

Darton College Cavaliers

Swimming and Diving

off-season training plan summer 2007

JULY

Purpose: The objective of July is to continue to develop our conditioning in a large part by increasing the intensity of our workouts. We will be increasing the duration, but we are interested this month in the strength and power gains that we will see with increased intensity.

Cardiovascular fitness: At this stage in the plan, it is necessary to increase our swimming time from one hour to an hour and a half for at least three times per week. Again, this includes time for both warm-up and warm-down. Remember, to make significant gains in cardiovascular endurance, you must maintain an elevated heart-rate of 140-170 for at LEAST 30 minutes of the workout. This should be done by taking your heart-rate for 10 seconds and multiplying by six. The time in the water is not only important in helping you develop your cardiovascular fitness, but it is also important in developing important neurological adaptations that will be necessary for the beginning of the season. These neurological adaptations are going to be important in helping you develop your “feel” for the water.

In summary, JULY guidelines for cardio workouts:

- Must swim three times per week for at least an hour and a half. You should be aiming to have your heart-rate elevated for at least 45 minutes of each session. In definition, an elevated heart-rate (for training purposes) is one that falls in between 140-170.
- If you are unable to utilize pool space, you can increase dry-land cardio training from 45 to 1 hour. The frequency of these workouts should follow the guidelines set for those getting in the water, 3x per week. However, it is not necessary to have as high of a heart rate. You should be aiming to have your heart rate fall in between 130-160 for at least 30-35 minutes of the total hour. The method of taking the heart rate for dry-land training remains the same. Take your heart rate for ten seconds and multiply that value by six.
- With the month of July in mind, you should be performing 13 cardio workouts in total.

Abdominal/Core Strength fitness: You should plan on doing abdominal/core strength exercises four times per week for the entire month of July. These exercises can be done in conjunction with your cardio workouts, or they can be done on a totally separate day. When you do these, make sure that you get at least ten minutes of cardio in before, just to warm-up, and that you make arrangements to get in an appropriate amount of warm-

down as well. Compared to the 13 abdominal workouts that you should have done in June, in July, you should complete a total of 17.

**For July, you will need to increase the weight in your water jugs. If you have filled your water jugs already, you will need to try and fill them with sand or dirt to increase the weight in each.

**For July, you will add in sprints as part of your strength routine. Sprinting, done at all out or maximal efforts is very similar to doing strength exercises. See the descriptions for each week to evaluate what sprints you will be doing for that week.

Again, the order of these workouts is very important and specific. Make sure that you don't jump around.

Week of JULY 1- JULY 7

For this week, you will need to perform three sets of each of the following exercises. Perform each exercise for: 50 seconds, allowing yourself: 10 seconds rest. The rest here is VERY important. If you take more than the prescribed amount of exercise, your heart rate will drop to recovery levels, which we do not want. For sprinting this week, you want to perform 5 :15 second ALL OUT sprinting repeats. Allow yourself :45 seconds in between each one.

- 1.) Superman: While lying on your stomach, lift both of your arms and your lower legs off the ground (keeping them straight, both your knees and your elbows should be locked). Move your arms and legs in an up and down motion. Do not let your feet or your hands touch the ground. Make sure that you point your toes.
- 2.) Wall-Squats: Stand against a wall. Your arms should be at your sides, with a water jug in each hand. Slide down the wall, until you reach a sitting position. Return to the starting position. As soon as you return to the starting position, you should be on your way back to the sitting position. You should not be resting in between squats. If the water jugs hit the ground before you get to a sitting position, hold the water jugs with your arms angled at a 90 degree angle.
- 3.) Front Lunges: This exercise is performed from a standing position with a water jug in each hand. Start by taking a natural step forward with one leg, while touching the knee of the opposite leg to the ground. Once your knee touches the ground, you should return back to the standing position. The entire time that you perform this exercise, your hands should remain on your hips. Like the Wall-Squats, if the water jugs hit the ground before your knees reach a 90 degree angle; hold the water jugs with your arms angled at 90 degrees.
- 4.) Front and Back Stabilizers: The front stabilizer will be performed like it was last month, but instead, this time, you need to find an elevated surface to perform the exercise on so that your feet touch the ground, but so that your arms are on a surface about 12 inches above your feet. To perform a front stabilizer, assume a push-up position, but

instead of resting your hands on the ground, rest both of your forearms on the ground. You want your back to maintain a straight line from your head to your feet. Your knees should not be touching the ground while you hold this position. The process for completing a back stabilizer will remain the same. To perform a back stabilizer, find a chair that has the seat part at or slightly above knee level. Lie on your back while your feet are on the chair. Point your toes and lift your hips off the ground. Your arms should cross your chest while you hold this position. Like the front stabilizer, you want to maintain a straight line from your toes all the way to the portion of your upper back that is resting on the ground.

5.) Dragons: To start this exercise, you need to begin by lying on the ground with both of your arms above your head, almost as if you were going to be in the streamline position, but you want your hands to be shoulder-width apart. Lifting from the abs, you are going to lift your hands and your feet up off the ground. Your knees and your elbows should remain locked while you attempt to touch your toes with your hands. Once you've touched your toes, or come close to it, return back to the starting position, but do not let your hands or your feet touch the ground.

