

## **MISSION**

The Washington State University Baseball Pitching Manual is a detailed-oriented explanation of the development process of collegiate pitchers. The goal-oriented information is designed to give structure and direction to a variety of aptitudes and athletic abilities. The following information provides tools for teaching; the program is designed for the player and the university, with the ultimate goal being a well-conditioned Division One pitcher.

**SECTION I:**  
**THE RESPONSIBILITIES OF A COUGAR PITCHER**

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## WHAT WE DO

- A. Washington State University Pitchers:
- Dictate the Pace - work fast, solid tempo.
  - Throw Quality Pitches – locate your pitches.
  - Change Speeds – create great separation through pitches and Effective Velocity.
  - Competitive Strong – great body language, mound presence and strong routine.
  - Trust the Plan – mentally strong and prepared.
  - Pound the Strings – dominate the bottom of the strike zone.
  - Great Communicator – with other pitchers, the catchers and the coaches.
  - Solid Secondary Skills – fielding your position, attacking runners, backing up bases, covering first, etc.
  - Make Adjustments – pitch to pitch, batter to batter, inning to inning, and game to game.
  - Relentless Approach – attack the batter, be the aggressor.
  - One Pitch at a Time – tremendous pitch to pitch focus.
- B. Washington State University Pitchers Delivery:
- Minimize risk and maximize performance.
  - Develop a repeatable delivery with rhythm and tempo.
  - Athletic position with timing, balance and posture maintenance.
  - Throw downhill with angle and trajectory.
  - Keep it simple – repeat the delivery.

## YEARLY GOALS WITHIN THE PROGRAM

The yearly goals of the Washington State University baseball program and pitching staff provide an outline of the minimum standards pitchers achieve in order to progress adequately through the system.

### FRESHMAN YEAR

*Goal: Acclimate to the program and the system. Understand responsibilities of representing yourself and Washington State University's Baseball program. Develop habits that form the foundation for your collegiate career.*

- Learn program responsibilities.
  - Appearance.
  - On and off field behavior.
  - Respect for the game.
  - Respect for authority.
  - Classroom standards and expectations.
  - Community responsibilities.
- Introduction to routine.
  - Throwing program.

- Bullpen and between innings work.
- Conditioning and weight training.
- Pitch to pitch.
- Game to game.
- PFP and Running Game repetitions.
  - Fundamental Series.
  - Daily Ten Series.
  - Running Technique.
  - Backhand technique.
  - Five Ways to Cover First Base.
  - Back up duties.
- Understand the importance of being on time and responsible,
- Understand mental toughness.
  - Develop a routine.
  - Develop a release system.
- Understand "Everything that happens to you is your fault".
  - Create a no-excuses attitude.
- Fastball usage.
  - Importance of command.
  - No fear of contact.
  - Box fastballs.
- Learn the Change-Up.
- Establish fundamental delivery keys.
- Delivery goals.
  - Rhythm and timing
  - Directions
  - Health
  - Maximize current physical ability.
- Identify future breaking ball. Adjust as needed.
- Establish quick tempo.
- Learn to read scouting reports and charts.

### **SOPHOMORE YEAR**

*Goal: Emphasis on work habits, making adjustments, understanding areas that need improvement, and having a plan to achieve them. Must understand positive contact and use it.*

- Good routines.
- Emphasize repetitions.
- Mechanics – work to achieve a repeatable delivery.
- Expand on mental toughness and no excuses attitude.
- Develop command of fastball to both sides – Level Three (ON the plate vs. OFF the plate).
- Continue to develop changeup; start using it when behind in count when possible.
- Introduce future breaking ball; change current breaking ball if not healthy or productive.

- Warm-up routine should be solid; any new pitches should be incorporated into it.
- Continued development of warm-up routine as a reliever.
- Continued improvement in running game; quicker pick moves, improved times to plate.
- Learn logical reasoning and decision making.
- Learning the difference between pitching on the plate and off the plate (higher than high, lower than low).
- Learn count leverage.
  - First pitch strike and the value it creates.
  - 0-2 count .
  - Ahead vs. Behind protocols.
- Increase knowledge of pitching strategies.
- Continued development of fastball movement.
- Better understanding of pitcher/catcher relationship.

### **JUNIOR YEAR**

*Goal: Becoming a pitcher: more emphasis on the mental part of the game, good habits, improved understanding of self.*

- Should be self-motivated with good work habits.
  - Running
  - Weight Training
  - Nutrition
- Mechanics should be solid.
  - Know body positioning.
  - Ability to repeat delivery.
  - Make own adjustments: during pens and in games.
- Importance of routine/adjusting it to fit needs.
  - Warm-up
  - Pre-game
  - Between pitches
  - Between innings
  - Between games
- Command of fastball.
  - Both sides of plate
  - Elevate and expand zone
  - Pitch below the strings
- Develops quality two-seam fastball approach (based on individual's needs).
- Solid game plan which utilizes charts and other available information.
- Evaluates hitter's strengths and weaknesses.
- Sets-up hitters using Effective Velocity.
- High first pitch strike percentage (Goal: 63%).
- Game situations.
  - Know and understand them.
  - Anticipate and prepare.

- Pitch to them.
- Able to call own game.
- Developed put away pitch and quality two-pitch put away combinations.
- Solid self-evaluator within your performance journal.
- Pitch with changeup as big part of attack (Minimum 15% usage).
- Better understanding of pitcher/catcher relationship.

### **SENIOR YEAR**

*Goal: Understands what has to be done and knows how to do it.*

- Ability to evaluate self and make adjustments (delivery, different pitches and game situations).
- Understands situational pitching and knows how and when to challenge hitters (examples: early in count, late in count, early in game, late in game).
- When to pitch to corners.
- Has put away pitch.
- Command of fastball in out and up.
- Knows how to avoid big innings.
- Can call own game.
- Mature and coachable.
- Command of two types of pitches and control of three.
- Understands different types of set-up strategies and how to use them within his style of pitching.
  - Changing speeds.
  - Changing eye levels.
  - Moving the plate.
  - Attack different areas of different hitters.
  - Observe hitting reactions.
- Has developed solid pick-off moves.
- Understands when and how to hold runners.
- Has quick step/release with runners on base (1.3 or better).
- Can “hold ball” and execute quality pitches.
- Projects confidence and game mentality.
- Enjoys challenges, no fear.
- Pride in good work habits.
- Prepared on and off the field.
- Follows disciplined running and conditioning program.
- Knows how to warm-up as both a starter and reliever.
- Prepared for heightened intensity and expectations.

## **COUGAR PITCHER PROFILE**

**MASTER YOUR MENTALITY**

Pitching at Washington State University within Bailey-Brayton Field presents challenges to all pitchers in the sense of unprecedented competition and often challenging environmental conditions. Developing a consistent and constant routine, one that is simple yet effective is a must within our staff. Within our routine the ability to release the negative in a timely manner, allowing us to move forward is key. Our focus is on playing the game one pitch at a time. That pitch to pitch focus allows us to be in the now and WIN this pitch. It also allows pitchers to be in control of the situation and eliminate any distractions. Controlling what we can control in the now moment allows pitchers to remain aggressive and have an aura about them at all times. This aura also leads to the development of a trust in self, creating great confidence and belief in one's own abilities. Without a true belief-in-self, one's confidence will waver and the results will be inconsistent at best.

**MAKE-UP**

While this might be the hardest to evaluate, it might also be the most important. Delivery, fastball command and fastball usability are all key components to a winning pitcher at Bailey-Brayton Field, but they will all break down without strong make-up and the ability to handle the uniqueness of pitching at a Division One program in a major conference. No matter how good one's stuff and command, there will be times that the results will not be favorable due to the conditions at Bailey-Brayton Field. These are outings that will test the make-up and resolve of each individual. The ability to evaluate these attributes in non-Bailey-Brayton environments is very difficult, but extremely important to our success in procuring the right type of pitchers for Bailey-Brayton Field.

**FASTBALL COMMAND**

This is the basic asset a pitcher must have to be successful at Bailey-Brayton Field. Fastball command means being able to locate the fastball on both sides of the plate as well as being able to change eye levels up and down. It does not mean just throwing strikes, but also means throwing balls when the pitcher wants to. Obviously ball/strike ratios and base on balls to strike outs per innings pitched are important indicators, but those can be misleading. There are many pitchers that can pitch to both sides of the plate but only to the outside corner of the respective hitter.

**PITCH AT A LEVEL THREE**

Our primary focus as a pitcher is to develop our ability to pitch at a Level Three. Level Three pitching includes the ability to locate your pitches to the lower part of the outer and inner half of the strike zone. While having all pitchers pitch at a Level Three is the goal of the program, simply having three to four pitchers a weekend pitch at that level will often lead to winning the weekend series versus our opponent. Level Two pitching is described as pitching to the lower part of the outer half of the plate. Most pitchers who develop this ability will see significant playing time and have important roles within our staff. Finally, pitching at a Level One is the concept of simply throwing strikes. While throwing strikes is a key factor in any pitchers success, Level One pitching often means the pitches are not located to a specific area, the pitcher simply throws strikes.

### **FASTBALL USABILITY**

We have all seen guys that light up the radar gun, but cannot get their fastball by hitters in fastball counts. The key factor in evaluating a pitcher's fastball usability is to see ***how hitters react to his fastball in fastball counts, when he has to use the plate.*** Very often pitchers with only average velocity are able to get hitters out with their fastballs in these situations. This usually is the result of one of two factors: movement or deception. When it's deception, usually from an unorthodox delivery, it can be disastrous to try to straighten out the delivery. What you see is what you get. Very often these guys will not have great fastball command, but their fastball is still a valuable asset because of the movement or deception and the fact that they can use more of the plate and be successful.

### **DEVELOP THE FASTBALL IN**

With the switch in bats in college baseball, more hitters are starting to emphasize covering the fastball away. Developing the fastball in has become a high priority. In MLB, the team that has the highest percentage of using the fastball in has the lowest batting average against. When a hitter is jammed it is an insult to them, thus potentially opening up the fastball away in later at-bats. However, several teams are sticking to the middle away approach and are susceptible to the fastball in at almost any time and count. Supporting the use of the fastball in is the MLB batting averages on those pitches: Up and in = .144 average, middle in = .199 average, and down and in = .186 average.

### **MOVEMENT**

The most reliable movement for a pitcher at Bailey-Brayton is a sinker. Pitchers with sailing and riding fastballs will also work, but their mistakes will result in more damage than mistakes with a sinker. While fastball usability and movement may sound redundant, they differ in the fact that the usable fastball with movement is also tied into a pitcher that is ***willing to use a lot of the plate,*** instead of being a nibbler.

### **CHANGING SPEEDS**

The main thing that will complement the fastball and its usability is the ability to change speeds. This will allow the fastball to be more effective. Again, this can result in an average to sometimes below average fastball having above average usability. In Bailey-Brayton Field change of speed becomes a very high priority.

### **EFFECTIVE VELOCITY**

Another factor in changing speeds is Effective Velocity. Understanding EV and the separations that velocity plus location can create is a major tool in the development and success of pitchers at Bailey-Brayton Field. Effective Velocity also allows pitchers to use more of the plate and attack the zone with their fastball as well as secondary pitches, which are key factors in the development of successful pitchers at WSU.

