truly in body line.

2. Paralleling the bottom.
 3. Angle off walls and depth of turns very important. Get deep quick – parallel bottom. Use combination of dolphin kicks to flutter to maximize this area of race. They must be adapted to the person innate abilities. They must use daily.
 4. Pay attention to the timing of starting the dolphin kicks after start and turn or flutter – prevent drag. Many start too quick. Streamline first then engage kick.
- E. Really work on setting up turns. Focus on the last 3 cycles into turns. – Charge the walls by strength of pull are under water hand speed coupled with building leg drive. Breathing pattern adjustment to wall based on short course, long course and race length and speed.**
7. Maintain the use of whistle drills for reaction also continues to develop ongoing use of speed drills. Bring a higher emphasis to quality of SP2 work sets and SP3 sets. – Do more 25's starting mid pool to provide 2 turns or a turn and finish.
 8. **Need to do a better job of teaching warm-up and warm-down procedures and value. I must bring out the importance of being prepared and also recovered to move on. This varies by time of year the amount of training. Athletes take charge of what is needed to be done not just simply what they like to do.**
 9. Improved teaching and coaching on how to establish races – control setting up race both in the stroke tempo and technique and finally energy output. Focus on second 25 and 50's of race establishing race pace. Prepare strategy for energy system and breathing patterns. Important to teach and promote frequently.
 10. We are doing a better job with distance kids better on over distance training and also training at Race pace. Need to maintain theory of providing needed rest to accommodate race pace using 25-50-100-200 type repeats. Continue the emphasis of building races (even splitting) must train and practice daily with this theory.
 11. Distance people need more repeats at long distances – 1500 and up to 5000. Multiples in the same practice with sustained intensity. Area that needs elevated emphasis. In this new quad.
 12. Need to improve knowledge of understanding of stroke (cycle) counting and it's consistency. Also what race tempo is and the necessity to train at this tempo on daily basis. Bring tempo and cycles together in understanding – must be efficient #1 with best tempo.
 13. Core/Hips are the center of the power of all strokes. Really must emphasize use of core/hips and how they play into all strokes
 14. Spend time getting athletes to take ownership of their programs. They need to develop the ability to coach themselves.
 15. **In the final analysis of program – Prevent clutter trying to do too many things – keep things simple so they can follow and measure. Be more willing to repeat sets, but change year to year the core sets. Must remember repetition is the best educator.**
 16. Talk to team on what 70% / 80% / 85% / 90% / 95% / 100% effort means vs. performance. Do this by more specific directions by identifying this by 100, 200, 500, 1650 speeds and also pulse rates.
 17. Practice Wed a.m. Thanksgiving week also offer Thursday AM for Short Course National and Junior National swimmers.
 18. First set training when you are doing first round should be all about skill. Each round should

involve a major step-up in intensity to provide a ratio of 50% training and 50% skill emphasis by last round. Remember the faster you can swim and call it easy the greater your potential. You get there by pushing it harder at beginning, you will adapt and become more efficient.

19. When training I.M. in practice, swimmers tend to not work as hard on their good strokes. (They use as a physical and mental recovery). We must push our self to work hard on all strokes and bring special focus to our strengths to maximize their potential.
20. **Swimmers must learn the importance of CO₂ tolerance. This is most critical to Fly, Backstroke, Breaststroker and I.M. You spend a great percentage of the race with the inability to breath by pure nature of the stroke and turns. This brings a big importance and focus to hypoxic training. For swimmers who will be using the underwater racing techniques in free, back and fly races this is very important. We must set up sets create confidence and tolerance to this status.**
21. Start AM swims in late September for Short Course National and Junior National swimmers and voluntary for others.
22. New-VIP-Need to develop two weeks cycle starting in late October using Wed. /Thur. or Sat. Practices with a max vo2 typeset.
 - A) 4x100 1:00/05/10/15 100 on 3:00 do 1 to 3 rounds. Could be as many 6x100 if so only 1 or 2 rounds.
 - B) 12x50 on all out 200 speed 1 or 2 rounds – use short or long rest.
 - C) 4x200 or 3x200 2:00/05/10/15/20/25/30 do only 1 round.
23. Friday nights in Phase and early part of Phase III do a 400 set. Break into heats and race 400/500 Free and a 400 I.M. do 3 to 5 of these repeats on 15 minutes with a recovery swimming mixed with quality kick. To create racing attitude and keep focus to high level performance with over load to legs training.

