AQUATIC SKILLS

Overview
Most people enjoy and appreciate water sports and swimming skills. It is our hope that the aquatic skills unit will teach students the necessary skills needed to promote water safety and the related aspects of fitness. Students will be engaging in swimming skills and some general lifesaving techniques, skills that will benefit them for a lifetime. These skills are useful to the individual and serve as a lifetime springboard to the enjoyment of aquatic activities.

Swimming Pool Requirements
Swimmers - should wear a one-piece swimming suit. A swim cap is required for hair that is longer than four (4) inches in length. Goggles are recommended but not required.
Non-swimmers – must be dressed in their regulation PE uniform ready for an alternative activity.

- Students with a swim medical will do the alternative activity to earn participation points.
- Students without a swim medical who choose not to swim must dress in their PE uniform and do the alternative activity and will lose 10 points from their policy grade for not being in the water swimming.
- Students are advised to avoid elective surgeries such as tattoos and piercings while they are in a swim unit. Failure to swim due to tattoos or piercings or the like will result in grade reductions. Please plan ahead.

Safety
1. Swimming is not permitted unless an instructor is present and has authorized the swimming. Never swim alone.
2. No diving in the shallow end of the pool. Dive only under the supervision of the instructor in designated pool areas.
3. All swimmers must take a shower before entering the pool.
4. Admission to the pool is refused to all persons who have a contagious disease or an infectious condition.
5. Bandages of any kind are not allowed in the pool.
6. Report all accidents or injuries to the instructor, as well as any medical conditions.
7. All swimmers with long hair (in the eyes) are required to wear caps or tie the hair back while in the pool.
8. Gum, food, and drinks are not permitted in the pool or locker rooms.
9. Unnecessary roughness, such as dunking, pushing, towel snapping, spitting, and tag games are not permitted in the pool area or locker rooms.
10. No running on the pool deck. Street shoes and street clothes are not permitted on the pool deck as per state guidelines.
11. Students may rent a swimsuit in order to participate in the class if they do not have their own.
12. Equipment may be used only with the permission of the instructor.
13. Drying must be done in the drying area before entering the locker rooms. Return used suits and towels to the proper place. One towel to a person.
14. It is recommended that contact lenses be removed before swimming.
15. All jewelry must be removed before swimming.
16. Starting blocks should only be used by those skilled in their use and under the supervision of the instructor.
17. Students may bring their own suits or wear the suits provided by the school. A swim suit extractor is provided for use (10 seconds only).  
18. Keep valuables in a locked locker. If you use a lock, make sure it is removed after each class period.  
19. Special health problems should be made known to the teacher, i.e., epilepsy, diabetes, etc.  
20. No one is allowed to walk on the bulkhead.  
21. No swimming under the bulkhead.  
22. Failure to follow these rules may result in serious injury or death to the swimmer.  

**Take Cover**  
1. Students should move out of the pool and into the area designated by the instructor.  
2. Remain in this location until the all-clear signal is given.  

**Fire Alarm**  
1. Students should get out of the pool and sit on the benches in the area designated by the instructor if it is a drill or evacuate the building if a fire exists.  
2. The instructor will check to see if the alarm is a drill or a fire.  
3. Students will then follow the directions of the instructor.  

**Emergency Phone Numbers**  
LaGrange/Western Springs Paramedics 911  
Nurse North Campus 6363  
Nurse South Campus 6531  
PE Department Chair 6383/6579  
PE Division Chair 6394  
Principal North Campus 6305  
Principal South Campus 6505
Basic Skills

