

# UNITED STATES SYNCHRONIZED SWIMMING



## WELCOME TO COACHING MANUAL

Part 2

November, 2017

# HOW TO COACH BASIC SYNCHRONIZED SWIMMING

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## **COACH REQUIREMENTS**

Coaches for a USA Synchro club must meet a few requirements:

- ❖ USA Synchro Professional Membership
- ❖ CPR/First Aid Training
- ❖ A minimum of CCP (Coaches' Certification Program) Level 1
- ❖ Safe Sport Training:

<http://www.teamusa.org/usa-synchronized-swimming/resources/for-coaches>

## **PREPARING FOR CCP I**

<http://www.teamusa.org/USA-Synchronized-Swimming/Resources/For-Coaches/Coaching-Certification-Program/Current-CCP-Opportunities/CCP-Levels-Explained>

## **EQUIPMENT NEEDED**

## **MUSIC**

## **INSTRUCTING BEGINNERS**

## **NOVICE REQUIREMENTS**

## **BUILDING ATHLETES**

## **DEVELOPING A PRACTICE/TRAINING PLAN**

## **MAKING IT FUN**

## **ADDITIONAL RESOURCES AND TRAINING**

### ❖ **Books and Manuals**

- **USA Synchro “Coaching Tips Manual”,**  
(can be found on the USA Synchro website for purchase.)

### ❖ **Online Sites**

### ❖ **Training Opportunities**

<http://www.teamusa.org/usa-synchronized-swimming/resources/for-coaches>

## EQUIPMENT NEEDED

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### Swimsuits

One-piece suits for practice.  
Need all black suits for figure competition.



### Goggles

Many different varieties. Anti-fog. If you practice outside, they swimmers will want something that is tinted (similar to sunglasses).



### Nose Clips

Variety –  
[www.SwimOutlet.com](http://www.SwimOutlet.com) or other sporting outlets



### Swim Caps

Variety – there are silicon and latex Swimmers may have a preference as to which type they will prefer.

Available for purchase at [www.SwimOutlet.com](http://www.SwimOutlet.com) or other sporting outlets.

Need solid white for figure competition.



# MUSIC

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## *Types of Music*

Just about any type of music can be and probably has been used for synchro routines. Routines have been done to Rock, Pop, Rap, Country, Classical, Jazz, Blues, and more styles and types of music. Routines may use one piece of music, or they may use multiple, related pieces of music, usually with a common theme or a similar style. For example, a solo might just use one song, while a team might use several different pieces. Music that is easy to count is a good choice, especially for team routines.

## *Counting Music*

The easiest music to count are selections that can be counted in sets of 8. A lot of music is counted in sets of 8. Sets of 8 exist because that's how musicians give structure to the music. The accent is on count "1", and a lesser accent is on count "5". Other ways to count music include a waltz count, which is a set of 6 (so accent on "1", lesser accent on "4"). For more information on counting music, see: <http://ihatetodance.com/counting-music/>

## *Editing Music*

Almost any music editing software will work for creating music for synchro routines. There is no standard music editing software; most coaches use whatever software they are most comfortable with. A few commonly used programs are:

- ❖ Adobe Audition ([adobe.com/products/audition](http://adobe.com/products/audition))
- ❖ Audacity ([audacityteam.org/](http://audacityteam.org/))
- ❖ Apple's Garage Band ([apple.com/mac/garageband/](http://apple.com/mac/garageband/))
- ❖ Sound Forge ([magix-audio.com/in/sound-forge/](http://magix-audio.com/in/sound-forge/))

To learn how to use these programs, there are many free tutorials online, especially on YouTube.

## *Time Limits for Competition*

Time limits can be found in the technical rules section of the USA Synchro Rulebook (specifically section CP 4.2.4)

<http://members.usasynchro.org/AssetFactory.aspx?did=56270>



## INSTRUCTING BEGINNERS

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Below are some fundamental basic skills, drills to teach the skills, and tips. This is not a comprehensive list of beginner skills, but rather a good starting point. Note that sculling is not judged, but whatever scull a swimmer uses should result in a controlled position or transition, with no extraneous movement of the body, no ruffling of the water, and no travel (unless it is required).

### POSITIONS

Mastering the body positions is fundamental to success. You can teach them on land first, and then move to the water using flotation devices such as bottles or the wall. Finally, swimmers can try the positions with the correct sculls.

#### BACK LAYOUT POSITION



**DESCRIPTION:**

Body is extended, on back, with the face, chest, thighs and hips at the surface.

The ears, hips and ankles are in line.

Feet are pointed; knees extended. Legs are “zipped” together.

**SCULLING:**

*Standard scull.* Hands are at hips, elbows bent. Hands should be wide and flat. Palms face the bottom to stay stationary. The illustration also shows a layout with the arms in a reverse torpedo scull (over the head), which is used for certain figures, including the Dolphin and Back Walkover.

**TIPS:**

Adjust wrists to prevent travel – lift fingertips to avoid traveling foot first, or push fingertips and forearms down to prevent head first travel (more common).

#### FRONT LAYOUT POSITION



**DESCRIPTION:**

Body is extended horizontally on the stomach, with upper back, buttocks and heels at the surface.

Feet are pointed and knees are extended. Legs are “zipped” together.

**SCULLING:**

*Canoe scull.* Hands are under ribs; palms face bottom. Hands move in a figure 8 motion. The illustration also shows the arms in Barrel scull (forward and about 5-6 inches under the surface). Barrel is used for a front pike down, such as in a Front Walkover or Prawn.

**TIPS:**

Adjust wrists to control travel. In a figure, the layout should be stationary.

## TUB POSITION



### **DESCRIPTION:**

The legs are bent at the knees and together. The feet and knees are at and parallel to the surface, with the thighs perpendicular. Head in line with the trunk. The face is at the surface.

### **SCULLING.**

*Standard scull.* (see Back Layout Position)

### **TIPS:**

Swimmer must remember to drop hips and push up on feet. Feet should be together with the tops of feet facing up, not turned in or sickled.

## TUCK AND INVERTED TUCK POSITION



### **DESCRIPTION:**

The body is as compact as possible, with the back rounded, heels are close to the buttocks, nose close to the knees, with the legs together.



### **SCULLING:**

In a surface tuck, hands should be in *standard scull*.