III. PHASE II: THINGS TO ADDRESS – THOUGHTS FOR 2009-2010

A. THINGS TO MAGNIFY:

1. **Elite level athletes need to look at going the extra mile for their potential. A hard look needs to be taken after the December meets to evaluate what we need to do in late December and early January in training (racing and skills).**
2. **Distance(EN2 and EN3) training needs to take a more detailed and specific emphasis to quality /quantity approach to set design.**
 - A. **Major sets with more specific speed goals by athletes.**
 - B. **Be attentive to stroke cycles and tempo technique combined with time and performance.**
 - C. **Sets that challenge the mind and body to push beyond.**
 - D. **Break sets and repeat length to magnify and identify with race speed.**
3. Be sure to cycle in various types of kick training along with elevated emphasis to pull training all throughout Phase II. Critical to use all types of kicking, be creative. Really expand specialized breast kicking. Mix kick performance in swim sets. The same efforts in pulling sets.
4. We will continue to develop our sets for the majority with I.M. principles with a special emphasis to the core of the I.M. (Bk and Br). Look for some creative and challenging sets for 400 I.M. emphasis. Must keep in mind you must train double the distance to maximize potential. Make use of in Phase II and Phase III special sets on Thursday, Friday p.m. or Saturday a.m. sets centered on I.M. over-training or EN 3 or SP1-2.

5. **Really need to start pushing power training and lactate training and cut back on quantity of sets to deliver appropriate performance level and create training impact. Look to more specific max EN3, SP1 and SP2 sets for quality, the intervals will expand to be at correct speed and technique. This needs to take place the second week of January forward.**
6. Create a greater emphasis and expand the volume of backstroke, fly, and breaststroke training up to 30% of weekly volume, as it applies to the more elite athlete and physically mature athlete.
7. Keep a high emphasis on stroke mechanics and turn-Monitor stroke cycle counting for fly – breaststroke –Tempo check and cycle count for free and backstroke – monitor more closely during training and racing. Tempo for all race distances needs to be consistent in practice to match meets. Do more measuring the last 25 or 50 of repeats and early stages promote consistency inside of repeats.
8. **Program ideas that really need to be increased in use during Phase II and III.**
 - A. **Underwater training for all – special focus to breaststrokers/backstrokes and flyers for CO₂ tolerance.**
 - B. **Whistle drill type sets – Every Wed. night and at least one a.m. practice per week.**
 - C. **Mid-pool turn sets with more focus to speed of rotation.**
 - D. **No breath 50 sets-CO₂- tolerance.**
 - E. **Toughness set at end of practices – teach them they can win when they are totally exhausted. Ideas to use are – underwater sets, fly sets, kick sets, swim sets limited to no breaths.**
 - F. **Do relay exchange sets, mixed with whistle drill and turn sets at race speed.**
 - G. **Develop and make consistent use of blast off vertical kick trainings and wall kick training combine sets with stroke skills.**
 - H. **Pull training needs to be evaluated weekly with all the other things we are doing because we tend to get away from appropriate amounts. We must have it.**
 - I. **Make better use on Thursday PM, Friday PM, and Saturday AM of broken 200's for race specific training that emulates speed-stroke tempo-turns, rehearsal and train.**
9. Tips for coaching at meets:
 - A. If possible, stay high for viewing
 - B. ASK QUESTIONS – FIRST OF ATHLETES, GET THEIR THOUGHTS - ENGAGE THEM THEY WILL LISTEN BETTER.
 - C. Emphasize good parts of race first and close with plan of action to address bad points.
10. After winter Sectionals need to take Monday off to provide physical and emotional recovery – VIP – winter only.
11. Must give specific stroke drills on steady basis during taper rest phase of Phase II and Phase III.
12. Really get sets that get them to swim at race speed at all distances 100/200/500/1650.
13. Really teach distance swimmers to build kick into turns. Streamline at emphasis transition with arms and light kick. This should change after the mid point of race. Start the use of legs coming out in the final 100 to 200 of race with more definition.
14. **I must give higher emphasis to warmdown after practices.**