### **DEVELOPMENT OF SECONDARY PITCHES**

Commanding the fastball and changing speeds will give you a chance to be successful, but commanding a second and/or third pitch will lead to a much higher rate of success and give pitchers the greatest chance for victory. Elite pitchers are able to locate three pitches to at least two different locations. Our focus is the development of secondary pitches that we can throw at any time and in any count, especially key moments in a ball game. Developing an in-in breaking ball (a cookie breaking ball) as well as an in-out breaking ball (the chase breaking ball) will add to a pitcher's ability and the value to our staff. Often time hitters will cheat to the fastball in college baseball, thus the development of secondary pitches allowing the pitcher to cross up hitters only adds to the success of our pitching staff.

### **DELIVERY**

A pitcher's delivery and his fastball command will usually go hand in hand. His overall command and ability to throw quality curves, sliders, and change-ups will also be connected to his delivery. A sound, simple delivery will enable a pitcher to repeat his arm action and his release point, which is the basis of command. The other main reason for a sound delivery is durability. The pitchers who have long and successful careers have done so because they have had deliveries that do not put undue strain on their arms. We can go on forever about deliveries, but there are some basics that you will find in most successful pitchers.

### **RHYTHM/TIMING**

The number one factor in the execution of a pitch or the non-execution of a pitch is the ability to be on time with the delivery. All the mechanical aspects of the delivery are meaningless if the pitcher is unable to kinetically sequence the delivery in a timely manner which allows a repeatable delivery with trajectory and angle. Our main focus of timing within the delivery is the three count system. Locating and developing the three count system is a must within our program. The three count system relies on the belief there is a natural body rhythm pitchers should pitch with, and that rhythm starts with a one count at knee lift peak, a two count at foot strike, and a three count at release point. The one-two-three count should be similar in rhythm to a pitcher's normal walking pace, his natural rhythm. This system allows pitchers to have something to fall back on and simplifies the delivery when adversity arrives.

### **ALIGNMENT**

A very high percentage of winning pitchers will stride and land with their landing foot in line with their push-off foot. There are more and more pitchers throwing across their bodies, which will eventually result in lack of command and can create undue stress and cause injury. This will most often occur during stress and fatigue situations. Often the remedy for this problem is to move to the opposite side of the rubber. However, this is only a bandage and puts off the inevitable struggles a pitcher may have with command or injury. Creating proper alignment is most successful when working on alignment exercises with the strength and conditioning coach as he can help you align your stride and strengthen your core at the same time.

### **ANGLE**

The angle at which the ball crosses the plate will dictate how much ball is in the hitting area at the point of contact. The more downhill angle the less ball to hit. This is obviously a key factor

in the pitching/hitting confrontation as was confirmed years ago: when baseball needed to get more offense into the game the first thing they did was lower the mound.

As stated earlier the delivery will take up a considerable amount of space within this manual. Thus, if a pitcher has proper alignment and creates good downhill angle with rhythm and timing, he will have done most of the other little things correctly.

### **THE UNORTHODOX**

Then there is the exception to the rule. This is the guy who does not have a good delivery from the above stated stand point, but gets results nonetheless. He wins. In these cases understand their longevity and long-term success will probably be lessened. Do not project any more than what you see, as their success is usually a result of their funkiness. Any attempt to “straighten them out” will usually result in their failure.

### **TEMPO**

The speed in which a pitcher works can have a direct impact on success and failure. A quick working pitcher sets a positive tempo for the game. By working at a quick tempo the pitcher sets a confident rhythm that keeps the defense ready. It also can disrupt the comfort of the hitter and make them overly aggressive early in the count. Our goals are to throw 14 pitches or less per inning, with each pitch coming at a pace of less than 14 seconds between pitches. In order to work at this quick pace, the pitcher must get signs from the catcher quickly. First pitch strikes and creating early contact by the opposing hitters helps speed the game up.

## **PITCHER ROUTINES**

### **DAILY ROUTINE**

- A. Early Treatment
  - a. Meet with trainer prior to practice/game in training room.
  - b. Prepare body for daily exercises associated with baseball program.
  
- B. Pre-Stretch Routine
  - a. Hip Mobility Exercises
    - i. Series of exercises designed to increase functionality of hip and core area.
    - ii. Great warm-up routine to raise core temperature prior to shoulder tubing and stretching.
  - b. Shoulder Tubing
    - i. Jaeger Band Exercises.
    - ii. Cross Symmetry Exercises.
  
- C. Team Stretch
  - a. Led by strength and conditioning coach.
  - b. Typically a 10 minute stretch period.

- D. Weighted Ball Routine
  - a. Arm strengthening exercises performed prior to actual throwing program.
  - b. 4-5 groups of pitchers alternating between weighted ball drills.
  - c. Pitcher will execute drill then rest while others in group execute drills.
  - d. Pitcher will perform between 5-10 drills with weighted balls.
  
- E. Throwing Routine
  - a. Typically a 30 minute period for pitchers to play long toss and do their flat ground work.
  - b. Bullpen routine immediately following throwing program for those scheduled to throw pens.
  - c. Conditioning for those who are not throwing that day.
  
- F. Daily Ten Series
  - a. Daily work on fundamental series and the running game.
  - b. Performed at the end of throwing routine due to various times pitchers will use to throw each day.
  
- G. PFP Routine Series
  - a. Daily work on pitchers fielding practice (if time permits).
  - b. Use the practice field or corner outfield depending on drills and time remaining.
  
- H. Team Defense
  - a. Defensive drills that bring the team together for execution.
  - b. Work on bunt game, running game, live defense, situational offense, rundowns, cuts and relays, pop fly communication, etc.
  
- I. Scrimmage or Batting Practice Duties
  - a. Scrimmage if pitchers are available for live arm action.
  - b. Batting practice duties include fungos, bases, stack shag, and home run balls.
  - c. Conditioning for those who have yet to conduct their conditioning for the day.

## **WEEKLY ROUTINE**

### **STARTERS**

Starters at Washington State University follow a well planned routine. This routine allows the starter great opportunities to prepare their body and mind for the upcoming week's battle. Alterations to the routine can be made based on the individual starter's needs, however, this is by and large the weekly program starters follow at WSU.

- A. Day One
  - a. Live: Start
  - b. Bullpen: Pre-Game Routine
  - c. Throwing: Pre-Game Routine
  - d. Conditioning: Post-Game Routine

- B. Day Two
  - a. Throwing: Off Day
  - b. Conditioning: Recovery Run
  
- C. Day Three
  - a. Throwing: Easy Long Toss (ELT)
  - b. Conditioning: Six Innings Core Program and Gassers
  
- D. Day Four
  - a. Bullpen: Work Pen
  - b. Throwing: Long Toss (LT)
  - c. Conditioning: Long Sprints
  
- E. Day Five
  - a. Throwing: Easy Long Toss (ELT)
  - b. Conditioning: Off Day
  
- F. Day Six
  - a. Bullpen: Prep Pen
  - b. Throwing: Long Toss (LT)
  - c. Conditioning: Post Pitch Flush Run
  
- G. Day Seven
  - a. Throwing: Long Toss
  - b. Conditioning: Medium Sprint Day

## **RELIEVERS**

### **NO MIDWEEK GAME**

This routine is a typical weekly routine for our relievers if we do not have a midweek game scheduled.

- A. Day One
  - a. Live: Relief Appearance
  - b. Bullpen: Pre-Game Routine
  - c. Throwing: Pre-Game Routine
  - d. Conditioning: Pre-Game Ladders
  
- B. Day Two
  - a. Live: Relief Appearance
  - b. Bullpen: Pre-Game Routine
  - c. Throwing: Pre-Game Routine
  - d. Conditioning: Pre-Game Medium Sprints
  
- C. Day Three
  - a. Live: Relief Appearance

- b. Bullpen: Pre-Game Routine
  - c. Throwing: Pre-Game Routine
  - d. Conditioning: Pre-Game Ladders
- D. Day Four
- a. Throwing: Off Day
  - b. Conditioning: Off Day
- E. Day Five
- a. Throwing: Easy Long Toss (ELT)
  - b. Conditioning: Six Innings Core Program and Gassers
- F. Day Six
- a. Bullpen: Prep Pen
  - b. Throwing: Long Toss (LT)
  - c. Conditioning: Long Sprints
- G. Day Seven
- a. Throwing: Long Toss
  - b. Conditioning: Medium Sprint Day

### **MIDWEEK GAME**

This routine is a typical weekly routine for our relievers if we have a midweek game scheduled.

- A. Day One
- a. Live: Relief Appearance
  - b. Bullpen: Pre-Game Routine
  - c. Throwing: Pre-Game Routine
  - d. Conditioning: Pre-Game Ladders
- B. Day Two
- a. Live: Relief Appearance
  - b. Bullpen: Pre-Game Routine
  - c. Throwing: Pre-Game Routine
  - d. Conditioning: Pre-Game Medium Sprints
- C. Day Three
- a. Live: Relief Appearance
  - b. Bullpen: Pre-Game Routine
  - c. Throwing: Pre-Game Routine
  - d. Conditioning: Pre-Game Ladders
- D. Day Four
- a. Throwing: Easy Long Toss (ELT)
  - b. Conditioning: Long Sprint Day

- E. Day Five
  - a. Live: Relief Appearance
  - b. Bullpen: Pre-Game Routine
  - c. Throwing: Pre-Game Routine
  - d. Conditioning: Pre-Game Ladders
  
- F. Day Six
  - a. Relievers Not Used on Day Five
    - i. Bullpen: Prep Pen
    - ii. Throwing: Long Toss (LT)
    - iii. Conditioning: Long Sprints
  - b. Relievers Used on Day Five
    - i. Throwing: Off Day
    - ii. Conditioning: Off Day
  
- G. Day Seven
  - a. Throwing: Long Toss
  - b. Conditioning: Medium Sprint Day

Both of these routines are based on the reliever who is used frequently during a weekend series or midweek game. Often times if a reliever is not used in a series they will have a different weekly routine the following week which includes facing our own hitters in a live situation such as rotational batting practice or scrimmage. While these routines shown above are the norm, pitchers may find themselves as relievers following a new routine every week based on their appearances over the weekend series.

**SECTION II:**  
**COUGAR PITCHER THROWING PROGRAM**

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## **THROWING PROGRAM**

The following will be done on a daily basis during the season. The key to the program is a gradual progression from pre-mound throwing to pen-mound throwing to live-game pitching. All throwing is aimed at "individual tolerance", thus preventing a stressful workload on the pitcher.

### **LONG TOSS**

The long toss program followed by the Cougars program is done with great purpose and intent. While we use to place an emphasis on timed catch play, the feeling now is the pitcher knows his body best and should be allowed to play catch at distances and times that best fit his needs as part of the individual tolerance ideal. Be careful as pitchers will often tend to baby their catch play rather than push themselves during catch play. Thus, the point of great purpose and intent is to encourage pitchers to push themselves during catch play to improve their craft. It is a belief that throwing harder requires the pitcher to throw hard when physically able to do so.

As part of the long toss program we adhere to the Jaeger Long Toss program which includes:

- A. An emphasis on shoulder tubing prior to throwing.
- B. Spread base catch until 60 feet.
- C. Step behind catch to 90 feet.
- D. Open close opening up toss to max distance.
- E. Bullet catch with pull down emphasis and a squatting partner back to 90 feet - move in 10-20 feet with each throw.

Pitchers are allotted 20-30 minutes daily to perform their throwing program. Long toss is typically an everyday routine with optional alterations to the program including Easy Long Toss, which allows pitchers to eliminate the Bullet Catch phase of the routine and continue to use the Open Close Opening Up toss on the way back in to 90 feet.