In an inverted tuck, swimmer should use *support scull*, just in front of the shins, with elbows slightly forward.

### **TIPS:**

Tell swimmer to put goggles on their knees and touch bum with heels. As in the tub position, make sure that swimmer doesn't turn legs or feet in, which will cause the shins to come apart and the feet to sickle.

## SURFACE ARCH POSITION



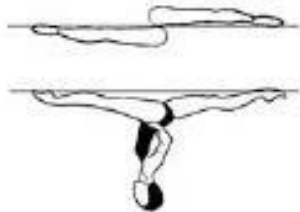
### **DESCRIPTION:**

The lower back is arched with the hips, shoulders and head in a vertical line. The legs are together and at the surface.

### **SCULLING:**

Sculling varies in this position, and will depend on the shoulder flexibility and stability of the swimmer. Swimmers can use *totem scull* (an overhead scull with elbows bent so that palms are just above the ears), *split arm scull* (one arm in totem and one doing a reverse pull to prevent travel) or even *support scull*.

## SPLIT POSITION



### **DESCRIPTION:**

Legs are parallel to the surface. Lower back is arched, with hips, shoulders and head on a vertical line.

Ideally, there is a 180° angle between the legs (flat split).

Regardless of height of hips, the inside of each leg should be aligned on opposite sides of a horizontal line.

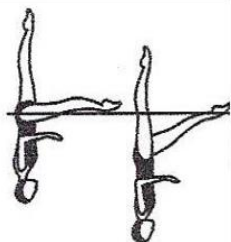
### **SCULLING:**

*Support Scull.* Arms are bent at a 90° angle, with elbows 2-3 inches from the sides of the body. Palms face the bottom of the pool. Fingertips reach in and then back out to side, as if wiping the bottom of a tray. In the split position, hands should be very wide, out to the side as far as possible, with shoulder blades squeezed together to balance the weight of the back leg.

### **TIPS:**

COMMON ERRORS	CORRECTION
Back leg is bent	Draw the knee up the quadriceps, and stretch out with the foot. Make sure that the knee faces up.
Back leg crosses behind body	Make sure hips are square. Make sure elbows are even and that the swimmer isn't reaching forward with one hand. Push out on the back foot.
Swimmer is over-piked	Squeeze shoulder blades together. Take scull out to side of body. Pull shoulders under hips and push hips forward.

## FISHTAIL POSITION



### **DESCRIPTION:**

The body is extended perpendicular to the surface, with head downward. Ears, hips and ankles are in one line.

The other leg is extended forward with the foot at the surface, regardless of the height of the hips.

### **SCULLING:**

*Support Scull.* See Split Position. In the Fishtail position, the hands will scull forward of the body, under the thighs and out to the side.

### **TIPS:**

Stretch the vertical leg to the ceiling and stretch the top of the head to the bottom of the pool. Create tension in the middle of the body from the opposing stretches. This helps stability.

Make sure that hips are square. A common error is to jut forward the hip of the horizontal leg.

Tuck the "tail" under and keep tension in the center of the body. Otherwise, the swimmer will tend to pike in vertical position.

## TRANSITIONS

A transition is a movement from position to position. Here are a few key transitions.

### BACK LAYOUT TO BALLET LEG



#### DESCRIPTION

From a back layout position, one leg remains extended at the surface. Draw the toe of one leg along the inside of the extended leg until the thigh is vertical to assume the Bent Knee Back Layout Position. The knee is straightened, without movement of the thigh, to assume the Ballet Leg Position.

#### SCULLING:

*Standard Scull.* See Back Layout Position. The scull is relatively gentle in the layout and gets shorter and faster as the leg lifts to the Ballet Leg Position.

#### TIPS:

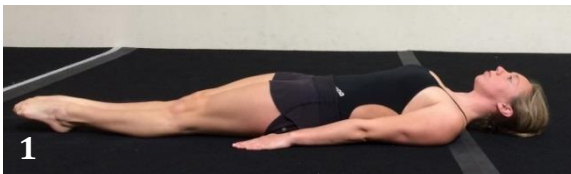
COMMON ERRORS	CORRECTION
Non-ballet leg is under the surface	Swimmer should squeeze the glutes and press up on the non-ballet leg foot.
Leg or thigh is forward over the face	Press the leg away. Generally, proper trunk alignment and engaging correct muscles will help keep leg vertical.
Shoulders are concave and collapsed, head is forward	Squeeze shoulder blades together. Press head and shoulders down. Engage gluts and use leverage of arm scull to push up on hips.
Choppy scull	Press hands deeper (just at the side of hips). Make sure arms aren't too straight, but slightly bent.

#### BEGINNER DRILLS:

Practice ballet leg on land, with counts.

Practice with bottles in the water, pressing hands, arms and shoulders down to create leverage to lift hips to surface.

Practice in the water with one toe on the wall, using standard scull.



## ARCHUP TO BACK LAYOUT



### **DESCRIPTION:**

From the Surface Arch Position, with continuous foot first movement, the hips, chest and face surface sequentially at the same point, assuming a Back Layout Position, as the head occupies the position of the hips at the beginning of the action.

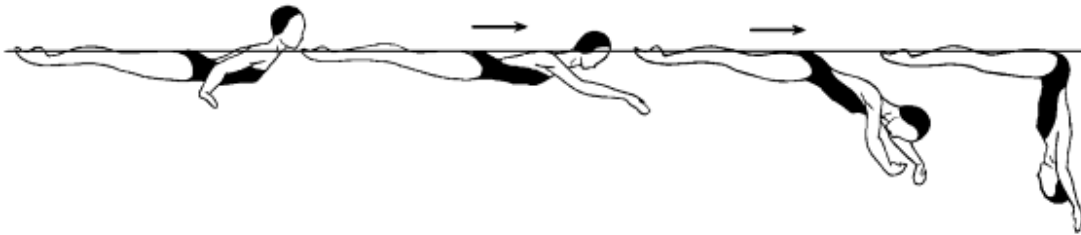
### **SCULLING:**

Scull will vary based on the shoulder flexibility and stability of the swimmer. See *Surface Arch Position*. As the body surfaces, torpedo or a variation (torpedo and reverse torpedo) will be used to scull shoulders to the surface.