I. Strokes
   A. Backstroke
   B. Freestyle stroke
   C. Elementary backstroke
   D. Breaststroke
   E. Sidestroke

II. Personal Safety
   A. Sculling
   B. Treading
   C. Floating
   D. Surface dives
   E. Underwater swimming

III. Lifesaving Techniques
   A. Rescues and assists
   B. Boat safety
   C. Diving

IV. Snorkeling
   A. Using masks, fins, and snorkels
   B. Water Entries
   C. Snorkeling explorations

Course Content Outline/Terminology/Material

I. Swimming Strokes
   A. Competitive Stroke
      1. Backstroke
      2. Freestyle stroke
      3. Breaststroke
      4. Butterfly
   B. Non-Competitive Strokes
      1. Elementary backstroke
      2. Sidestroke

II. Parts of a Stroke
   A. Entry
   B. Catch (Press)
   C. Pull
   D. Push (Finish)
   E. Recovery
III. Diving
A. Front dive from the side of the pool
   1. Kneeling
   2. Rock forward
   3. Standing
   4. Three-step approach
   5. Racing
B. Surface dives
   1. feet first
   2. Pike
   3. Tuck
**Backstroke (Back Crawl)**

Use this stroke in competition, recreational swimming, and endurance swimming.

**Head Position**
1. Back
2. Steady
3. Water level at the ears
4. Chin near the chest

**Body Position**
1. Chest high
2. Hips and thighs at the surface of the water
3. Knees down, feet up, toes pointed
4. Relaxed appearance
5. Complete stretch

**Arms**
1. Recover—little finger enters water first
2. Straight elbow in recovery (no water in the face)
3. Hands enter the water above the shoulders (one o’clock – eleven o’clock position)
4. Deep catch at about 12” deep
5. Start to bend the elbow when the hands get to shoulder level in the pull
6. Hands pull in an “S” pattern (bent arm pull) adjusting to the water pressure at the proper depth
7. The arms are directly opposite each other (direct opposition)
8. Continuous stroking without pause at the start or completion of the stroke, alternating arms
9. Proper hand entry/angle into the water, little finger first
10. Proper positioning (pitch) of the hand and wrist throughout the stroke

**Legs (flutter kick)**
1. The toes are pointed, ankle extended
2. The knees and feet remain below the surface – “silent kick”
3. Continuous “boiling” action of the water over the feet
4. The kick originates from the hip
5. Kick down as well as up

**Coordination**
1. Proper timing – kick to arms
2. Six beat kick

**Breathing**
1. Continuous breathing pattern, no breath holding. Inhale on one arm, exhale on the other arm.

**Push Off**
1. Hands are overhead, together, fingers elevated.
2. Feet are below the surface on the wall, knees bent at 90 degrees, feet are hip width apart.
3. Drop under, extend legs, start kick, streamlined
4. Exhale through the nose, mouth closed, stream of air bubbles
5. Reach the surface before taking the first stroke

**Start**

**Open Turn**

**Competitive Turn**
Freestyle (Front Crawl)

Use this stroke in competition, recreational swimming, and endurance swimming. It is considered the fastest stroke. Top swimmers can swim three (3) miles per hour.

**Head Position**
1. The head is in line with the spine.
2. Look down at the pool bottom, slightly forward
3. Turn the chin to the shoulder to breathe, no head lift

**Body Position**
1. Flat horizontal position in the water
2. No up/down movements of the hips
3. No snake-like (sideward) movement of the body
4. Proper and equal body roll on long axis

**Breathing**
1. The head turns in time with the body roll
2. No lifting or jerking of the head for breath
3. Breathe at the “open” part of the arm cycle (one side only)
4. Breathe to the most comfortable side (no difference if the right or left hand is dominant) when the opposite arm is forward.
5. Breathe low to the water level

**Arms**
1. Flat hands enter the water fingertips first, elbow and wrist up, in front of the shoulder
2. Catch in the initial part of the pull, not hurried
3. Deep catch with the elbow higher than the hand
4. Push/pull of the flat hand near the “midline” of the body
5. Acceleration of the hands throughout the push/pull
6. Bend in the elbow under the body during the pull
7. Finish the pull at the thigh with no delay
8. High elbow and shoulder recovery
9. Elbow leads the hand in the recovery
10. The arms are a mirror image of each other