### **FLATGROUND WORK**

The flat ground program allows pitchers to meet the workload needs of a pitcher without the stress of throwing on a mound. It is used to create downhill angle after the long toss program. Typically a pitcher will use 50-75% effort and can be lengthened or shortened based on the pitcher's previous day's work. The program includes the following:

### **BALANCE CATCH**

Balance Catch is performed at a distance of 60-70' and places an emphasis on the fastball/changeup combination. In the stretch position, the pitcher will throw to his partner who is squatting and alternate between a fastball and changeup. Partners will alternate catch play to each other in a continuous manner for a minimum of 10 throws and a maximum of 20 throws. Ideally this routine starts at the 70' distance emphasizing arm speed and the pull down phase of throwing the fastball, and more importantly the changeup with fastball arm action. Included in this routine is the ability to offset the squatting partner to arm side and emphasize

throwing the inner half of the baseball using a two-seam fastball grip or a changeup grip. The offset catcher should set up about 5-8' off center during offset catch.

### **PITCHER CATCH**

Pitcher Catch is performed at a distance of 50-60' and places an emphasis on the fastball/breaking ball combination. Unlike balance catch, pitcher catch requires the pitcher throw 10 consecutive pitches to a squatting partner using the fastball/breaking ball combination. After 10 throws the pitchers switch. If a pitcher has both a curveball and slider, then it is recommended they repeat pitcher catch using the second breaking ball in their arsenal. Ideally this is done at the 50' distance to emphasize spin and an on top / out front release point with their breaking ball. Veteran pitchers will tend to prefer the 60' distance to simulate game like actions.

Adjustments to both Balance Catch and Pitcher Catch can be made by either the pitching coach or the trainer based on pitch development goals or health rehabilitative goals.

### **SHADOW CATCH**

Part of the WSU throwing program includes shadow catch, which emphasizes delivery sequences from a mound. This routine is common amongst injured pitchers as it allows them to simulate their delivery while unable to physically throw a baseball. The pitcher should place high importance on having a partner or catcher squat for them and should include the following areas of intent:

- A. Delivery Goals
- B. Routine Development
- C. Sign Series Development
- D. Game Like Situational Pitching

Injured pitchers are encouraged to perform shadow catch during the staff's throwing routine portion of practice. If able have the pitching coach sit in on shadow catch and create game situations one can visualize and perform during catch play.

## **PITCH DEVELOPMENT**

### **DEVELOPMENT OF THE BASIC PITCHES**

The key to developing any basic pitch is to use them in game like settings. Check grip often for initial adjustments.

### **FASTBALL**

The most important pitch in every pitcher's arsenal is the fastball. All pitches originate from it and it is thrown more than any other pitch. Location of fastball gives pitcher four different pitches in the strike zone. The ability to locate fastball will give the pitcher an advantage in most situations. Emphasis is on down (strings) before in and out.

- A. Movement - Proper rotation from a pitcher's fastball will be straight or have a slight tail down and in to a right-handed hitter from a right-handed pitcher. A live, moving fastball thrown with downward angle is difficult to hit because the hitter must judge two planes rather than one.
- B. Four-Seam - Used mainly for location, pitching up and pitchouts. This grip will straighten ball and can give ball more velocity and direction.
  - a. Hold across seams (horseshoe out)
  - b. Loose wrist and grip.
  - c. Half inch gap or closer between index finger and middle fingers.
  - d. Gap between ball and palm. The bigger the gap typically the later and greater the movement.
  - e. Young power arms should use the four-seam grip most of the time.
- C. Two-Seam - The "with seams" or "two-seam" fastball usually will be thrown down in the strike zone. This grip will tend to yield a "sinking" or "running" movement. "Sink" is usually achieved with a variation of the two-seam fastball.
  - a. Grip ball with fingers in line with seams (on or against)
  - b. Finger pressure is found on the inside of the fore finger. Throw the inside part of the baseball.
  - c. Don't turn / pronate the wrist. Be free and easy. Hand pronates naturally upon release.
  - d. Use middle of plate as target and let ball break to arm side. Aiming for third or black will cause pitch to appear and be out of the strike zone.
  - e. Pitcher wants hitter to swing at pitch "No Fear of Contact".
  - f. Sink is created by staying on top of the baseball at release point.
- D. Practice Approach
  - a. Work on throwing with a loose arm. Long, loose arm action is very important. Keep wrist behind ball, firm and strong fingertips.
  - b. During catch play, change grips for four-seam and two-seam as pitcher would in game.
  - c. Flat ground work is critical. Use the partner's knees as the string level and get to extension to throw the ball downhill. Command and location starts here as it can be done daily, unlike mound work.
  - d. Increase game and bullpen usage. Early bullpens will have fastball command emphasis and pitchers will only proceed to secondary stuff when fastball command and location is adequate.

### **CHANGE-UP**

The "change" may be the most underrated pitch in baseball. Pitchers often have difficulty believing they can get hitters out by not throwing hard. The change-up is particularly effective when the pitcher is throwing to an opposite-handed hitter.

Arm speed is the most important element. The idea that "grip dictates velocity" must be emphasized. If the pitcher slows his arm, most hitters can identify off-speed and make adjustments. We want the hitter to look fastball and appear to get one, except the speed is short. Also, change-up is thrown off the fastball and should look like a fastball. In the initial stages of learning the change-up, it is better to throw the change too fast as opposed to too slow. Throw the change with trust that is exhibited by arm speed. You can slow the ball down with your grip, not a change in your arm speed. A deeper and looser grip will slow the ball down. While a separation of 8mph can result in soft contact and typically a separation of 10+mph can result in swing and misses, there is truly no optimum differential because there are too many variables. The hitter will tell you if it's the correct speed, if he's the right guy to throw a change to and if it's in the right location. If he's right on the change it's probably too fast and if he double clutches to hit it or foul it off it's probably too slow.

- A. Grips - Although many grips are used, the one closest to the fastball grip should be tried first, especially with young pitchers just learning the pitch.
  - a. Three Finger (Pitch Fork)
    - i. With two or four-seam fastball grip, add the third finger, keeping the little finger and thumb under the ball.
    - ii. Use fingertips.
    - iii. This grip is closest in comfort to the fastball.
  - b. Four Finger
    - i. Use all four fingers on top of ball with thumb directly under the ball.
    - ii. Throw with fastball arm speed.
    - iii. White ball grip.
  - c. Choke
    - i. With fastball grip, hold ball deeper in hand, below fingertips with slight palm pressure.
    - ii. No fingertips.
  - d. Circle
    - i. The thumb and index finger will be held together in shape of circle.
    - ii. Lay ball against this circle with middle finger gripping large part of ball.
    - iii. LHP should try this grip.
    - iv. Keep wrist inside the ball.
    - v. Be careful not to push the ball.
- B. Practice Approach
  - a. Use as part of daily catch (long toss and flat ground work)
  - b. Check arm speed.
  - c. Exaggerate downhill angle.
  - d. Flat ground work should include offsetting the catcher to arm side to get feel for throwing the inside of the baseball.
  - e. Pitch down in the strike zone. It does not have to be a strike, however, consistent non-competitive 55' changeups are not acceptable.

- f. Work from the ground up and pitch below the strings for swing and miss or soft contact.
- g. Pitch for contact.
- h. Called strikes are good but change of speed is the goal.

### **SLIDER**

The slider is thrown much like a fastball, resulting in late break across plane of bat. A slider appears like a fastball (out of hand) and has "late darting" action to desired side of plate. RHP vs. RHH would be down and away.

- A. Grip - The slider grip will vary from pitcher to pitcher. The most common grip involves placing the middle or power finger next to a seam and thumb underneath the ball on the seam. Many pitchers have also developed good sliders while gripping the fastball and slider the same way. Whatever finger placement is used, the slider must not be held too tightly. This will reduce the velocity and sharpness of the pitch. As an indicator of grip tightness a person should be able to slap the ball out of the pitchers hand when held sideways. The across the seams X slider may be beneficial to some pitchers having trouble maintaining velocity on the slider.
  - a. Top right corner of the ball (RHP).
  - b. Use cup (horseshoe).
  - c. Hold ball as long as possible.
  - d. Back of hand stays parallel to the ground.
  - e. Prevent wrist turn, which can cause arm violence and elbow problems.
  - f. Arm should move down and across the body so as not to have "flat" rotation.
  - g. Think fastball all the way through the pitch.
  - h. The slider is ultimately a fastball thrown on top of ball with slight turn of hand to create cut action.
- B. Release Point
  - a. Extension with arm at center of body or out front, creating outside rotation and avoiding pitch backup.
  - b. Front side closure is important with possible stress put on the arm when front side releases too early.
  - c. Allow arm to work through the same fastball window and stay inside the wall to prevent getting around the pitch. Stay through it, on top, out front.
- C. Practice Approach
  - a. Shorten distance. Flat ground, exaggerate arm with less body, use to get hand out front.
  - b. Extend catcher to batter's box of desired location to emphasize releasing ball at center or out front.
  - c. Spread base catch emphasizing upper half extension.

- d. Fastball with slider grip emphasizing fastball arm action and getting a feel for release point out front. This will often show cut action on the guys who can naturally throw a slider. From here emphasize out front release with same arm action resulting in cut and tilt.

### CURVEBALL

- A. Grip - Each pitcher must experiment to find the grip that best suits his hand size and wrist flexibility. The key is to achieve four seam downward rotation.
  - a. The most common grip is the horseshoe grip.
  - b. The side of throwing hand should be facing the hitter at release. The side of the hand should also be perpendicular to the ground at release. This fundamental will help to prevent a slow, looping curveball.
  - c. It is extremely important that the throwing hand is not wrapped too soon. However, once the hand comes forward, it is angled for the curveball and is thrown with fastball hand speed.
  - d. It is important the throwing arm shoulder be above the glove arm shoulder when releasing the curveball. These fundamentals help prevent the uphill curveball.
  - e. The curveball is a pitch that has fastball aggression that you throw with the front of the ball. The goal is quick, late down or down and across action. Even though there is a speed variation from the fastball, this breaking ball should ideally develop as a change of direction power pitch.
- B. Practice Approach
  - a. Work on spin from short distances, high-low angle emphasis.
  - b. Have the catcher check for four seam downward rotation.
  - c. Work towards a short quick breaking pitch.
  - d. Always check the target point. This point may change from day to day.
  - e. **Focus on where to start the break not where you want it to end.**
  - f. Stay back and ride the back leg down the hill to allow the arm to get to apex at foot strike and get out front to release point.
  - g. Stay inside the wall as your arm comes forward to avoid getting around the ball causing the slow and early loop curveball.
  - h. Bring your thumb up at release as in flipping the ball over a wall in front of you to gain proper rotation and four seam downward spin.
  - i. Creating tight rotation with proper arm slot will give best chance for results.

### BULLPENS

Although nothing replaces the game, what's done in the pen is close. Our goal here is taking quality work from pen to game. The structure of a bullpen should have direct assimilation to game-like settings. Emphasis is on being down in the strike zone (pound the strings) before inner or outer half development. Pitchers are encouraged to incorporate their routine within the pen, thus pens can take varying rates of time. The catcher is responsible for counting the

number of pitches a pitcher throws, with the amounts ranging from 20-50 pitches depending on the pen type. During the finish phase, or on your own phase of the pen, a catcher should signal in the pitch to the pitcher even if the pitcher indicates the pitch first with glove action. If pre-game pen, be sure to allow three-five minutes on the bench before the beginning of the game to take a break and catch your breath. Being rushed during game action is not a goal and should be avoided at all costs, thus it is imperative the starting pitcher know their needed time and start their pen accordingly.