### **TIPS:**

Beginners tend to bring body straight up, often piking hips, instead of unrolling one vertebrae at a time. Practice unrolling on land, from a cobra position down to a prone (front layout) position.

## FRONT PIKE POSITION (TO ASSUME) (also called: Front Pike Down)



### **DESCRIPTION:**

From the Front Layout Position, as the head and trunk descend to a Front Pike Position, the buttocks, legs and feet travel along the surface until the hips occupy the position of the head at the beginning of the action.

### **SCULLING:**

In the Layout, use *canoe scull*. Before beginning the movement, swimmer should gently float hands forward, about 5-6 inches under the surface. From there, begin barrel sculls. Finish the pike in *support scull*. Variations in the pike: Swimmer can also use a variation of barrel scull over the head, or *paddle scull*.

### **TIPS:**

The most common error with beginners is to not travel forward enough. Make sure that the elbows are wide in the barrel scull and the hands are not just paddling in front of the face. Swimmer should use core muscles to bend the body down, pretending there is a line pulling them down from the chest. They must keep ears in line with shoulders though, being careful not to tip the chin up. About halfway down, swimmer should feel like they are pulling head through arms and dragging or sliding the hips across the surface to a position just over the shoulders.

# BUILDING ATHLETES

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## *Importance of Fitness Training for Beginners*

Whether new swimmers are young children, teens, adults, or even seniors, working on basic fitness levels will benefit both the athletes and the coach. Synchro has a unique skill set among sports, and even accomplished athletes from other disciplines will need some time to build their “synchro-specific” fitness levels. Obviously, a small child will have a different set of needs when working on strength and flexibility than will a senior citizen, but the overarching goals for all groups should be the same.

1. Injury prevention – The number one thing that works to prevent injury in athletes is building core strength. This is particularly true for beginner athletes. The muscles that stabilize the midsection of the body are key to every other system. If posture is off-balance it will affect the knees, hips, back, shoulders, and even neck. Once a strong core is established, then other exercises can be added to strengthen and stabilize other vulnerable joints and muscle groups.
2. Building a base – For beginners, fitness is about more than just movement. Beginners need to establish a vocabulary to describe movement and help them understand what the coach is saying. What does extension look like? What does it feel like to engage a muscle or muscle group? What does stretching feel like? How is the soreness from building muscle different from that of injury? Even established athletes from other sports will need to learn about breathing and breathe holding in a way that is much different from any other discipline.
3. Progressing through water skills more quickly – Pool time is always at a premium, and new athletes will tire quickly when working in the water. Establishing a basic level of fitness will help make time in the water more efficiently, and let new swimmers move on to the thing they find interesting more quickly. Advantages of starting on land include:
  - ❖ Easier for coach to correct movements and positions hands on.
  - ❖ Easier to modify skills for different levels or age groups (i.e., one group works on wall push-ups while another group works on modified push-ups).

## *How to Work with Beginners*

Many coaches are intimidated by a group of beginners. It can be very easy to get so caught up in “there is so much to do!!!” that you feel paralyzed or overwhelmed. Yes, with beginners you are needing to build a whole swimmer from the ground up, but don't feel that it all needs to be done at once. Focus on one item or area that you want to teach or see improvement in, and let everything else slide for the moment. Once you have reached that first little step, then move on to the next one, reinforcing step one while learning step two. Don't let yourself get bogged down in the “big picture”.

1. Focus on form – Teach beginners how to do the most basic exercises correctly. Part of this is for their health and safety. If they have the wrong form they won't be getting stronger in the correct way, and they could be inviting later injuries. Another big part of focusing in this way is teaching the new swimmer the importance of doing

movements consistently and correctly. Right from the start we want a swimmer to learn to concentrate on doing things well, and be consistent.

2. Concentrate on key muscle groups – Focus on the largest muscle groups, those of the torso and of the legs. Strengthening these areas will have the most influence on injury prevention, as well as having the biggest impact on aerobic fitness.
3. Start with basics and build on those skills. – Don't allow athletes to move onto more complex or more difficult skills until they've mastered the form for the basics. For example, learn to do a proper plank position first, perhaps starting on knees and working up to a full plank. Then add time – start with 5 seconds, then progress to 30, then to 60 seconds.
4. Keep it fun – Beginners don't yet have “buy in” to the sport of synchronized swimming. They are there because it looks interesting & fun, because they are recovering from an injury from another sport, because the class is at a time their mom can bring them, or any other number of reasons. Their focus and motivation is not engaged in the same way as a swimmer who has several years of competition experience. The number one thing you can do is provide an environment that makes them want to come and join in consistently. That means creating a fun, nurturing, and non-judgmental situation that makes them want to come and be a part of what you are doing.



Progression for Teaching a New Exercise	
Name the exercise	Use the same name every time
Explain the exercise	Use simple terms; include explanation of breathing; include the purpose or benefit of the exercise
Show the exercise	Demonstrate from several viewpoints
Observe and correct the athletes	Give verbal feedback, demonstrate proper technique and/or provide hands on correction

## Types of Training

There are many resources for physical fitness and training online and in your local community. Hundreds of books are written on the subject, and in much more detail than we can go in to here. The purpose of this section is give you some very basic principles that you can apply to whatever exercises and training you choose to do with your new swimmers.

1. Strength/Muscle building – Strength is important in everything we do. Strong muscles help hold joints in proper alignment, and increase the speed that you can move both in and out of water. The basic principle of building strength is this: make your muscles do a little more than they are used to doing, rest, and then make them do it again.
  - ❖ Slow twitch – Slow twitch muscles are endurance muscles. This type of training builds sustained strength – to allow you to keep your core engaged for an entire routine, or to keep your knees extended for an entire figure. One of the best ways to train this type of muscle is the use of “isometric” and/or “super slow” exercises. An isometric exercise is one in which you engage the muscle and then hold in a stationary position. A plank is an example of an isometric exercise. Super slow

exercises are when you perform a strength exercise (such as a squat or a push up) at a “super slow” speed. For example do a standard squat, but make it take 60 seconds down and 60 seconds up. With both types of slow twitch exercises you want to do relatively few repetitions - 2-3 of each exercise at most.