B. GENERAL GOOD POINTS TO RETAIN AND/OR MAGNIFY IN PHASE II

1. Maintained first set integrity through taper and rest. Provide taper of the main training sets, not worrying about rest in Phase II.
2. The idea of massage therapy is a good idea. Offer mid October through March and again late April through July. Provide massage therapist on Saturday s after last training session for the week.
3. Setting specific training times on sets and my expectations for individual athletes.
4. Snorkel/Paddle/Zoomer sets - more use at the SP1 – SP2 level.
5. We need to challenge swimmers to keep moving up the ladder of peak performance. We must refocus and adjust goals monthly and be willing to re-assign lanes more frequently.
6. Stop weight training late January; no later than early February.
7. **Promote following collegeswimming.com for keeping track of what is going on college swimming.**

C. GENERAL WEAK POINTS: ELIMINATE OR THINGS TO ENHANCE PHASE II AND III

1. We need to focus on keeping athletes healthy, in December, January, February, and March. Must react to slight symptoms – do not wait – we are torn down from daily schedule and training loads. We are prone to infection. Encourage flu vaccine to group in October.
2. We must really emphasize and direct proper warm down and recovery work after practices, but even more important at meet after races. Consider using structured warm-down like we do with first sets.
3. **We must be careful in Phase II or III when preparing for long course championship meets. We must cut down the racing in practice in the final 10 days more rest is needed for long course meets.**

D. FEATURES TO MAGNIFY THE PROGRAM IN PHASE I, II AND III

1. Use set 10X50 – no breathers or only 1 or 2 breaths options to consider zoomers – zoomers and paddles-long rest.
2. Tougher major endurance sets (15X500) (10X800) IM, (30X200) or 6000 set size for free or IM/ specialty combination – super challenge through January and even some in November Phase I. Consider using 9X1500, 10X800 for the most Elite distance swimmers in Phase III .
3. Core sets for Thursday p.m./Fri. p.m. or /Sat a.m.:
 - A. 4X100 fly/200 IM/4X100 Bk/300 IM/4X100 Br/400 IM. 100's go 1-4 moderate to long. Then 40 X 25 zoomers at end underwater/flykick or dolphin on back kick.
 - B. 30X100 1:30 (base) some faster interval. Do odd 100 – 10-12 sec off Pace Even at Pace or 1-2-3 pace this is for 1500 Free-Long course sets. (+10 +5 pace)
 - C. 15X200 1 – 3 #4 D/S #5 Race Performance specialties or IM. – Rd 1 Fly/Bk Rd2 Fly/Br and Rd 3 Fly/Free – 4:00 to 5:00 interval
 - D. **Really develop Thursday PM to have heavy fly training and challenge.**
 - E. **Keep balance in these- sub high performance with kick mixed in..**