### **PREP PEN**

This pen is performed two-three days prior to the start of a series or a starter's game day. The prep pen includes 30-50 pitches and allows pitchers to develop their game plan and pitch plan for the upcoming opponent. Command and movement of pitches is a critical point of emphasis during a prep pen. A typical prep pen is as follows:

- A. Fastball Series (10) - 2 Box, 2 Glove Side, 2 Arm Side, 2 Elevated, 1 Ext Glove, 1 Ext Arm
- B. Second Pitch Series (10) - 2 Box, 2 Glove or Arm, 3 FB/2ndP Combinations
- C. Third Pitch Series (10) - 2 Box, 2 Glove or Arm, 3 FB/3rdP Combinations
- D. Fourth Pitch Series (If App) - Same
- E. On Your Own (10-20) - Catcher call and work in 3-4-four pitch sequences to a hitter.
- F. Conditioning - Light Jog Day (ie. 8 Poles)

The prep pen does not specify when the wind-up or stretch is used, but ideally 75% of the pitches thrown during this pen are out of the stretch, and at the least the On Your Own portion of the pen is done in the stretch.

### **WORK PEN**

The work pen is done three days after a starter's appearance, or can be done with a reliever who has not seen action in a few games and needs to throw a pen the day before a game day. While the prep pen emphasizes game day preparation, the work pen focuses on the development of the delivery or pitch development. Since the pitcher is focused on his delivery or pitch development, little emphasis should be placed on command, with the focus simply being pound the strings or box up your pitches. A work pen progresses as follows:

- A. Balance Catch - 60-70' at the conclusion of long toss
- B. Pitcher Catch - 50-60' at the conclusion of balance catch
- C. Short Work - on the mound with catcher at 50' - 6 Fastballs and 4 Changeups (stretch)
- D. Backside Mound Drill - five pitches to catcher at 50' throwing uphill to emphasize chest over front knee and release point - 5 Changeups (stretch)
- E. Shadow Catch - 10 shadow throws with catcher calling the pitches (windup)
- F. Spin Catch - on the mound with catcher at 50' - 5 Breaking Balls (stretch)
- G. On Your Own - 20 pitches on your own - 5x4 pitch sequences (2FB/2OS combos) (stretch)
- H. Running Game - 10 fundamental series from catcher with execution by pitcher
- I. Conditioning - Hard Sprint Day (ie. 4 Hard Poles)

**COUG PEN**

The Coug pen was created with a heavy emphasis on command, where the pitcher is only allowed to progress to the next pitch type after successfully completing a series with the previous pitch. This pen starts with fastball command and progresses to the second and third pitch as earned. It allows a maximum of 30 pitches to be thrown. At the end of the pen a pitcher is recognized as a D-1 pitcher if completed in 30 pitches, a Regional pitcher if completed in 28-29 pitches, a Super Regional pitcher if completed in 27 pitches, an Omaha pitcher if completed in 26 pitches and a National Champion if completed in 25 or less pitches. The Coug pen is used frequently at the start of both the fall and winter break bullpen sessions as fastball command is greatly emphasized before being allowed to throw secondary pitches. The Coug pen looks like:

- A. 3 Boxed Fastballs
- B. 2 Glove Fastballs
- C. 2 Arm Fastballs
- D. 2 Elevated Fastballs
- E. 1 Extended Glove Fastball
- F. 1 Extended Arm Fastball
- G. 2 Boxed Second Pitch
- H. 2 Glove or Arm Second Pitch (breaking ball glove / changeup arm)
- I. 2 Buried Second Pitch
- J. 2 Boxed Third Pitch
- K. 2 Glove or Arm Third Pitch (breaking ball glove / changeup arm)
- L. 2 Buried Third Pitch

If the pitcher hits the batter at any time, or throws a wild pitch at any time, he is required to move back a set and repeat the previous set of pitches. If the pitcher is able to hit the strings at any time during a pitch set, he is allowed to move forward to the next set instantly.

The Coug pen is also a great way to set up bullpen competitions amongst the staff as they can go head-to-head in competition to see who can complete the pen in the fewest amount of pitches, or who can advance the furthest in pitch sets by pitch 30.

**LIGHT PEN**

Used for relievers who have been inactive, but are needed the next day. This is also considered a shortened mid-week pen or a modified prep pen. Emphasis is quality pitches down in the zone.

- A. Fastball (9) - 3 Box, 3 Glove, 3 Arm (windup)
- B. Changeup (four) - 4 Strike or Contact Changeups (windup)
- C. Fastball (7) - 3 Glove (fourseam), 2 Arm (twoseam), 2 Elevated (fourseam) (stretch)
- D. Changeup (three) - 3 Strike or Contact Changeups (stretch)
- E. Fastball (four) - 2 Arm (two or four seam), 2 Glove (fourseam)

- F. Breaking Ball (four) - 4 Cookies (stretch)
- G. Situational (three) - 1 pitchout RHH, 1 pitchout LHH, 1 3-0 Count strike

The light pen can be modified in pitch count if needed to accommodate the reliever's workload and needs.

### **FASTBALL/CHANGEUP PEN**

This pen structure is ideal for most rehab assignments as the pitcher starts their pen progressions, or as part of the initial fall season pen progression, or winter throwing program pen progression. Use after a long toss session.

- A. Fastball (4) - Boxed (windup)
- B. Fastball (3) - Glove
- C. Fastball (4) - Arm (stretch)
- D. Changeup (5) - Boxed
- E. Fastball (3) - Glove (windup)
- F. Changeup (2) - Boxed Arm
- G. Fastball (2) - Arm
- H. Changeup (2) - Arm
- I. Fastball (1) - Glove (stretch)
- J. Changeup (1) - Boxed Arm
- K. Fastball (1) - Glove

The bullpen program can be adjusted to the needs of the individual pitcher. Many pitchers can prepare with fewer pitches and should be allowed to do so accordingly, unless the pen is part of the build-up phase of the throwing program. Once the throwing program enters the maintenance phase, when pitch counts no longer progress upward and have leveled off for the season, then the pitcher should be allowed to throw pens at the lower end of the pitch count spectrum. A particular pitcher's personal development may require a change in the ratio between fastballs, breaking balls and changeups. Also you may find that a pitcher will throw two prep pens between starts or two work pens between starts. Regardless of pen type, the key is to find the best program for each individual pitcher that allows them to maximize their talents come game day.

### **BULLPEN PROCEDURES**

The following are suggested items and guidelines:

#### **EQUIPMENT**

- A. Surgical tubing (Cross Symmetry sets or Jaeger Bands).
- B. Weighted balls and rebound mats.
- C. Pitcher's bag with balls in game-like condition (replace weekly).
- D. Sanitary sock with new balls (pearls) only used for mound work.
- E. At least one catcher in pen at all times on defense (have shin guards on, glove and mask nearby).

- F. Jacket (no matter the weather).
- G. Sleeves and/or extra shirt.
- H. Towels for both pitcher's use and to dry balls off with.
- I. Rosin bag.
- J. Tongue depressor or cleat cleaner.

### **GUIDELINES**

#### **PRE-GAME - STARTER**

- A. Nobody in pen except starting pitcher, catcher and coach.
- B. No position players near bullpen mound at any time (ie. pepper play).
- C. Starting pitcher routine.
  - a. Treatment.
  - b. Stretch.
  - c. Light Run (produce a sweat) - two poles or six sprints.
  - d. Surgical Tubing.
  - e. Trainer Assisted Stretch.
  - f. Throwing Program - Individual Pre-game Long Toss program.
  - g. Structured Bullpen - Use last few pitches to sequence to first few hitters of game.
  - h. Meet with pitcher coach and catcher - one last review of game plan, signs.
  - i. Rest in dugout (three-five minutes).

#### **RELIEVERS**

This is a key element for pitching success or failure. Without the luxury of time that the starting pitcher has, the reliever must be able to get ready in a hurry. This takes practice and discipline.

- A. Make all pitches from the rubber.
- B. Get arm loose quickly.
- C. Throw in rapid sequence but not out of control - giddy up catch.
- D. Concentration begins before the pitcher gets the call.
- E. Majority of appearances will be from stretch, so pitcher should throw all warm-ups from stretch position.
- F. Get fastball ready first.
- G. Get out pitch or second pitch ready next.
- H. If time permits mix both.
- I. Get ready to pitch to on-deck hitter or pinch hitter - know who's playing and who key hitters on the bench are.
- J. Once relief pitcher is ready don't keep throwing. A gauge is to not throw any more than the pitcher in the game - match him one for one. Don't leave it in the pen or not be able to pitch because pitcher threw too much in the pen the game before.

#### **RELIEF PITCHER GAME PROCEDURE**

- A. Stay mentally in the game. Watch for:
  - a. Hitter weakness.
  - b. How pitcher would attack those weaknesses.

- c. Pay attention - know the details.
- B. Stay physically ready.
- a. Play catch with outfielder between innings.
  - b. Use surgical tubing.
  - c. Stretch legs or jog between innings.
  - d. Cold to hot can cause injury - stay loose.
- C. Anticipate the call. Know possible role that day.
- a. Know if you're long, middle or short relief.
  - b. Watch pitcher in game to anticipate call.
  - c. Never be surprised if you get the call.
  - d. Want the baseball.
  - e. Know the head coach / pitching coach. This can give you extra time to stretch.
- D. Upon entering the game, know the situation.
- a. Listen to the coach for situation instructions.
  - b. Familiarize yourself with all surroundings.
  - c. Have ability to understand and apply warm-up pitches to first hitter you face.
  - d. Tell coach and catcher best strike pitch and best out pitch.
- E. Eight warm-ups from stretch position unless no one is on base. Sequence:
- a. Boxed fastball (1).
  - b. Fastball to strength side (2).
  - c. Breaking balls (2) or out pitch if other than fastball.
  - d. Fastball strength side (1).
  - e. Breaking ball or changeup (1); looks/hold, depending on the situation.
  - f. Fastball (1).
  - g. Use quick pitch / slide step on at least one pitch from the stretch for opponents timing purposes - be as quick as you can without worrying about command as they'll be more worried about your time to the plate than the quality of the pitch during your warm-ups. Make sure the pitch is a fastball when doing this.

## **DEVELOPMENTAL PROGRESSION**

### **PITCH LIMITS**

Pitch limits are essential to the health and development of the pitcher. A steady progression from Fall Ball to Opening Day and throughout the season:

### **FALL BASEBALL**

First Appearance	40 Pitches or three Innings
Second Appearance	50 Pitches
Third Appearance	60 Pitches
Fourth Appearance On	70 Pitches Max

**SPRING PRE-SEASON**

First Appearance	30 Pitches or two Innings
Second Appearance	40 Pitches
Third Appearance	50 Pitches
Fourth Appearance	60 Pitches
Fifth Appearance	65 Pitches
Sixth Appearance	70 Pitches
Seventh Appearance	75 Pitches

**SPRING REGULAR SEASON**

First Three Starts	75-90 Pitches
Second Three Starts	90-10five Pitches
Remainder of Season	90-120 Pitches

**PITCHING PERCENTAGES**

These are minimal percentage goals for pitchers to attain:

**STRIKE PERCENTAGES**

Overall	63%
First Pitch	59%
Fastball	64%
Curveball	61%
Slider	61%
Change-Up	61%
Other	60%

**PITCH USE PERCENTAGES**

When documenting the usage of pitches, we design to emphasize the use of the fastball. For the young pitcher the use of the fastball is the single most important aspect of his development. The fastball is thrown in all counts, and the ability to locate it with change of speeds is essential.