**Legs (flutter kick)**
1. The kick originates from the hip
2. The soles of the feet churn the surface, “boil water,” feet stay under the surface
3. Proper knee bend, kick up and down
4. Proper depth of kick 12”-14”
5. Timing of the kick to the arm stroke
   a. six beat kick
   b. two beat kick
   c. four beat kick
   d. eight beat kick

**Coordination**

**Push-off**
1. Drop under the water
2. Hands over head – arms against the ears
3. Feet hip width on the wall 14”-16” below the surface, 90 degree bend in the knees
4. Push off, streamlined body position, elevate finger tips to reach the surface at swimming speed. Start the kick while the body is under water.

**Start**

**Open Turn**

**Competitive Turn**
Elementary Backstroke

Use this stroke to save your life. You can breathe easily with the face out of the water. You get more distance for the least amount of energy expended. It is a resting stroke.

Head Position
1. The water level is slightly above the ears.
2. The face is clear of the water at all times.

Body Position
1. Back straight
2. Legs and hips slightly lower than the head and shoulders
3. Hips remain near the surface at all times

Arms
1. Recover the hands up the body to shoulder height
2. Extend the hands away from the sides
3. Pull both hands at the same time, from the shoulders, past the hips, to the thighs

Legs - Whip
1. Heels drawn down below the knees
2. Heels about as wide as the hips
3. Ankles flexed
4. Circle heels wider than the knees (whip kick)

Breathing
1. Inhale as you recover the arms and legs
2. Exhale during the pull/kick phase into the glide

Coordination
1. The arms pull and the legs kick at the same time
2. The arms and legs recover at the same time
3. Emphasize glide at the end of each stroke (arm pull and leg kick)

Push-off
Breaststroke
Use this stroke in competition, lifesaving, and recreational swimming

Head Position
1. Chin at water level when inhaling
2. Look down at the bottom of the pool when exhaling
3. Head moves chin to hairline approximately 8”

Breathing
1. A breath is taken late in the arm pull.
2. A breath is taken at proper sequence with the arms and legs.

Body Position
1. Good horizontal alignment
2. Complete stretch of the body between strokes

Arms (20% of stroke effort)
1. Complete stretch of the arms, in downhill position, prior to the pull
2. Initial part of the pull is outward with no slippage of the hands
3. Elbows are up throughout the pull
4. Acceleration of the hands throughout the pull, no hesitation under the chin
5. Correct depth and trace “heart shaped” pattern with the hands
6. Use hands as effective “paddles”
7. Hands must not travel too far back in the pull (not past shoulders)

Legs (80% of stroke effort) “Whip Kick”
1. Complete stretch of the legs with toes pointed during the glide phase
2. Proper recovery of the feet top proper position
3. Proper catch of the feet with heels close to the buttocks
4. Not bringing the knees and thighs forward on leg recovery
5. Feet push out and back on the power thrust
6. Feet accelerate throughout the kick
7. Proper timing of the legs to arms and breathing

Coordination

Push-off
Start
Underwater stroke (competition)
Turn
Sidestroke
Use this stroke in recreational swimming and lifesaving. A nice, relaxed resting stroke.

**Head Position**
1. Lower the ear in the water close to the shoulder
2. The mouth and nose should be clear of the water to permit easy breathing
3. Look slightly backward for the best body position
4. Occasionally glance forward to be aware of where you are going

**Body Position (glide)**
1. Lie on the side, horizontal to the surface, straight alignment
2. Legs together, one ankle directly on top of the other, toes pointed
3. Lower arm extended overhead
4. Top arm resting at the side, extended toward the feet

**Arms**
1. Pull overhead arm as trailing arm recovers
2. Hands meet near the breast bone
3. Change angles of hands at proper position
4. Recover overhead arm as trailing arm does the pull/push phase
5. Exaggerate glide in streamlined position