- ❖ Fast twitch – Fast twitch muscles are the “wow” muscles. This type of training lets you do barracudas and body boosts, push lifts and quickly surface. Frog jumps and rapid push-ups are examples of fast twitch training. When you are training beginners, “fast” is relative. The most important thing is proper form. So, slow a movement down to make sure it is being done correctly! Fast twitch elements require a lot of repetition; the speed will come over time if you concentrate on proper form.
- 2. Aerobic conditioning – This is all about training your swimmer's bodies to use oxygen efficiently and effectively. This is also a good time to teach your swimmers about how to check their heart rate and breathing. Some new athletes will have never felt out of breath before!
- 3. Speed training – For beginner athletes, much of speed training is about learning what maximum effort feels like. Short distances (whether running or swimming) are best. Most new athletes don't know what their maximum speed feels like, so races, time trials, etc. are good exercises. Pick something they can do well (kicking with a kickboard, or skipping) for your speed training. This is not the time to have them try to do new skills
- 4. Endurance – With beginner athletes, endurance training is about getting them used to moving for extended periods of time. This is one time where you don't have to pay as much attention to form, you just want them moving continuously. On land, have your beginners train to get ready to walk/jog a 1 mile or 5 K event supporting a favorite charity (there are plenty of “couch to 5K” resources online). In the water, set a timer and have them swim continuously for 3-5 minutes, either letting them choose the stroke or giving them a set of movements to choose from (i.e., kicking, eggbeater, and head first scull).
- 5. Flexibility – On the most basic level, a baseline level of flexibility and range of motion will



allow new swimmers to move with less risk of injury. But, beyond basic range of motion, we need to lay the foundation for extreme range of motion flexibility. The biggest barrier to flexibility in beginners is learning how far to push a stretch. If they do not engage the stretch there will be no progress, but if they push (or are pushed) too far there will be injuries, sometimes serious. Learning what a “good stretch” feels like is the key for beginners. There are 2 basic types of flexibility/range of motion exercises.

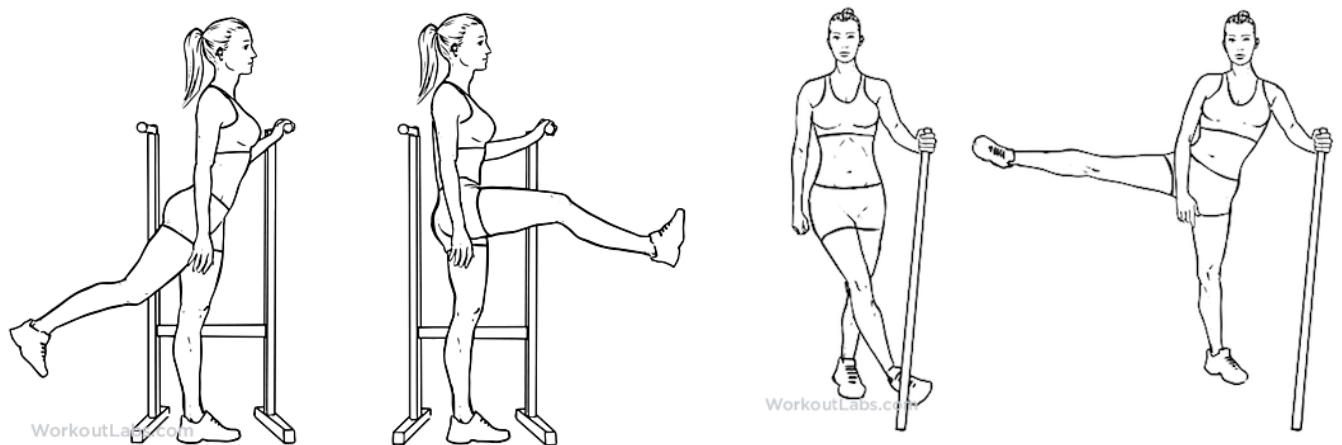
- ❖ Static – This is the old-fashioned “hold a position” type of stretching. Static stretching should never be done at the start of a practice. It's very important that the swimmer is completely warmed up before they static stretch. This type of stretching is best for positions that are either held for an extended time (such as toe points) or gotten in to slowly (such as back arches).

- ❖ Dynamic (Ballistic) -Dynamic stretching can be used as part of your warm up or after the muscles are warm. It involves moving in and out of a stretching position, either by pulsing, swinging, or flexing the muscle groups involved. Care should be taken with dynamic stretches that the swimmer doesn't overextend the stretch.

### Static Stretches



### Dynamic (Ballistic)



# NOVICE REQUIREMENTS

Solo, Duet, Trio and Team can be no more than 1 min 30 seconds long (plus or minus 15 seconds).

Routine Elements: 1-5 Must be performed in this order.

#1 - Head First Standard Scull in BACK LAYOUT POSITION

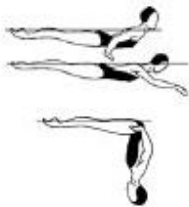


A) **Back Layout Position:** The body is extended, on the back, with the face, chest, thighs and feet at the surface. The ears, hips and ankles are in line.

#2 - Figure #310 SOMERSAULT, BACK TUCK, to the completion of at least a 90 degree rotation.



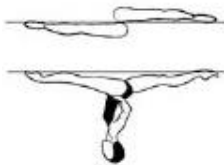
#3 - Side flutter on either side, followed by an arm sweep to a FRONT LAYOUT POSITION, followed by a pull into a SURFACE FRONT PIKE POSITION.



A) Front Layout Position: The body is extended horizontally, on the stomach, with head, upper back, buttocks and heels at the surface. The face may be in or out of the water.

B) Surface Front Pike Position: Heels and back of the thighs are at the surface.

#4 - SPLIT POSITION.



A) Legs evenly split forward and back. The legs are parallel to the surface. Lower back arched, with hips, shoulders and head on a vertical line. 180 degree angle between the extended legs (flat split), with inside of each leg aligned on opposite sides of a horizontal line, regardless of the height of the hips.

#5 - Figure #101 BALLET LEG, SINGLE, while TRAVELING.