Fastball	65%
Breaking Ball	20%
Change-Up	15%

**PITCHER ROLES**

The pitcher's role will be decided by the coaching staff after evaluating the pitching staff and the role that allows the most success for the pitcher, staff, and team within that role. Most successful programs rely on six to eight arms which carry the load of the staff's innings throughout the season. As a reminder we typically carry ten pitchers on our roster during competition while we carry 14-16 pitchers as a whole on our team. As you can see the pitcher's development and innings pitched are often related to finding a spot in one of these roles.

The roles of the pitching staff are as follows:

1. Friday Starter
2. Saturday Starter
3. Sunday Starter
4. Closer
5. Set-Up RH or LHP
6. Set-Up RH or LHP
7. Swing Arm (Spot Starter or Long Reliever)
8. Situational LHP
9. Innings
10. Innings

**SECTION III:**  
**THE DELIVERY**

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## **MECHANICS**

### **THE DELIVERY**

Mechanics are an avenue for location, durability and maximizing physical potential. The mechanics discussed here are by no means the only ones available for pitchers to learn, but more of a foundation from which basic adjustments can be made. Our goal through mechanics is creating:

- A. Rhythm - work in unison with the body's natural pace.
- B. Direction - must understand pathways or lines to home plate. Proper direction is achieved when the land toe and pivot toe are in a straight line to the plate.
- C. Trajectory or Extension - work downhill.
- D. Durability - taking pressure off arm through use of large muscle groups for balance throughout the delivery.
- E. Finish - create a strong finish as the arm can only accelerate as fast as it can decelerate.

### **THE SETUP**

- A. Body in relaxed position, feet slightly spread (not together), torso slightly forward and upright with shoulders relaxed.
- B. Feet positioned on throwing arm side of rubber for deception and outside edge angle on breaking pitches. Body weight should be positioned over pivot foot.
- C. Ball should be set in the glove prior to stepping on the rubber. It is not advised to hold ball in hand during set-up.
- D. Shoulders and hips should have slight angle open to throwing arm side.

### **PRELIMINARY MOVEMENT**

- A. A short three-quarter drop step with the free foot in the direction of second baseman (RHP) or shortstop (LHP) occurs as the pivot foot is moved into position in front of and next to the pitching rubber.
- B. The hand lift should be coordinated with the drop step and the placement of the pivot foot.
- C. Key points:
  - a. Cover wrist and ball with the glove so that the view of the ball and wrist is obscured from both base coaches.
  - b. Keep the back of the glove to the hitter during movement.
  - c. Do not tilt torso toward second base.
  - d. Keep head over pivot knee and get loaded.

### **BALANCE PHASE ONE**

- A. Hands should move down the mid-line of torso, moving simultaneously with the lift of the stride leg.
- B. The stride leg should be lifted using the quadriceps. The calf and foot should remain almost limp during the leg lift. The stride knee should be moved toward the belt buckle during the leg lift. Key points:

- a. Do not swing stride foot. This may cause the torso to lean back or arch to maintain balance.
  - b. During this movement, the eyes should remain parallel to the ground. The vision should be continually focused on target once catcher's signs are given.
  - c. The stride leg should reach its highest position at or slightly above the pitcher's belt line. Extreme leg kicks may lead to balance / load problems. The leg kick should always be "soft".
- C. Balance with the weight on rubber foot position. It should be emphasized that too great a turn can cause too much head turn and result in control problems.
- D. The head position should remain stable. Head movement created by excessive hip and shoulder rotation may cause balance and vision problems. Both eyes on target!
- E. The rear leg should remain moderately flexed with the pitcher's head over the pivot foot.
- F. Head, back foot, and lifted leg are all in a balanced position.
- G. Maintain posture during this phase.
- H. Note: Arm angle dictates leg lift and the amount of turn the pitcher takes.
- a. Over the top arm angle take knee to front of chest.
  - b.  $\frac{3}{4}$  arm angle take lift knee to back of chest.
  - c. Sidearm angle take lift knee beyond pivot leg during turn.

### **BALANCE PHASE TWO**

Separation of the hands should occur at a point allowing arm to reach apex at foot strike.

- A. As the hands break or separate there are several key fundamentals to execute:
- a. Balanced with weight retention and head riding the back leg.
  - b. Glove stays inside the box.
  - c. All actions stay inside the tunnel, allowing pitcher to stay linear with great direction.

### **EXPANSION AND DIRECTION PHASE**

- A. Lower Half - The stride should begin with the front side moving directly at the catcher's glove.
- a. This movement toward the target should be initiated by the glide of the back leg and should be considered a controlled fall. Stride like you hit.
  - b. Linear direction allows better direction. All movement keeps the pitcher on-line and moving to the plate.
  - c. During the stride/separation phase the head should remain over the rear leg thigh. This head position allows the pitcher to retain the body weight behind the center of gravity. During acceleration, the weight is shifted to the pitch.
  - d. Lead with the front foot / knee.
  - e. The stride leg foot should land slightly closed with the body weight landing predominantly on the inside of the stride foot, which has moved at the target. This landing allows the front side to stay closed longer, improves power and location and reduces arm strain. The knee of the stride leg should be flexed as the stride foot lands.

- f. Ideally the pitcher reaches a point 75% down the hill before opening up the front hip.
  - g. Maintain posture during the delivery. Not concerned with posture tilt as long as the pitcher maintains that tilt throughout and does not change tilt while going downhill.
  - h. By locking in the hip the pitcher is able to maintain back hip height as he goes down the hill.
- B. Upper Half - The separation of the hands and subsequent arm action should occur simultaneously with the beginning of the stride.
- a. Lead elbow parallel with front shoulder, level with back shoulder.
  - b. The glove stays level to or below the lead elbow. The glove should not reach a point higher than the front elbow.
  - c. The lead shoulder should move directly at the inside third of the plate (RHP vs. RHH).
  - d. The glove stays inside the box out in front of the body.
  - e. The throwing arm should move down, back and up in a loose, free manner to apex.
  - f. The throwing hand should move along this route on top of the baseball (palm down).
  - g. Shoulder and arms stay inside the tunnel.

### **BALANCE PHASE THREE – FOOT STRIKE**

As the stride foot lands the arm should be up on the backside of the body at apex. Proper timing at foot strike allows the rest of the delivery to take place naturally.

- A. Lower Half – A loaded lower half lights the fuse for an explosive delivery.
- a. Energy at foot strike is sent through the body at a force up to six times the pitcher's body weight.
  - b. Energy at foot strike is sent back to create an explosive backside.
  - c. Front toe is slight closed, ideally at a ten degree angle.
  - d. Feet are lined up to the target.
  - e. Front knee inside the front foot.
  - f. Hips uncoil at foot strike.
- B. Upper Half – Throwing arm reaches apex position at foot strike to allow forward moment from this point. If the timing is right at foot strike the shoulder goes along for the ride during the rest of the delivery.
- a. Firm front side with glove out and over stride foot.
  - b. At apex ideally the ball is facing the shortstop (RHP) or the second baseman (LHP) and fingers should be on top of the baseball.
  - c. Throwing arm should be at 90 degrees or less between hand and shoulder when the spine begins to rotate.
  - d. This position at apex provides optimal positioning for the medial elbow during the delivery.

- e. Chest faces third base (RHP) or first base (LHP) while the hips have opened up to create maximum torque.
- f. Proper arm positioning with both the throwing arm and lead arm (opposite and equal) minimizes risk and maximizes efficiency.

#### **FIRING PHASE – POWER POSITION**

- A. Energy fired from plant foot to backside in previous phase now delivered to target.
- B. Firing sequence is back knee to back hip to back shoulder to throwing elbow.
- C. While the hips uncoiled the shoulders stay closed. During the firing phase the shoulders start to rotate to a squared up position with the plate.
- D. There is a direct correlation between the velocity a pitcher can uncoil his hips and the velocity of a pitcher's fastball.
- E. If the timing is correct when the hips uncoil and the shoulders stay closed, the shoulder should rotate during the firing phase at a rate twice as fast as the hips. If the shoulders open up when the hips open up during the stride phase, the rate is equal to that of the hips.
- F. Back foot heel releases up to shoulder twist allowing the back hip to be released.
- G. The firing phase is like building a house. Starting with the foundation, if done correctly, should lead to a solid delivery the rest of the way through.

#### **BALANCE PHASE FOUR - ACCELERATION**

With the stride foot planted and the shoulders rotated and squared up to the plate, the throwing hand will flip to a palm up position and acceleration will begin and continue through the release.

- A. The pivot foot leaves the rubber and body weight is moved from the flexed backside to the flexed front leg.
- B. Concurrently, the throwing elbow (remaining at least as high as the throwing shoulder (marginal) or slightly below (optimal)) leads the throwing hand toward the release point in a less than 90 degree slot.
- C. As the throwing arm moves toward release, the lead arm glove will firm up and allow the chest to move towards the glove.
- D. The throwing side, or power side, is now replacing the front or directional side.
- E. Key Point: An axis for this acceleration toward release is created by having the pitcher's head directly over the flexed landing leg knee. This is a critical mechanical fundamental that helps the pitcher achieve maximum leverage.
- F. At release there are several key checkpoints:
  - a. Stable head is over a flexed front knee.
  - b. Trunk tilts forward to cause back to arch.
  - c. Trunk moves to the plate tilted at a 45 degree angle.
  - d. Lead knee begins to firm up and must stop at some point to allow the back hip to fire. If the lead knee continues to drift the back knee will not be able to fire.
  - e. Glove arm is non-aggressive. Squeeze and swivel and allow it to relax to torso.

- f. Glove is near body allowing pitcher to rotate with greater acceleration. Picture a figure skater. With their arms near their body they rotate quicker. If their arms get away from their body their rotation slows down.
- g. Back knee closes the gap between the back and front leg. Ideally the back leg creates a small L. If the back leg is straight the pitcher is not incorporating the lower body into the acceleration phase.
- h. Back leg and ankle get to extension.
- i. Fingers are on top the ball and wrist is behind the ball. Throw the top-back of the baseball.
- j. Arm snaps to full extension allowing pitcher to throw with trajectory.
- k. Elbows stay close together during this phase to maximize rotation.
- l. Throwing elbow is beyond glove arm.
- m. Throwing shoulder is closer to the target then the glove shoulder.
- n. Consistent release point out front of land foot.

### **BALANCE PHASE FIVE – DECELERATION, FOLLOW THROUGH AND FINISH**

Our primary focus with any pitcher is to first create an exceptional efficient pattern of deceleration. Such a pattern will be unique to the individual pitcher, but the pattern will have six important qualities or characteristics:

- A. At release the throwing shoulder is closer to the target then the non-throwing shoulder.
- B. The hand/forearm is pronating immediately upon release therefore the banging of the elbow is minimal, greatly reduced or eliminated all together.
- C. The trunk flexes at the waist.
- D. The glove side stops, firms, folds and stabilizes so that distance closes between the elbows as the throwing arm decelerates.
- E. After release and pronation, the throwing arm stays relaxed / flexed and does not cross the athlete's midline.
- F. The trunk continues to rotate around the front hip.
- G. Release back foot to help deceleration process. If back foot is outside of body at release point then upper body is dominating movement to the plate.
- H. Throwing elbow is located outside or in front of firm front knee but not crossing the mid-point of the torso. Rotate the shoulders together to accomplish this.
  - I. Keep head out and down over land leg. If head is beyond stride foot the pitcher is using too much of his upper body.
  - J. Throw through the ball to finish and prevent recoil.
  - K. If head is over stride foot and back foot whips around then lower half is being utilized.