4. **Athletes must have specific weekly and daily training goals. Also evaluate at end of each training cycle – they need to take more ownership for what they are doing. More use of the system of having them verbalize their grades on all sets in practice, use 1-5.**
5. Test sets / Core sets Friday p.m. or Saturday a.m.
 - A. 16X50 1:30 8 Free/8 Fly
 - B. 4X200 8:00 – Options: 100 Fly/100 Back or 100 Fly/100 Breast or 100 Breast/100 Free or 200 IM.
 - C. 4X400 IM or 4X400 on 15:00 – with set of SP 3 25: Between repeats-Either kicks or swim.
6. Continue to do a lot of kicking without a kickboard by using a stick to stabilize and make better use of snorkel. Plan under water kicking sets.
7. **Must get the athletes to go back at end of Phase II and refocus to stroke technique as we did in September/October. They must take on the role of teaching and coaching themselves daily on skills, get them to use what they know, be actively involved, draw answers from themselves.**
8. Reflect in January on training assignments of each swimmer. Be willing to reset cut back. Also, adjust lane assignments to reflect Phase I improvements.
9. For distance swimmer (Elite) – do 5000 for time three weeks apart – January - February.
10. Put SP-3 sets at end of practice at least once/week during this Phase II and Phase III.
11. **In the last 3 weeks of Phase II and III, do not worry about finishing practice. Worry about doing it right. Spend time correcting, talking and if needed – repeating.**
12. Much more use of tumble drills – turn sets – relay exchange –in Phase II.

IV. PHASE III – THINGS TO ADDRESS-THOUGHTS FOR 2009-2010

A. GOOD POINTS IN GENERAL FOR ENTIRE YEAR AND PHASE III

1. **Maintain first set volume and pulling through taper phase. Look to use more structured first sets to keep more measurement and focus. Really need to demand focus and more determined attitude in first set. Look at making first set shorter 1500-2000 but then doing it over at end of practice. Also more usage of 50 and 100 repeat. It also very useful at meets due to the crowded pool conditions. Good transfer.**
2. **Continue the focus on swimmers warm-up at meets and warm-down properly. Stress to use a structured set in both these situations. The body is creature of habit. It reacts to over learned stimulants.**
3. High emphasis to IM work for training purpose and also stroke development. Expand weak stroke training and fly training to all. We also will do more stroke specific training for All athletes in Phase III.
4. Breaststroke training program in the pool.
 - A. A lot more pull work/kick work – all kick with stick.
 - B. Pay more attention to stroke tempo, during races and training this is major factor in long course races. In taper, do more specific tempo work with high performances but most hold stroke count. This is very critical to long course success – Stress to build tempo in race and in each 50 without adding cycles.

5. Fly training program in the pool
 - A. A lot more sets mixed with fly
 - B. Fly kick training with snorkel and zoomer
 - C. More focus to swimming Fly in training situations with proper breathing patterns
 - D. Pay attention to stroke count and tempo. Focus on efficiency first.
6. The final Dr. J. talk in July. Have all swimmers explain/coach on what are the keys to success at Sectionals and about competition. Let people who have won races speak first, then Top 8, then Top 16 then Dr. J. and coaches.
7. Look at dropping weight program in early June completely. More focus to what we are doing. No later than July 1.
8. **Need more specific flat wall turn teaching, practice, and training.**

B. POINTS THAT NEED TO BE EMPHASIZED AND DEVELOPED THRU YEAR AND PHASE III

1. Be more focused to work levels (pulse monitor-actual speed of repeats) and emphasize skill work during the first set – closer supervision.
2. Middle distance and distance people need to swim at pace and performance level in major EN3 sets. Need to relate speeds to necessary performance level in competition. (90% of race speed)
3. **Kick-training will be a primary part of all weekly cycles. Especially EN3 and SP (1-2-3)-create an appropriate blending with swim part of set. Kick training in all facets of energy system be 50% or more of practice on T-Th AM and 30% on Saturday AM. At least one PM practice 50% as well all thru June.**
4. Broken and higher performance work in p.m. practices in mid - June and also look to go in heats to accommodate quality and team support for each other.
5. **Make sure that in April/May major focus and commitment to leg training.**
6. Need to have more commitment to rest for those at the most Elite levels who trained at highest level thru May and June. This requires longer period of rest that should start early July. Have all switch to 3 doubles after July 1. Remember all Elite group are focused on August.
7. I MUST BE COMMITTED TO CUTTING BACK VOLUME OF SETS AND EXPANDING INTERVALS AFTER MID JUNE – YOU MUST TRAIN FAST AS PRIORITY OVER VOLUME.
8. Creative use of diving well in June/July AM practices for middle distance down swimmers.