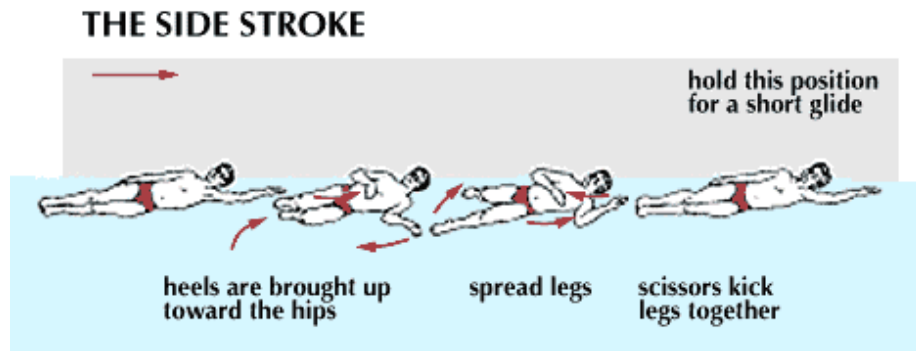
Traveling: Must move head or foot first. (Recommend at least 1 lane line)



#6 - Required Strokes: Any two of the three listed strokes must be performed in the routine. The strokes may appear in any order and at any point in the routine. Each stroke must be performed with **AT LEAST 3 REPETITIONS WITH NO INTERVENING ACTIONS**. The proper kick must be done with the proper arm strokes. The 3 listed strokes are:

- a. Breaststroke: Head may be in or out.
- b. Backstroke: Stops at top of the arm strokes are allowed.
- c. Sidestroke: Head up or down.

#7 - With the exception of deck work and entry, all elements –required and supplementary- must be performed simultaneously and facing the same direction by all competitors. Mirror actions are not permitted.



Recommendations:

1. Use songs that are easy to count to or have a steady rhythm, preferably ones that are possible to count in 8's.

# NOVICE FIGURES

**COMPULSORY FIGURES** - Bolded words are positions that should be held for 3 skulls.

## 101 Ballet Leg, Single 1.6

From a **Back Layout Position**, with one leg remaining extended at the surface, the toe of the other leg is drawn along the inside of the extended leg until the thigh is vertical, to assume a **Bent Knee Back Layout Position**. The knee is straightened, without movement of the thigh, to assume a **Ballet Leg Position**. The ballet leg is bent, without movement of the thigh, to a **Bent Knee Back Layout Position**. The toe moves along the inside of the extended leg until a **Back Layout Position** is assumed.



\*Tip: Teach the kids to sing “Twinkle Twinkle Little Star” to learn to pace their Ballet Leg. Example: *Twinkle, Twinkle little star* (draw from Back Layout to Bent Knee), *How I wonder what you are* (raise to Ballet Leg), *Up above the world so high, like a diamond in the sky* (hold Ballet Leg), *Twinkle Twinkle little star* (Lower from Ballet Leg to bent knee) *How I wonder what you are* (Bent knee to back layout).

## 302 Blossom 1.4

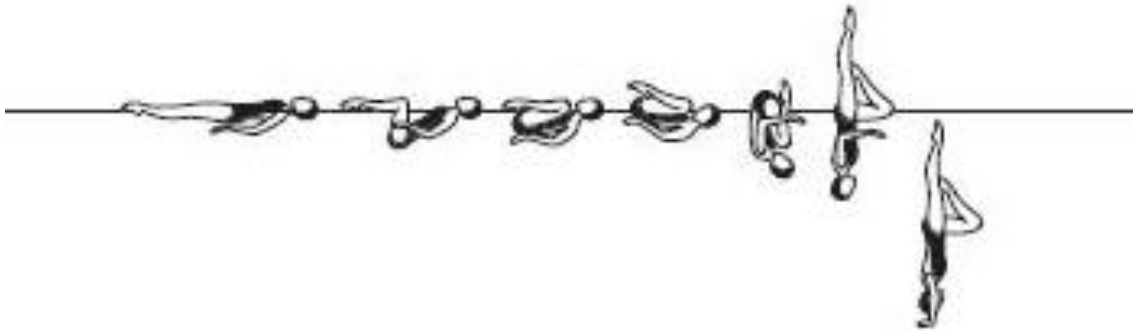
From a **Back Layout Position**, the trunk is lowered as the hips are bent to assume a **Submerged Double Ballet Leg Position**. The feet separate along the surface as the hips rise and the body assumes a **Split Position**. The legs join to assume a **Vertical Position** at ankle level. Maintaining the **Vertical Position**, the body descends along its longitudinal axis until the toes are submerged.



## NOVICE OPTIONAL FIGURES - GROUP 1

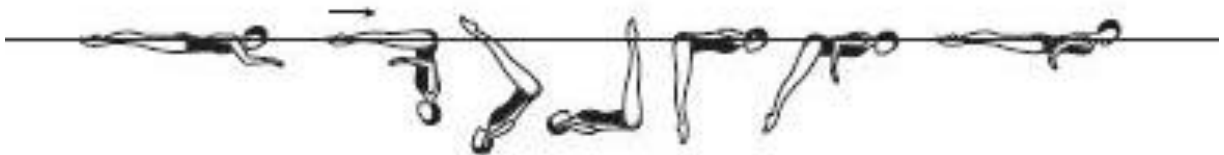
### 315 Kipnus 1.6

From a **Back Layout Position**, a Kip (311) is executed until the shins are perpendicular to the surface of the water. With shins remaining perpendicular to the surface, the trunk unrolls as the legs assume a **Bent Knee Vertical Position** midway between the former vertical line through the hips and the former vertical line through the head and the shins. Maintaining the **Bent Knee Vertical Position**, the body descends along its longitudinal axis until the toes are submerged.



### 320 Somersault, Front Pike 1.7

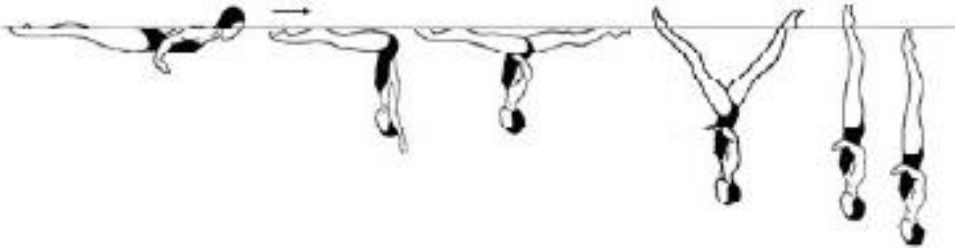
From the **Front Layout Position**, as the trunk moves downward to assume a **Surface Front Pike Position**, the buttocks, legs and feet travel along the surface until the hips occupy the position of the head at the beginning of this action. Maintaining this position, the body somersaults forward around a lateral axis so that the hips replace the head at each quarter point of revolution. The rotation continues until the head and buttocks return to the surface. As the legs move upward to assume a **Front Layout Position**, the head, shoulders and buttocks travel along the surface until the hips occupy the same position as the head at the beginning of this action.