## **MECHANICS - DRILLS FOR CORRECTION**

### **THREE COUNT RHYTHM DRILL**

- A. Purpose
  - a. Teaches pitcher to pitch in three count sequence.
  - b. Provides feel for pitcher to pitch in his natural rhythm.

- c. Provides simple delivery cues for pitcher to use during games or bullpen sessions to get their delivery back on track without over analyzing or complicating the matter with mechanical lingo.

#### B. Drill Procedure

- a. Pitcher walks around in a normal pace counting each step up to three (one-two-three) and repeating the three count for several steps.
- b. This walk provides the pitcher with the rhythm that is his normal pace.
- c. The pitcher starts in the stretch position using a normal leg lift.
- d. As the knee gets to lift peak, the pitcher counts one, either to himself or out loud.
- e. The pitcher completes the pitching sequence in the rhythm the earlier walk provided for him.
- f. At foot strike the pitcher will count out two, either to himself or out loud.
- g. At release point, a point in front of his stride foot, the pitcher will count out three, either to himself or out loud. Often times a pitcher will say three prior to the ball and hand getting to a proper release point, indicating his timing is off and his ability to throw downhill and out front will suffer. An easy observation of this is made by the coach as he stands to the side and near release point.
- h. This drill can be repeated during all bullpen sessions and can even be part of the catch play routine, especially the balance catch and pitcher catch phase of the throwing routine.

### **TEN FOOT DRILL**

#### A. Purpose

- a. To achieve downhill angle on flight of ball.
- b. To teach the pitcher to extend arm out front.

#### B. Drill Procedure

- a. Start with towel or object ten feet in front of start position on flat ground.
- b. Achieve balance point through regular delivery.
- c. Pick up object with eyes.
- d. Throw pitch to hit object from ten foot distance.

#### C. Result

- a. The close distance eliminates time to do mechanics that cause angle problems.
- b. Quickens arm from ball-glove separation to release point.

### **KNEELING DRILL**

#### A. Purpose

- a. Isolate the upper body.
- b. To get the feeling of trunk flexion over a flexed front leg.
- c. To keep good alignment within the arm swing.
- d. To develop forearm, wrist and hand speed.

- e. To develop good angle and a long arc of deceleration.
- f. To keep chest from staying open on release.

B. Drill Procedure

- a. Kneel on the pivot leg knee with the stride foot out in front, flexed at the knee.
- b. Square-off, facing the throwing partner.
- c. Throw at approximately 30 to 40 foot distance.
- d. Start with both hands together in front of the body.
- e. Break normally, throw with a natural pitching motion and throw below half speed.
- f. Use a good long arc of deceleration outside the lead knee.

**PIVOT FOOT SHADOW DRILL**

A. Purpose

- a. To teach pitchers to release the backside (hips) into the pitch by rolling over their pivot foot.
- b. To teach pitchers that their pivot foot comes forward off the rubber even before they release the pitch.

B. Drill Procedure

- a. Put the pitcher in a stride position with the pivot foot still on the rubber.
- b. Pitching hand is in a high, cocked position at apex.
- c. Coordinate the arm action with the rollover of the pivot foot (do not throw the ball).
- d. Pitcher should feel the hips and shoulders rotate and square off and the lead leg stay flexed, versus stiffening too early.

**WALL DRILL ONE (FRONT)**

A. Purpose

- a. To teach the pitcher to get up in a balanced position without moving or drifting forward before the lead leg starts downhill.
- b. Good body control and balance prevents the pitcher from rushing.
- c. Gives pitcher a general look at our meaning of drifting to arm side / across body, and a better idea of a corrected feeling.

B. Drill Procedure

- a. Pitcher stands facing a fence, wall or net with his toes within one foot of the barrier.
- b. Pitcher moves from his preliminary taking-the-sign position to the leg lift balanced position.
- c. If the pitcher uses proper techniques, he will not move up into the barrier. This also demonstrates good balance and body control and prevents rushing.

C. Repetitions

- a. For pitchers with balance problems: at least 10 reps daily with a five second hold.

### **WALL DRILL TWO (BACK)**

#### A. Purpose

- a. To allow feel of bad direction / alignment and how to correct it.
- b. Give a better view of how mechanical parts should work in sync / together.
- c. To cut down on over-rotation of arm swing upon separation and moving to apex position.
- d. Prevents throwing arm from crossing acromial line.

#### B. Drill Procedure

- a. Start with back against fence and heels about 8-12 inches from fence.
- b. Lift into balance / load position in one continuous motion.
- c. Make sure no part of your hand, arm or body touch the fence as you start towards an imaginary target along the fence line.
- d. From start to finish, notice proper lower half alignment, extension and a controlled finish each time.

### **STRIDE DRILL**

#### A. Purpose

- a. To check the direction of the pitcher's stride.
- b. To check length of stride (head and shoulders can get over the front knee).
- c. To check stride leg knee flexion on landing.
- d. To check stride foot landing – slightly closed toe. Watch for landing on the heel.

#### B. Drill Procedure

- a. Wind-up or set position.
- b. Good drill to be done in front of a mirror.
- c. Mark a straight line from the ball of the pitcher's pivot foot to the land plate.
- d. Pitcher takes his normal motion and throwing action (without throwing the ball at first) and checks his stride.
- e. Can place hat under the stride leg at knee lift to give indicator of where to take foot during the stride.

#### C. Repetitions

- a. For pitchers that throw across their body or open up too much, 20 reps per practice.
- b. Place mark over the improper landing spot if needed.

### **CONE DRILL**

#### A. Purpose

- a. To check the direction of the pitcher's stride.

- b. To eliminate the rotational habit of pitchers who like to swing open the stride leg knee rather than take the foot and knee down the hill in a linear manner.
- B. Drill Procedure
- a. Stretch position.
  - b. Place cone in front of rubber and in front of pitcher.
  - c. Pitcher uses his normal delivery and throwing action (without throwing the ball at first) and checks his stride, making sure stride foot is coming down from leg lift and striding down the hill inside the cone.
- C. Repetitions
- a. For pitchers that throw across their body or open up too much, 20 reps per practice.
  - b. Can use a chair or other large object in place of the cone to give pitcher a larger feel for keeping stride foot moving in a linear direction down the hill underneath him.

### **BALL GLOVE SEPARATION DRILL**

- A. Purpose
- a. To teach the proper time and location of the hand break.
  - b. To teach the pitcher to break his throwing hand downward with the fingers on top of the ball.
  - c. To teach the pitcher to lift his glove hand or lead elbow at the hitter. This helps to create trunk arching as well as rotational and downward forces.
- B. Drill Procedure
- a. Pitcher starts in his hand break position (hands together) with the pivot foot parallel to and in front of the rubber.
  - b. Break the pitching hand down out of the glove. At the same time, lift the glove and lead elbow at the hitter.
  - c. Get the lead arm and throwing arm in a proper sequence and rhythm.
  - d. Allow the lead elbow and glove to stay firm out front of the body. Be careful not to be overly aggressive with the lead arm and allow it to fly open or pull back towards the body.
  - e. Create tension between the distal and proximal end of the lead arm.
  - f. Lead arm should firm up as the pitcher squeezes and swivels the lead arm as the chest moves forward towards the glove.
- C. Repetitions
- a. No ball, ten reps, in mirror if able.
  - b. Form throw into net, 30 feet away, emphasizing lead-arm action.

### **CROSS ARM DRILL**

- A. Purpose

- a. To teach the proper timing and arm action from glove ball separation to apex.
- b. To teach the pitcher to break his throwing hand downward with the fingers on top of the ball.

#### B. Drill Procedure

- a. Pitcher starts in spread base position.
- b. Long arm action - place the throwing hand under the lead arm's armpit while the glove hand rests near the throwing arm's shoulder.
- c. Short arm action - place the throwing hand and glove hand in an X / cross arm position in front of body, with glove and throwing hand located at shoulder height.
- d. Start the delivery by taking a small rhythmic weight shift from center to backside, getting head over back thigh before moving forward.
- e. Bring the throwing hand back in either a long arm circle (thumb to thigh) or a short arm circle (catcher like) so that ball gets to apex at foot strike.
- f. Get the lead arm and throwing arm in a proper sequence and rhythm, taking the glove arm to a firm position out in front of the body no further than a point over the stride foot.
- g. Throw the baseball.
- h. Use during the spread base phase of the daily throwing program.
- i. Encourage pitchers to use the short arm action sequence as it allows the pitcher to get in the optimal position to throw the baseball.

### **DOUBLE CROSS ARM DRILL**

#### A. Purpose

- a. The next phase of cross arm drills.
- b. To teach the proper timing and arm action from glove ball separation to apex.
- c. To teach the pitcher to break his throwing hand downward with the fingers on top of the ball.
- d. Allows pitcher to check that ball is getting to apex while glove hand is getting to a point out front of body in a timely sequence.
- e. Allows pitcher to check that throwing arm angles are less than 90 degrees from hand to shoulder and elbow to side of body, and throwing hand is located inside (in front) of body alignment when the spine begins to rotate.

#### B. Drill Procedure

- a. Pitcher starts in spread base position.
- b. Long arm action - place the throwing hand under the lead arm's armpit while the glove hand rests near the throwing arm's shoulder.
- c. Short arm action - place the throwing hand and glove hand in an X / cross arm position in front of body, with glove and throwing hand located at shoulder height.
- d. Start the delivery by taking a small rhythmic weight shift from center to backside, getting head over back thigh before moving forward.

- e. Bring the throwing hand back in either a long arm circle (thumb to thigh) or a short arm circle (catcher like) so that ball gets to apex at foot strike.
- f. Stop at apex and allow pitcher to check that he is in proper positioning.
- g. Return throwing hand to initial cross arm positioning and repeat sequence, this time not stopping but continuing throwing motion.
- h. Get the lead arm and throwing arm in a proper sequence and rhythm, taking the glove arm to a firm position out in front of the body.
- i. Throw the baseball.
- j. Use during the spread base phase of the daily throwing program.
- k. Encourage pitchers to use the short arm action sequence as it allows the pitcher to get in the optimal position to throw the baseball.

### **THREE STEP PAUSE DRILL**

#### A. Purpose

- a. To gain muscle memory at vital spots of the delivery.
- b. Teach repetition of correct movements.
- c. Help strengthen pitching muscles.

#### B. Drill Procedure

- a. Start with pitcher at leg lift position on the rubber.
  - i. Hold position for 10 seconds.
  - ii. Unlock knee to slightly bent position and hold for 15 seconds.
- b. At foot strike, position ball of foot to ball of foot.
  - i. 10 seconds in relaxed state to slow movements to semi-squat position.
- c. On coach's command shadow throw finish, holding finish position for 10-15 seconds.

### **FRONT TOSS DRILL**

#### A. Purpose

- a. To gain balance awareness.
- b. Hold balance point at leg lift.
- c. Control violence on landing.
- d. Smooth ball-glove separation.