VI. MAJOR IDEAS TO BRING FORWARD: TO TOTAL YEARS PROGRAM - SUMMARY

1. Underwater dolphin kick for free-fly starts and turns. Develop those that can use the under-water swimming for fly races off starts and turns. Start developing fish kick. Get the education process started in age-group program. Must design set with the opportunity to develop (first set/last set in practice/SP 1-2-3 work area.
2. Hips and core are center point of stroke development. Bring a greater emphasis to flexibility in total body to enable freedom of hip rotation and ability to access maximum strength and power. Remember core lead all stroke development.

3. Breast stroke Tips

- A. Steady head – in body line – Eyes down and under hands as they go forward.
- B. Lift elbows upward and forward – be committed. Jump hands up and forward, one movement – parallel to surface. Work to get fingertips forward and thumbs up in recovery phase of cycle. Dive through hole out front, like start off blocks and then immediately parallel bottom with body line.
- C. As you go forward, press with the chest forward and down as you shrug your shoulders – drive with legs.
- D. Drive down with kick - fast feet and heels. Remember directional force with kick as relates to hip drive. Do not let feet get too wide at catch. Drive hips up and pull hips forward to assist the lunging forward of full body.
- E. Kick – finish of kick is when the heels are up in catch position. Keep toes towards bottom and lift heels up quickly. Do not point toes at end of push phase till heels up.
- F. No sudden pitch changes during the sweep and pull-in phase. Hands, same catch position as Fly as you engage the water. Must be explosive when you execute catch/sweep and start the inward pull action.
- G. Do a lot more stroke cycle counting for breast stroke and fly this was big help – must go faster by better strokes and power.
- H. Tempo training for 100 and 200 distance type races – but consistent stroke count.

4. Freestyle Tips

- A. Must keep head in body line.
- B. Great emphasis to hips and shoulders steady – be a missile.
- C. More knowledge and understanding of breathing patterns for races.
 - 1. Bilateral at least once or twice per lap (different for 25 yards or 50 meters – course pools)
 - 2. Establish specific breathing spots for 50 free and number of breaths.
 - 3. The greater intensity of kick requires more breathing.
- D. Freestyle turns must dive through turns. Maximize momentum to wall – tumble speed.
- E. Pull pattern must have no sudden pitch changes. Should be finger tips toward bottom on all race distances and in the stroke pulling pattern should be as vertical as possible. Focus on directional force – front to back – hip speed. Catch outside shoulders – big hands. Empower hand and forearm as paddle – body travels over hand – anchor – Theory – 1) get wrist up over hand 2) elbow up over wrist and hand 3) then start pull phase.

5. Backstroke Tips

- A. Relaxed facial muscles – breathe deep from diaphragm – be cautious of short shallow rapid breathing.
- B. Steady kick, but vary intensity of kick but not tempo - understand the use of – shallow and deeper kick use or soft and hard.
Build legs through race.
- C. In Backstroke pull focus press hand on water as you execute the sweep out and execute the catch – get elbow up over hand before
Pull and push phase.
- D. Head steady – rotate from hips and catch outside shoulder – drive to catch and propel off arm strength and sweep out and up, no sudden pitch change and throw water to feet – Thumbs up recovery – relax the arms during recovery – prevent muscling the recovery.
- E. Backstroke body position better job of lifting from the core and pec area to get up then press with center of upper back (power button) –Shoulder shrugged forward. This brings up hips and really makes the back more effective and less overload to the legs. If hips are low or kick too deep you overload legs. Press belly button to spine up then lift from belly button for body position.