## NOVICE OPTIONAL FIGURES - GROUP 2

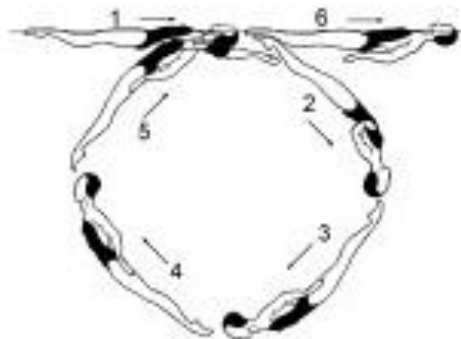
### 361 Prawn 1.6

From a **Front Layout Position**, a Front Walkover (360) is executed to a **Split Position**. The legs join symmetrically to assume a **Vertical Position** at ankle level. Maintaining the **Vertical Position**, the body descends along its longitudinal axis until the toes are submerged.



### 201 Dolphin 1.4

From a **Back Layout Position**, with head leading, the head, hips and feet leave the surface sequentially at the same point to assume a **Dolphin Arch** as the body begins to move around a circle which has a diameter of approximately 2.5 meters (8 feet), depending upon the height of the competitor. Movement continues, as the head, hips and feet follow the imaginary line of the circumference until, with the head, hips and feet breaking the surface sequentially at the same point, the body straightens as it surfaces to a **Back Layout Position**.



## DEVELOPING A PRACTICE PLAN

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A well-thought out practice plan will help practices run smoothly and ensure that young athletes are receiving training that is appropriate for the developmental age and experience level. Comprehensive practice plans should take into consideration the following points:

- ❖ Developmental and chronological age
- ❖ Time of year
- ❖ Available resources (e.g., pool time, facility, equipment, coaches)
- ❖ Absences, injuries and other special considerations
- ❖ Goals and expectations
- ❖ Safety plans

### *Developmental and Chronological Age*

Practice plans should take into consideration of the following:

- ❖ Chronological age
- ❖ Developmental age (e.g., physical and mental maturity, ability to listen to instructions)
- ❖ Skill level

One approach to athlete development is called long-term athletic development. At the recreational level, long-term developmental recognized the following stages for synchronized swimmers:

**Active Start (3-6 years old):** Introduction to unstructured active play, which incorporates a variety of body movements. Develop fundamental movement skills with the ABCS of movement – Agility, Balance, Coordination and Speed.

**FUNdamentals (6-8 years old):** Continue to develop fundamental movement skills though participation in a fun and challenging multi-sport environment. Incorporate well-structured activities that develop basic skills while maintaining a focus on fun. Formal competition should only be minimally introduced. Learning fundamental movement skills throughout this stage is a key to the overall development of physical literacy.

**Learn to Train (8-11 years old):** Converting fundamental movement skills into fundamental sports skills. This involves more formalized methods. Greater amount of time spent training and practicing basic general and specific skills than competing.

Younger children (up to age 8 or 9) do best with:

- ❖ Short periods of instruction (5-10 minutes) broken up by a 3-5 minute game or distraction (see “*Making it Fun*” for ideas). The games can reinforce the skill learned.
- ❖ Use straightforward, simple explanations. Provide a clear focus, and use visualization and quick demonstrations. For example, “in a layout keep your legs together like a mermaid.”
- ❖ Use the same structure for each practice to create routine. Change the skills and drills within that format.

Older children (ages 9-10+) can spend more time practices sports-specific skills:

- ❖ Longer periods of instruction (up to 30 minutes) with a break for games or distractions every 30 minutes.
- ❖ Keep instructions simple and clear. Begin to offer some explanation of why skill works as it does (for example, if you lift your fingertips in head first scull to push water toward your feet).
- ❖ Spend more time on each skill.

Refer to the USA Synchro Grade Level Manual to help determine which level your athletes are and what skills you should be focusing on. The skills in each level are cumulative. If your athletes are beginners then the skills in grade level 1 will be where you want to start and what you want to incorporate in each practice.

### ***Organizing the Season***

Before each season, map out practice dates, competitions, and other events. Serious athletes will likely use periodization in their training in order to maximize gains in strength and endurance over the year. The CCP 1 course covers how to vary the volume and intensity of training based on the time of year. There are four phases in the annual plan:

- ❖ Preparation phase
- ❖ Pre-competitive phase
- ❖ Competitive phase
- ❖ Transition phase

For younger swimmers, an annual training plan is more likely to have monthly and practice-specific goals. Many clubs will start training in September and the first meet will be in December or January.

The annual or season plan should include an overview of each month or session of training and includes an overall goal, specific skills and drills to be worked on, and needed equipment and resources.

Month/Session	Session Objectives	Skills	Equipment

## Daily Practice Plans

Use the annual overview to develop daily practice plans that will meet the monthly/session objectives. Describe needed equipment and list specific skills and drills you will do at the practice. Most synchro practices will include dry land conditioning/acrobatics, swimming skills, and of course synchro skills. For younger swimmers and for shorter practice times, plan to focus on 3-5 new skills a practice. Incorporate games, free time and distractions. Games and activities can reinforce the skills learned.

Here is an example of a format for writing daily practice plans:

RECREATIONAL CLASS LESSON PLAN:	
Date:	
Equipment Needed:	
Land Work-out (30 mins)	
*include flexibility & strength training	
Warm-up (10 mins)	Review sculling and swimming skills from prior lesson
Swimming skills (10 mins)	
Game 1 (5 mins)	
Synchro Skills (10 mins)	
Game 2 (5 mins)	
Routines (15 mins)	
Wrap up (5 mins)	

## ***Goals and Expectations***

Is this a new team? Are you a new coach? Perhaps your goal for the season is to have the team compete at an invitational meet and also have a show or exhibition once or twice during the season. Is your team ready to compete at the novice or intermediate level for the entire season? Perhaps your team is ready for the age group track and they are hoping to qualify for regionals or Junior Olympics? Each goal will have a different practice or training plan. The more competitive your team becomes, your training hours will need to increase. The commitment of the swimmers and parents will also need to increase. It is important to talk about your goals and expectations at the beginning of the season with parents and swimmers to make sure that everyone is on the same page and committed to the training plan.