#### B. Drill Procedure

- a. Face pitcher from open side, underhand toss ball to his hands high.
- b. Pitcher gets to leg lift position (balance point) and hold position.
- c. Coach or partner tosses ball to pitcher.
- d. Pitcher receives the ball and throws.
- e. Throw to partner in squat position.

### **FOUR STEP FORM THROWING DRILL**

#### A. Purpose

- a. The complete series is a mechanical breakdown of the four major points in a pitcher's motion. Isolating a particular flaw and repeating an adjustment can be seen and addressed here.
- B. Drill Procedure
- a. Upper Body Isolation
    - i. Pitcher has right knee (if right handed) on ground with lead foot on ground (direct line from knee), slightly closed foot.
    - ii. 10 30' throws emphasizing extension and finish to ground with head down.
  - b. Lower Body Positioning
    - i. Pitcher in stride position.
    - ii. Stride is shorter than normal position.
    - iii. Feet are in line with front foot, slightly closed.
    - iv. Throw with backside coming through (foot lift).
    - v. Emphasize extension.
    - vi. Lead arm lift with throw.
    - vii. Hand to knee.
    - viii. 10 throws at 60'.
  - c. Balance
    - i. In stretch position hold ball in relaxed mind-set for count.
    - ii. Move to balance point, hold for count, incorporate throw.
    - iii. 10 throws at 50'.
  - d. Step Four
    - i. Full delivery – incorporate first three steps with two second count hold on finish.
    - ii. Check for backside help (lift back foot).
    - iii. 10 throws at 50'.

### **COMEBACKER / WALL DRILL**

- A. Purpose
- a. Keep pitcher from recoiling.
  - b. Keep pitcher's head from popping up.
  - c. Helps reaction on comebackers.
- B. Drill Procedure
- a. Throw ball against cement wall from full pitching motion.
  - b. From 10-15', throw pitch and receive ground ball.
  - c. If pitcher is in proper finish position, he will field ball with head down and knees flexed.

### **KOUFAX DRILL**

- A. Purpose
- a. To reinforce proper mechanical position to maximize outcome.

- b. To understand proper leverage points from feet up to top.
- c. To reinforce proper body alignment.
- d. To understand the importance of the hip flexor area.
- e. This drill gives the best indication to the pitcher of several different points we often point out verbally about the delivery.

#### B. Drill Procedure

##### a. Establish Pull position

- i. Use slant boards that simulates the front of rubber parallel to the fence.
- ii. Place foot along the ridge so you can feel leverage on the entire inside of the foot.
- iii. Lift leg to balance / load position, holding on to the fence with the palm facing the fence.
- iv. Be sure arm and hand are inside body.
- v. Keep weight on back leg with a slight bend in knee.
- vi. You should feel the power with the back leg and the leverage to the instep of the back foot.
- vii. Allow the hips to move out first, feeling the power on the instep of the back foot throughout.
- viii. Finally, pull on the fence so as not to lose your balance.
- ix. The hand and arm should be inside the body line and you should feel the hip flexor muscle intensely.
- x. In viewing from the side, you should see an arch from the fence hand to back foot.

### **HERSHISER DRILL**

#### A. Purpose

- a. To reinforce proper mechanical position to maximize outcome.
- b. To understand proper leverage points from feet up to top.
- c. To reinforce proper body alignment.
- d. To understand the importance of the hip flexor area.
- e. This drill gives the best indication to the pitcher of several different points we often point out verbally about the delivery.

#### B. Drill Procedure

##### a. Establish Lean Position

- i. Use the same slant board, but position yourself moving towards the fence.
- ii. You may have to be 12-15 inches from the fence to get a good feel for this drill.
- iii. Lift to balance / load position.
- iv. From this position control your fall forward with the hip leading.
- v. Be sure not to touch the fence with your shoulders or your leg.
- vi. The front hip is the only part of the body touching.

- vii. From a side view you can see an arch from the palm of the throwing hand to the back foot.
- viii. Once your hip has touched the fence, gain more leverage from the inside of your back foot without dropping or breaking down the backside too much to gain the feel.

### **SLIDESTEP DRILL**

#### A. Purpose

- a. Teaches pitcher to pitch in a quick step / slide step rhythm down the hill from the stretch position.
- b. Allows pitcher to pitch from the stretch in a time of 1.30 seconds or less.

#### B. Drill Procedure

- a. Can be done during flat ground work or bullpen session.
- b. Pitcher starts in stretch position with a slightly wider than normal base.
- c. Hands are separated in front of the body just below chest height with palms facing down and ball in throwing hand.
- d. Using a three count rhythm, start by slightly raising the hands up (one), followed by a short stride step (foot strike = two), and finish with a pitch (release point = three) to the catcher or partner.
- e. Progression of drill includes starting with the hands together at chest height and ball in glove, and feet closer to a normal set position width.
- f. Repeat several times and do daily until pitcher has a feel for the quick step and being quick to the plate from the stretch position.

### **HOOK 'EM DRILL**

#### A. Purpose

- a. Teach pitcher to lead down the hill with his front hip.
- b. Teach pitcher to keep head over pivot leg thigh as he goes down the hill.

#### B. Drill Procedure

- a. Start on flat ground, then progress to mound work.
- b. Come to set position with pivot foot in front of rubber.
- c. Lift stride foot and wrap top of foot behind pivot leg knee.
- d. Pull forward with stride foot causing pivot leg knee to move forward, creating a bow shaped angle from head to back leg.
- e. As soon as pitcher starts to move forward release stride leg foot and stride as if making a pitch.
- f. Finish the drill by finishing the pitch.
- g. Repetitions = 5-10 daily during flat ground or prior to bullpen session.
- h. Can also be done as part of weighted ball warm-up routine.

### **BACKSIDE MOUND DRILL**

- A. Purpose
  - a. Force pitcher to firm up front leg and limit drift.
  - b. Quicken delivery from balance point.
  - c. Force pitcher to land with a flexed front leg.
  - d. Allows pitcher to get chest over front knee and extend release point.
  - e. Great drill for change-up and two-seam fastball development.
  
- B. Drill Procedure
  - a. Start on flat ground behind mound.
  - b. Work from the stretch with normal leg lift.
  - c. Go through throwing motion allowing slope to change timing and delivery.
  - d. Throw to catcher or partner.

### **THREE BALL DRILL**

- A. Purpose
  - a. Allows pitcher to firm up the front arm during delivery.
  - b. Provides weighted resistance to firm up the proximal and distal ends of the lead arm.
  - c. Teaches the pitcher to keep a solid front arm during delivery.
  - d. Eliminates opportunity for pitcher to open up with the front arm causing the rest of the delivery to drag.
  - e. Allows greater chance for pitcher to stay on-line during the delivery.
  
- B. Drill Procedure
  - a. Can be done during catch play, flat ground or mound work.
  - b. Pitcher removes glove and holds three baseballs in his glove hand.
  - c. Complete throwing motion with balls in glove hand and throwing a baseball to partner or catcher.
  - d. May need another player or coach to catch the return throw.
  - e. Repetitions vary based on front arm issues, however can be full part of catch play or initial part of bullpen sessions until pitcher has feel for front arm tension and locking it in.
  - f. Use two balls inside of glove during catch play as progression of drill to allow daily use and development.

### **WALKING FRONT TORQUE DRILL**

- A. Purpose
  - a. Create separation between hip and shoulders during throwing motion.
  - b. Add feel for torque in torso area during delivery.
  
- B. Drill Procedure
  - a. Used as part of catch play after the spread base session of catch play, replacing the step-behind-throw session of catch play.

- b. Pitcher will step directly towards partner with pivot foot, keeping toes of foot pointed directly at partner.
- c. Without rotating pivot foot (keeping toes pointed forward towards partner), stride forward with stride leg.
- d. Rotate shoulders so that hips continue to face partner but glove shoulder is now pointing at partner, and back shoulder is lined up with glove shoulder.
- e. Release the shoulders (torque) and throw the baseball to partner.
- f. Continue drill to a distance where crow hop is needed to throw baseball.

### **LEE/MARSHALL DECELERATION DRILL #1**

#### A. Purpose

- a. Develop proper deceleration pattern for the individual pitcher.
- b. Develop patterns which allow natural deceleration to occur more efficiently and effectively.
- c. Drill emphasizes the last part of the throw, the finish, from release point to follow through.

#### B. Drill Procedure

- a. Drill is to be done daily as a build-up or lead in to throwing program.
- b. A series of weighted balls are used to emphasize pronation. They include four pound, two pound, 21 oz, 14 oz, 7 oz, baseball and underload ball.
- c. As you get down to the baseball and underload ball it is more difficult to decelerate, thus the heavy balls will teach the arm how to pronate effectively.
- d. Pitcher's pivot knee is placed on a beam replicating the distance between the knee and the ground when throwing the baseball. Use a knee pad on the beam for comfort.
- e. The feet should stay in line and be uncomfortably wide simulating the stride length.
- f. The pivot foot toe is barely touching the ground and drags in a way similar to the throwing motion. Do not lean back with weight on back foot nor rotate back foot to external side of foot.
- g. The land leg is out front and the knee is at an angle greater than 90 degrees for a positive ground force angle.
- h. Pull throwing arm straight back with throwing hand inside much like pulling an arrow back with a bow.
- i. Head stays over back hip as ball is pulled back.
- j. Glove arm stays solid out front with glove over the foot as if holding a bow with slight flexion in elbow.
- k. Rotate to the glove as throwing motion takes place.
- l. Principle #1 - throwing shoulder is closer to the target than non-throwing shoulder.
- m. Principle #2 - immediately in to launch we have pronation of the throwing arm.
- n. Fold in to follow through with flexion at the waist.
- o. Replace shoulders by rotating through a narrow doorway.

- p. At finish the throwing arm is flexed and out front of the stride leg knee.
- q. Do not allow throwing arm to over rotate beyond glove. Allow trunk to twist so that arm does not cross midline at follow through.
- r. Hold the follow through for a two count.
- s. Start with heaviest ball and work through series to underload ball.
- t. Typically this is a series of five rounds starting with an easy throws in round one, then medium low effort, medium effort, medium high effort and finally a high effort throw on the last round.
- u. Use a target to throw at each time.

### **LEE/MARSHALL DECELERATION DRILL #2**

#### A. Purpose

- a. Similar to drill #1 with a couple of adjustments.
- b. Develop proper deceleration pattern for the individual pitcher.
- c. Develop patterns which allow natural deceleration to occur more efficiently and effectively.
- d. Drill emphasizes the last part of the throw, the finish, from release point to follow through.

#### B. Drill Procedure

- a. Drill is to be done daily as a build-up or lead in to throwing program using the same energy you would in a game throw.
- b. Drill is done in a same manner as #1 with the following adjustments:
  - i. After setting feet up, bring the front foot in to a position under the front hip and then back out to start the drill.
  - ii. Repeat this movement three times and prepare to throw on the third stride.
  - iii. At follow through bring back leg up and over to simulate actual throwing motion follow through.
  - iv. Do not hold follow through on drill #2.

### **CONNECT BALL DRILLS**

#### **FRONT ARM**

#### A. Purpose

- a. Assists with firming up front arm / glove arm during delivery.
- b. Throwing arm /scapula and glove arm / scapula are all connected to the spine when spine begins to rotate.
- c. Keeps front arm in a solid position throughout the delivery.
- d. Eliminates opportunity for pitcher to open up with the front arm causing the rest of the delivery to drag.
- e. Allows greater chance for pitcher to stay on-line during the delivery.