6.) Dips: Find a surface that is about waist high. Stand in front of the chair, but face away from it. Put your hands down chair's seat or arms. Your hands should be placed wide, farther than shoulder width apart. Position yourself so that your legs are straight, and your heels are the only part of your feet that are touching the ground. Start this exercise with your arms locked and lower your hips to the ground until your arms are bent to a 90 degree angle. Return to the starting position, and repeat.

7.) Box Jumps: For this exercise, we are going to increase the distance off the ground. You will need to find a surface that is above knee level off the ground by about 6-12 inches. This will need to be a sturdy and stable area. While standing on the surface, step off with one leg. As you hit the ground with both feet (about shoulder width apart), bend your knees to a squatting position and jump as high as your can. To be specific to swimming, try to get your arms and hands in a streamline position to mimic a similar action to pushing off the wall.

8.) Shoulder Lock: To perform this exercise, you will need to empty out most of the water in your water jug. You will only need one water jug. Start out by lying down on the ground and holding the water jug above your body with your arm locked. Keeping the water jug above your head, move to a standing position. Once you are in a standing position, return to a lying position. No matter what, keep the water jug above your head at all times.

Week of JUNE 8-JULY 14

Same as last week, you want to perform three sets of each of the following exercises. The work to rest ratio for this week is still :50/:10. For sprinting this week, you want to perform 7 :15 second ALL OUT sprinting repeats. Allow yourself :45 seconds in between each one.

- 1.) Slide Raise: To perform this exercise, you start by lying on the ground, with your hands resting on your thighs. The point of this exercise is to lift your shoulders up towards the ceiling at a point directly above them from the resting position. As you lift your upper body, slide your hands down your legs until your hands reach your knees. Hold this position for two seconds, and then return to the starting position.
- 2.) Right and Left Stabilizers: Start this exercise by lying on your right or left side. If you are on your left side, then you want to rest your left forearm on the ground. When you lift your hips off the ground, the only parts of your body that should be touching the ground are your feet and your forearm. When performing this routine, you should be trying to maintain a straight line from your feet all the way up through the top of your head. Once you are done with one side, perform the same action on the opposite side.
- 3.) Side Lunges: Like the front lunge we will perform this exercise with a water jug in each hand. Hold the water jugs in front of your body so that they form a 90 degree angle. Start this exercise in the standing position with your arms by your side. With one leg, step far enough to the side that you can make a 90 degree angle with your knee. The other leg should remain straight. When you have created a 90 degree angle with the leg that you step with, return to the starting position.
- 4.) Cobra's: This exercise is good because it counteracts all the muscle actions in swimming which tends to internally rotate the muscles towards the core. In this exercise, the swimmer lies on their stomach with their arms extended out in front of them. They lift from their core and lift their chest and legs off the ground as much as they can. Hold for a second or two before relaxing and redoing the movement over.
- 5.) Hip Rotation: Start this exercise by lying on your back. The position of this exercise is crucial to performing it correctly. Extend your arms out by your side (so that you make a letter "T" position). Bend your knees to a 90 degree position, and turn them so that one leg is resting on the floor, with the other leg directly on top of it (like you are lying on your side). You'll have to roll your hips a little bit to get in this position, but it is imperative that your arms remain in the "T" position, and that your upper torso remains facing the ceiling. To perform this exercise, you want to lift your hips and your legs, and roll them so that the knee of the opposite side touches the ground on the opposite side. When the knee of the other leg touches the ground, then you return to the position in which you started.
- 6.) Wall-Sits: You should now hold a water jug in each arm while performing this exercise. Begin this exercise by finding a wall and standing against it. Slide down the wall until both of your knees are at a 90 degree angle. Hold this position.
- 7.) Squat Jumps: Squat Jumps are very similar to Box Jumps, only instead of the drop to the ground; this exercise starts on the ground. To begin, put your arms above your head in the streamline position. Bend both of your knees to a squatting position and then jump as high as you can. The trick to this exercise is that when you land on the ground, to return to the squatting position as soon as possible to begin the next jump.

8. Push-Ups: Depending on how strong you are, there are going to be a lot of variations to this exercise. Start out in the beginning of the month by doing regular push-ups. Pay VERY close attention to your technique. If you are not strong enough to maintain body position during this exercise, you can start out on your knees, but by the middle of the month, you should be doing this exercise in the correct position. If you are looking for a challenge, find two soccer-sized balls. The outside layer of the ball should be strong enough to support your weight. With a ball under each hand, perform the push-up exercise. If you can't stabilize yourself on the balls, you need to return to a regular push-up until you can.

Week of JULY 15-JULY 21

Return to the list of exercises that were prescribed for the week of June 3-9. This time, you will perform four sets of these exercises in the following order: 8, 6, 4, 2, 1, 3, 5, 7. This week, the work to rest ratio for this week is 1:00/:15. For sprinting this week, you want to perform 9 :15 second ALL OUT sprinting repeats. Allow yourself :45 seconds in between each one.

Week of JUNE 22-JULY 28

Return to the list of exercises that were prescribed for the week of June 10-16. This time, you will perform four sets of these exercises in the following order: 8, 6, 4, 2, 1, 3, 5, 7. This week, the work to rest ratio for this week is 1:00/:15. For sprinting this week, you want to perform 11 :15 second ALL OUT sprinting repeats. Allow yourself :45 seconds in between each one.