**Legs – regular or inverted scissors kick**

**Regular scissors kick**
1. Draw the heels toward seat, flex hips and knees
2. Extend the top of the leg forward, bottom leg backward
3. Draw both legs together in action of scissors cutting
4. Stop the legs with one directly on top of the other

**Inverted scissors kick**
1. Top leg stays back
2. Bottom leg goes forward

**Coordination**
1. Pull the overhead arm as trailing arm and legs recover
2. Change the pitch of the hands as top leg extends forward (direction you are facing)
3. Recover overhead arm as legs kick and trailing arm pushes
4. Emphasize glide position

**Breathing**
1. Inhale as hands come together near the shoulders
2. Exhale as hands go into glide position
Butterfly

Use this stroke in competition. It is considered the most tiring swimming stroke.

Head Position
1. Exhale with the head down, looking at the bottom, chin near the chest.
2. Inhale with the head up, chin on the water level, looking forward.
3. The head must move to get body undulation. The body follows the head.

Breathing
1. Breathe at the proper time in pull – late
2. The head must precede the hands into the water – dive into the stroke
3. Proper rhythmic breathing pattern

Body Position
1. Shoulders near surface
2. Hips close to surface

Arms
1. Hands enter the water first, proper width, elbows up, little splash
2. Catch the water with the proper hand and wrist action
3. Proper “S” shape pull pattern (hour glass, key hole pull pattern)
4. Elbows up throughout the stroke
5. Acceleration through push/pull phase
6. Ballistic-like follow through on recovery
7. Proper depth of arms through stroke
8. Lift of shoulders and elbows into recovery
9. Butterfly not “butterstyle”

Legs (dolphin kick)
1. Two beat kick for each arm cycle
2. Whip-like action of legs and feet
3. Feet “bounce” up after each down kick
4. Feet cause water to “boil” without breaking surface
5. Knees bend at beginning of down kick – straighten – hyperextension at the end of the kick

Coordination
1. Proper timing – head, arms, legs, breathing
2. Down kick on entry on hands, down kick on exit of hands

Push-off
Start
Turn
**Drowning Statistics**
1. Definition of drowning – suffocation in water
2. Causes of drowning: panic, overwhelming fear, loss of rational thought process
3. Falling, fully clothed, into the water is an emergency. Keep the arms under the surface – less tiring.
4. Modified strokes to use: breaststroke, elementary backstroke, sidestroke
5. The safest rescue of a near-drowning victim is “reaching and throwing.”

**Survival Skills in the Water**
1. Floating – effortless, motionless, with minimum use of arms and legs
   a. Horizontal on back
   b. Vertical on back (trouble in floating)
      1. relax
      2. head back position
      3. lungs filled with air
      4. controlled breathing
      5. arms overhead
      6. knees bent
   c. Jellyfish float
   d. Drownproofing
   e. Survival floating
2. Buoyancy
   a. 99% of the population are floaters
   b. 1% of the population are non-floaters
3. Sculling – A skill using the hands and arms to maintain a position in the water – no legs
   a. Horizontal
      1. Stationary – hands flat, parallel to the surface, figure eight movement
      2. Head first – fingertips up, hands flat, figure eight movement
      3. Overhead – feet first (most difficult) – arms overhead, fingertips down, heels of hands up, push water away from the head, half circle, “polish the halo”
   b. Vertical
      1. Stationary
4. Treading – A skill using the legs and feet to maintain a position in the water – no arms
   a. Flutter kick
   b. Scissors kick
   c. Whip kick
   d. Rotary kick – “egg-beater” kick

**Grading**
See Activity unit breakdown, fitness grade breakdown, and final grading scale under NC/SC Grading Policy at the beginning of the study guide.

**Technique Description/Skill Test**
Specific skills for activity units are taught on a regular basis. In some units, demonstrated knowledge of skills may be obtained through some form of skill testing. This testing is not outcome based.