## ***Safety Plans***

Practice should be a safe environment for young swimmers. Practices should be structured and disciplined so that swimmers are safe. Things to keep in mind include:

- ❖ Keep swimmers in a specific area
- ❖ Be clear about rules (listening to the coach, process for switching from dry land space to water, how to swim in circles in the lanes, etc.)
- ❖ Establish drop off and pick up procedures for parents/guardians

A comprehensive safety plan will also address what to do in the event of illness, injury or disaster. Consider:

- ❖ Requiring a pre-participation physical and/or baseline test for concussion
- ❖ Keeping emergency contact information, medical releases and treatment authorizations readily available
- ❖ Informing parents and guardians of potential risks of the sport
- ❖ Ensuring that all coaching staff and volunteers are trained in CPR and First Aid
- ❖ Training coaching staff and volunteers to recognize symptoms of concussion and other injuries and how to react
- ❖ Ensuring that facility and equipment are safe and properly maintained
- ❖ Adopting an emergency action plan for potential risky situations

## ***Sample Training Plans***

### **Training plan for a beginner/Novice/show team.** **(Water hours per week 3, Land hours per week-3)**

#### **September-December-**

Focus: In the pool- endurance and stroke technique. During these months the swimmers should really focus on their swimming strokes (freestyle, back stroke, breast stroke, butterfly). A significant amount of time swimming is important to build the strength and endurance needed to be a synchronized swimmer.

**Ages 6-8 (Grade level 1 and 2)** 1.5 hours in the water, 45 min on land. These times are very fluid. More land time is not a “bad” thing for this age group. If you have more land time than water time then practice sculling, body alignment, basic positions (fishtail, vertical bent knee-standing up, layouts, bent knee, and ballet legs laying down).

**Pool:**

30-45 min lap swimming, swimming drills: Start with 4x25yds of freestyle, correcting the swimmers as they go. Then 4x25yds backstroke, 4x25yds breast stroke, 4x25yds butterfly. If you have very weak swimmers you may want to focus on one stroke per practice. If you have stronger swimmers you may need to start with longer sets (50, or 100yds per stroke).

30-45 min synchro fundamentals: sculling laps, back layout (head first and foot first), torpedo and reverse torpedo. For newer swimmers have them use a pull buoy between their ankles so they can focus on sculling correctly and they know what it feels like to have their feet at the surface (this also prevents them from kicking).

15-30 min of wall positions and using jugs upside down. The four walls of your pool should be used as often as possible. Many new swimmers can learn how to do basic synchro positions while keeping their body straight and holding on to the wall. The wall is a tool that should be used for all ages and abilities. It also allows the coach a “hands on” opportunity. Helping to straighten the vertical leg and extend the knees and feet, the coach should walk around and help each swimmer. Once the athletes have “mastered” the wall drills they should go and try to do the same position off the wall or with the use of jugs. If you don’t have the funds to purchase jugs for your team, just send out an email to the parents to save all detergent bottles or milk containers (plastic gallon containers).

**Land:**

**Focus:** On land building strength **and** learning how to stretch. Land training should be used to support fundamentals being taught in the water (sculling, body positions, etc.). Key grade level elements to be taught: bridge, hollow body, balance with bent/straight leg, ballet leg, leg flexibility, plank hold, Tri-cep pushups, forward/backward rolls. Please see the grade level manual for all land tests in level 1 and 2. Following the Grade Level Manual (can be found in the Members only section of the USA Synchro website) is a great way to insure you are training the right skills to build a strong synchronized swimmer.

A dry area is best for cardio warm ups. If you only have a pool deck available for your land training be aware of safety precautions (such as not jumping on slippery surfaces) or using mats on concrete decks. Yoga mats can be found for under \$10 at TJ Max, Target or Walmart. Each swimmer should have their own yoga mat if possible.

Depending on your land time (before or after practice) you may have to allocate more or less time for a cardio warm up. There are a variety of options for cardio warm ups. Your main concern is getting the heart rate elevated and the blood pumping through the muscles. If you want to discuss resting heart rate and maximum heart rate with your athletes there is a lot of information pertaining to that on the internet.

5-15 minutes cardio warm up (jumping jacks, running in place, jogging around a gym or field, leg kicks)

10-20 minutes basic strength (push-ups, sit ups, planks, v-sits)

15-30 minutes flexibility and acrobatics. Splits; right, left, center, many beginner synchro swimmers will need a gentle progression when training flexibility. Start with basic stretches for hamstrings, quads, hip flexors. Start to train back flexibility and teach swimmers how to perform a bridge. Strongly encourage your athletes to practice stretching at home. You also want to start working ankle and toe extension as soon as possible.

If you have longer time on land than in the water (as mentioned above) you will want to incorporate as many synchro skills as possible into your land training. Sculling is a wonderful skill to practice on land. Having the girls perform each scull for a minute is actually a cardio workout as well (1 minute X back layout, torpedo, reverse torpedo, support scull, and canoe scull).

Having young swimmers learn about body alignment on land as well as balancing while practicing basic positions is a great drill. Back layouts along with bent knees and ballet legs on land (have the girls hold each position), correct extension and alignment on land.

### **Training plan for 12/U age group swimmers and more experienced intermediate swimmers (\*13/O intermediate).**

(Water hours per week- 5, land hours per week- 5.)

#### **Ages 8-12\* (Grade levels 1, 2 and 3)**

#### **September-December**

Focus: In the pool- endurance and stroke technique. During these months the swimmers should really focus on their swimming strokes (freestyle, back stroke, breast stroke, and butterfly). This group of athletes should have a good understanding of synchronized swimming fundamentals and should be able to incorporate synchro endurance sets into their workouts.

#### **Pool:**

20-40 minutes of swimming sets (drills to correct technique will most likely be needed the first few weeks of training). Be sure to correct flip turns as well as streamlining off the wall.