6. Butterfly Tips
 - A. Must train/teach breathing patterns greater emphasis to hips. Sneak a breath inside natural body line and land on water.
 - B. Teach and develop the underwater kicking and managing it by #of kicks used on each start and turn. They must learn-think by # kicks.
 - C. Press with chest/ forward/down as shrug shoulders as you drive thru the hole at front after you have landed – parallel bottom – hips drive your upper body to finish line – the gutter of the pool – pinch butt cheeks as driving kick down.
 - D. Take all the principals of free and breaststroke and adapt them in fly stroke.
7. Pulse counting should become a greater use in daily workouts with all sets. Athletes need to be measuring times, heart rates to know what is really going on – not just what they think.-In all sets. Start count with “0” and use 10 sec. count as protocol Numbers will range from 15 to 30+ (IN actuality multiply by 6 and you will get your normal pulse counts for 1 minute). Monitor where they are at when possible 1:00 later and 2 and 3 minutes see recovery process.
8. **Always evaluate decisions against the issue of being short-sighted vs long-sighted. What am I doing and why? What is the long-term advantage? Short sighted decisions frequently create limits to long term potential.**
9. **At the Elite level, let swimmers pick their own Division I entries at both Spring and Summer Championship and their Zone events. Allow summer Div. I, swimmers who are going to Nationals, Juniors or Zones not to swim in Division I, with a focus at August championships as the final performance for this year’s plan.**
10. Maintain the routine in Phase III of Distance Group, Mid-Distance Group on T – Th a.m. all through taper/rest. Be consistent and do not move people around if possible.
11. In taper/rest phase of both II and III maintain the principle of core sets in all areas – keep simple with the ability to measure. Look to decrease mental stress. Decrease volume at the same % of what they are in the main training cycle. Maintain first set at 80% of normal volume. The taper comes primarily in all other areas.
12. Nutrition workshops will remain split Men/Women (Dec/Feb/April) we will have nutrition introduction workshop in October for all new athletes and optional to others.
13. **We must keep in mind what part of the athlete’s development we are presently working on. Look to their long range potential and weigh against short term potential. The Blazer program really is primarily about development. Many of those with world class potential will realize it in their early 20’s if we create the foundation, dream, and opportunity.**
14. **The elimination of performance enhancing suits will affect all areas of preparation. Being fit in all dimensions is important. This also means greater adjustments in the final three. This will be a learning curve over the next few years.**

D. SPECIAL IDEAS TO USE WHEN APPROPRIATE IN ALL PHASES OF PROGRAM

1. 30X100 pace set use two options.
 - a. Add 10 sec above pace and even pace-technique all on 1:30/1:25/1:20
 - b. 1-2-3 #1- 12-15 above pace focus technique
 - #2- 8 sec above pace
 - #3- Pace, intervals descend during hard phase stay constant in quality parts of training cycle.
2. Select Saturday AM goal sets from sets listed below but do selections during that actual training week to better complement plan.

- A. Saturday AM goal set 6X200 on 6:00 or 8:00 with no drill/swim after each 200 -odd-200 IM – Even 200 Spec.
- B. Saturday AM goal set 6X200 on 6:00 or 8:00 with no drill/swim Go 1-2-3 First set spec., second set IM
- C. Max vo2 set of 12x50 all 200 speed 1 or 2 rounds. Goal to be good 200 speed.

Option 1: 4x50 all out 1:30 faster than 200 speed then 8x50 drop interval 10 sec every 2x50.

Option 2: All 12 at same speed medium to long rest must be at 100 or 200 speed.

- D. 20x100 alt swim kick intervals no faster than 2:00 determine your goal for today. This set might be as small 10x100
 - E. 5x100 do over 100's on 9:00 do long course meter and the go to SC meter 4x25 all out kick stick then 200 easy.
- 3. In August inter-season, go all short course-meters. Do the same as primary mid-May till we get out of school. Follow this plan when the bubble is down at Roeland Park Pool.
 - 4. 200-300-400-500- kick repeat must integrate in training all racing sets in all three phases.
 - 5. **Assign one of the assistant coaches to the warm-up pool to monitor swim downs and proper race prep. Critical at Sectionals.**
 - 6. Give greater considerations to the amount rest based on personality, attitude, physical body types, age, background, and short and long-term development. We can possibly rest more - open my mind that lack of suit technology can be a factor that requires more rest. Look first to eliminate amount of practice time.