15-25 minutes of synchro endurance sets (hypoxic training), rotary eggbeater drills, head up side stroke, side flutter, egg beater to side flutter transition sets, sculling laps (50X each scull).

10-15 minutes of stretching in the water

10-15 minutes of vertical warm up- this may be on the wall in the beginning of the season but transition to off the wall after the first few weeks, depending on the experience of the athletes.

20-30 minutes of synchro specific skills- pike down drills, thrusting drills, transition from front pick to fishtail, split to surface arch. You can also work on basic routine drills- jump ins and dive ins, vertical descent with back tuck somersault and surface in eggbeater. No arm, 1 arm and 2 arm eggbeater boost (be sure to work on the set up). Again, please refer to the USA Synchro grade level manual to help decide which skills you want to prioritize for your group.

**Land:**

Focus: On land- building strength, learning how to stretch. Land training should be used to support fundamentals being taught in the water (sculling, body positions, etc.). Key grade level elements to be taught: bridge, hollow body, balance with bent/straight leg, ballet leg, leg flexibility, plank hold, Tri-cep pushups, forward/backward rolls. Please see the grade level manual for all land tests in level 1 and 2. Following the grade level manual is a great way to insure you are training the right skills to build a strong synchronized swimmer.

## MAKING IT FUN!

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Making your program fun is relative to the age, experience and expectations of your athletes and program. There are several key elements that can add an element to fun to any practice (beginner to elite).

### *Creating a Fun Environment and Traditions*

- ❖ **Coaching Style.** With young children the coach must have high energy and a positive outlook. It is important to remember “kids don’t care how much you know, until they know how much you care”. Be sure to take an interest in your swimmers. Giving a compliment and praising the athletes can be a lot of fun, with little effort other than a smile and words of encouragement. Being positive goes a long way with all athletes, regardless of their age.
- ❖ **Add Music.** Add music to the lap workout. Have your swimmers create a playlist that is appropriate for their age and for your facility.
- ❖ **Celebrate Together.** Have a birthday “plan”. Many organizations are trying to promote healthy living so cupcakes and cookies are not allowed as birthday treats any longer. Allergies are always a concern as well. Have a day each month to celebrate the birthdays on your team for that month. Instead of food, have the athletes make up the workout for that day, or decide on a game that everyone enjoys. Or create a short routine to the Birthday Song or related song (such as “Ice Cream and Cake”). You can have a birthday lunch after practice with a group activity for everyone to celebrate together outside of the pool. Try to find different opportunities to bring the team together. Halloween party, Thanksgiving food drive, Holiday events (show, exhibition or party).
- ❖ **Include Others.** Bring a friend to practice- This might sound like a fun event for the younger swimmers, but you would be surprised how many of the 13 & over athletes would be very excited to invite a friend from school to practice to show them what they do and invite them to get in the pool and try it for themselves. Or create a Bring your Dad (or other Grown Up) to synchro day.

### *Create Non-Swimming Social Opportunities*

Every year our athletes have more responsibilities and social activities that pull them away from our sport. It is important to find out what interests your athletes have and how to incorporate that into your practice or team activities. Many high school students need to have volunteer credits for their college resume.

- ❖ **Volunteer Opportunities.** Reach out to your older athletes and offer opportunities for them to volunteer with the younger swimmers on the team. Let them know you will send a letter to their school or provide documentation for their resume. Younger swimmers love to learn from the older athletes on the team. Having the top swimmer on their team help them learn a new skill or choreograph their routine is a lot of fun for all involved.
- ❖ **Participate in Community Events.** There are many events held in towns and cities throughout the year that can be fun for the girls to take part in. There are Color runs (5K

races where the runners get sprayed and painted with different colors), obstacle courses for groups, town parades. Anything that brings the team together to have fun and appreciate the good friends they have on their team.

- ❖ **College visits.** Take a group of swimmer to see a local college or University that has a synchro team. Attend a College synchro meet with your team.
- ❖ **Cancel a Practice during Mid-Terms.** This might sound “sacrilegious”, but alleviating a little stress for your older swimmers will make them enjoy their time at the pool more in the days, weeks, months leading up to your competitions.

## *Make Drills and Skills Practice into Games*

Especially for younger swimmers, drills and skills practice can be tedious and, let’s be honest, not the most fun. Get creative with making skills practice into games. Here are a few ideas to make practicing skills fun.

- ❖ **Game of Statue.** Use layouts (front or back) instead of statues. Layouts must be still and with legs together/feet pointed or swimmer is out. You can add a variation by requiring the swimmer to put arms over head.
- ❖ **Red Light Green Light.** Use flutter kick (or eggbeater on tummy) to swim. When “it” says “red light” swimmers must go into a float that they’ve practiced (such as back layout, star float or jellyfish float).
- ❖ **Chicken in the Hen House Variation.** Come up with a number of skills to call out. Skills can be related to time of year, holiday or other theme (for example, a Winter theme, a mermaid theme, a Halloween theme). Last swimmer to complete skill is out. For the Winter-themed example, you can have snowman (eggbeater with silly face), snow angel (star position), sled ride (head first or foot first scull), snowflake (pinwheel), and snowball fight (swim to side, get out and cannonball back in).
- ❖ **Simon Says.** To practice eggbeater, instruct swimmers to eggbeater to left, right, forward, back, put one arm up, two arms up, etc.
- ❖ **Hand Stand Tag.** Just like tag, but swimmers must do a handstand (with extended legs and pointed toes, of course, or for more advanced swimmers, hold a vertical) in order to be “safe”.
- ❖ **Monkey in the Middle or Ball Toss.** Use a ball to practice eggbeater
- ❖ **How High Can you Go?** With a kickboard or float under each arm, practice scissors kick vertically in the water. Swimmer tries to pop up as high as possible with each kick.
- ❖ **Sea Horse Races.** Straddle a pool noodle (like a “sea” horse) and use sculling to move through the water. Swimmers can have races or play “follow the leader”.
- ❖ **Duck Walking.** On deck, have swimmers stand with ankles flexed and feet rotated outward. Swimmers take small steps, keeping feet pointed outward and knees inside ankles. This teaches proper foot position for breaststroke kick and eggbeater. You can also duck walk in a squat position with knees out.