#### B. Drill Procedure

- a. Start by placing Connect Ball inside front arm, holding it in place with the forearm and chest.
- b. Pitcher in spread base position with full stride.
- c. Using a rhythm shift, execute full pitching motion keeping the Connect Ball in place throughout the delivery.
- d. After baseball is released to partner during throwing motion the lead arm and connect ball can release to side of body if part of normal delivery. Beware not to allow lead arm to release to side or pull down to side of body prior to release of baseball.
- e. Repetitions: can be done as much as every throw during catch play or can be limited to 10 reps at the beginning of catch play to lock in the front arm.
- f. Can also be done as part of weighted ball warm-up routine.
- g. Add two balls in glove for tension in proximal and distal end of glove arm.

### **THROWING ARM - OVER**

#### **A. Purpose**

- a. Creates proper arm angle between throwing hand and shoulder during delivery.
- b. Throwing forearm is inside of elbow when spine begins to rotate.
- c. Assists with medial elbow development.
- d. Provides assistance in getting arm (shoulder to elbow to wrist) to an angle of less than 90 degrees when reaching apex and right as the spine begins to rotate when throwing the baseball.
- e. Studies show this angle of less than 90 degrees is ideal when throwing, while the old belief of 90 degrees is marginal, and anything beyond 90 is high risk for injury.

#### **B. Drill Procedure**

- a. Start by placing Connect Ball on top of throwing arm, holding it in place using the bicep and forearm area of throwing arm.
- b. Throwing hand is inside (in front) of body as arm is ready to throw.
- c. Pitcher in spread base position with throwing arm at apex of arm circle just before the spine begins to rotate and is ready to move forward in delivery.
- d. Using a rhythm shift, execute full pitching motion keeping the Connect Ball in place during the initial stage of the motion.
- e. As the arm starts to extend the Connect Ball should release from the elbow area and fall to the side and in front of the pitcher.
- f. Repetitions: can be done as much as every throw during catch play or can be limited to 10 reps at the beginning of catch play to demonstrate throwing hand / shoulder relationship.
- g. Can also be done as part of weighted ball warm-up routine.

### **THROWING ARM - UNDER**

#### **A. Purpose**

- a. Creates proper arm angle between elbow and side of body during delivery.

- b. Assists with anterior shoulder development.
- c. Provides assistance in getting arm (elbow to armpit to lat) to an angle of less than 90 degrees when reaching apex and throwing the baseball.
- d. Studies show this angle of less than 90 degrees is ideal when throwing, while the old belief of 90 degrees is marginal, and anything beyond 90 (elbow higher than shoulder) is high risk for injury.

#### B. Drill Procedure

- a. Start by placing Connect Ball under the throwing arm, holding it in place using the elbow and side of the body (lat area).
- b. Pitcher in spread base position with throwing arm at apex of arm circle and the spine is about to rotate and ready to move forward in delivery.
- c. Using a rhythm shift, execute full pitching motion keeping the Connect Ball in place until the spine begins to rotate.
- d. The Connect Ball will fall behind the pitcher as he begins to come forward and raises his arm slightly, releasing the ball.
- e. Repetitions: can be done as much as every throw during catch play or can be limited to 10 reps at the beginning of catch play to demonstrate elbow / side of body relationship.
- f. Can also be done as part of weighted ball warm-up routine.

**SECTION IV:**  
**DEVELOPING A PLAN**

<b>A. Game Planning</b>	<b>50</b>
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## **GAME PLANNING**

The development of a game plan stems from the philosophy of creating early contact from the hitter. Statistics support this theory and are shown along with some key points of emphasis when developing a game plan.

- A. Attack the Hitter
  - a. ABCs of pitching – Aggressive behavior creates competitiveness.
  - b. Dictate the pace – force the hitter to call time out often.
  - c. Throw strike one.
  - d. Get to two strikes in a hurry. Batting average against is .187 and only 30% of all runs driven in occur with two strikes.
  - e. Finish an inning in 14 pitches or less.
  - f. Command the strike zone with each pitch – any pitch in any count.
  
- B. Pitch to Contact
  - a. Out in four or fewer pitches.
  - b. Rule of 63 – 63% of all balls hit in fair territory are outs.
  - c. Strikeouts are fascist – only time we need a strikeout is with a runner at third base and less than two outs.
  - d. Waste pitches are wasted pitches – every pitch has to have a purpose.
  - e. Early contact is our goal against every batter.
  
- C. The Perfect Pitch Myth
  - a. Every pitch in every location at every speed has been hit for a home run.
  - b. Every pitch in every location at every speed has been an out.
  
- D. Use the Fastball Effectively
  - a. Get fastball hitters out with fastballs – cross them up then beat them.
  - b. Lead hitters from their strengths. Work away away away then jam them.
  - c. The 90% / 98% / 80% Fastballs – increase and decrease fastball effort percentage to create different velocities with the fastball.
    - i. 90% = working fastball, the one you use most often.
    - ii. 98% = max fastball, the one you dig down deep for.
    - iii. 80% = BP fastball, taking something off in a hitter's count to get the hitter out front.
  
- E. Upset Timing
  - a. Change speeds and locations.
  - b. Elite pitchers throw three pitches to at least two different locations.
  - c. Learn the change up and use it.
  - d. Effective Velocity's impact.
  
- F. Effective Velocity
  - a. Effective Velocity = initial velocity + location (reaction time)

- b. Hitter's reaction time increases or decreases based on location.
- c. Pitch sequences create a separation of plus or minus six EVMPH.
- d. 80% of all hard hit balls are the result of pitches that are within six EVMPH of each other.

#### G. Free Strike Opportunities

- a. Hitter taking – 50% of all hitters take the first pitch.
- b. Early count situations – taking pitches allowing the base runner to steal.
- c. Bad hitter – Pattern One hitter that the pitcher attacks.

#### H. Trust the Plan

- a. Pitch in for strikes.
- b. Move their feet by expanding in.
- c. Go in miss in.
- d. Go away miss down.
- e. Pitch around the hitter using the fastball and not secondary pitches.
- f. Know the situation – double play stay down in the zone.
- g. Read the hitter – look for his tendencies and pitch against them.

## **PITCHER-CATCHER RELATIONSHIP**

It is imperative each catcher gets to know the personality of each pitcher. As the season progresses, the catcher will be the on-field coach who gets the pitcher to perform better. Thus, as the catcher gets to know each pitcher individually, they will be able to motivate and calm them down when needed.

During games, the catcher will relay signs to the pitcher. These signs will come from the dug-out, so make sure you are on the same page. Pitchers and catchers must understand the purpose of each pitch called (get an out, set-up a hitter, hold base runners, set up the catcher for a throw, etc.). Thus, stay within your framework of ability and work on the game plan being passed to you from the coach.

Our signs will come in via the number system to the catcher. The catcher will wear a wrist band with a grid that corresponds to the numbers sent in. The catcher will relay to you the location of the pitch first, then the pitch selection. The location will always be first, while the pitch selection will be based on the series sequence we are using at that time. Once the location and pitch are called, commit to the pitch and execute the pitch.

Once the sign is relayed, the pitcher has the ability to shake the pitch selection and/or location. If the pitcher shakes his head once, this is a decoy to the hitter and the catcher will give the same pitch to him. If the pitcher shakes again, this is an indication the pitcher likes the pitch but wants it in a different location. If the pitcher wants to change pitch selection he will use the wipe system. Wiping the chest of the leg will tell the catcher to add or subtract from the pitch he selected/called and get the pitch the pitcher wants. Remember that a set-up (out pitch, set-

up pitch, pick, hold, pitch to the defense, etc.) is occurring on the hitter or situation, thus you should try to stick to the game plan as much as possible. If the pitcher feels coach is not calling a certain pitch enough, or is using a pitch he does not feel good with that day, he should communicate this to the coach in the dugout or prior to the game. Wiping pitches repeatedly makes managing the game from a coaching standpoint difficult as we are never quite sure what pitch is coming, or where the defense should be aligned.

Part of our number system will also reflect our Fundamental Series of holding runners and pick attempts. The upside down longhorn followed by a number will indicate a certain pick or pitch intended to control the running game. We may give the Fundamental Series repeatedly so stick to the plan. Fundamental Series cannot be shaken to a new selection, however it is advised that the pitcher show a decoy shake to make sure the base runner does not simply go based on the knowledge you are throwing a pitch to the plate because all you do is shake off pitch selection. Instead of location being the first sign, fundamental will be the first sign, then the fundamental choice will follow just as a pitch selection would follow the series sequence.

If a pitcher is ever unsure of a pitch selection, fundamental selection, or game situation, come to a set position, step off, gather himself and prepare to go to work. If still unsure, step off again. After a second step off the catcher will come to the mound to discuss the situation. After the pitcher/catcher meeting, if the pitcher steps off a third time, the coach will come out for a visit to clear things up. The situation should right itself after the second step off and visit. This is a good maneuver when trying to get the bullpen warmed up if a pitcher feels like they have ran out of gas.

The pitcher, catcher and coach must communicate prior to each game/series about hitter profiles, team profiles, game situations, pitch selections (what's hot, what's not), etc. Our success is directly related to the success of this ability to communicate and be on the same page during a game. Working hard is not enough. Working hard and being smart will take us to new heights.

## **CALLING A GAME**

Developing the ability to call a game is a critical part of the pitcher's, and catcher's development. In order to accomplish this, the following factors must be considered:

- A. Get ahead. The best pitch of the game is strike one. Call the pitch that the pitcher is throwing most consistently that day.
- B. Know your stuff. What is your best pitch today? Rate your pitches and use them accordingly.
- C. On 2-2 counts throw your best pitch.
- D. Runner on first and a left-handed hitter at bat, careful with the change-up or slow curve when the first baseman is holding the runner. A better decision is to work firm away.

- E. Runner on third base with less than two outs and the infield in. Try to pitch the hitter in. Stay away from change-ups as they are easier pitches on which to hit fly balls.
- F. Follow a curve with a slider, but try not to follow a slider with a curve.
- G. Don't try to set up a poor, Pattern One hitter. Stay basic. Save your strategy for the good hitters.
- H. Do not be afraid of contact. Groundballs and fly balls are outs too.
- I. Just because a hitter is a first pitch fastball hitter doesn't mean you can't throw him a first pitch fastball. In fact he'll be more likely to swing at a fastball anywhere in the zone and chase a poor fastball.
- J. A lot of catcher's have a tendency to call pitches they can't hit. They call the breaking ball too early and too often. This can get the pitcher behind in the count and force him to throw fastballs to catch up.
- K. Do not be tentative when deciding what pitch to throw. Don't be afraid of being second guessed. Think two or three pitches ahead. Don't be afraid of failure.
- L. There is no such thing as the perfect pitch. It has never been called or thrown.
- M. Always remember the pitcher has the final say on what pitch to throw. The catcher and/or coach simply make suggestions. Own the pitch and execute it.
- N. Concentrate on the first hitter of each inning. It is imperative our focus is on getting the leadoff hitter out each inning. College baseball is evolving to a small ball culture and much of that approach depends on the leadoff hitter getting on base.
- O. Concentrate on the first pitch to a hitter with two outs. Often the pitcher will think the inning is over when the second out is made. Finish the inning as aggressively as you started it.
- P. Know how to:
  - a. Change eye levels.
  - b. Expand the strike zone.
  - c. Change speeds.
  - d. Use the scoreboard.
- Q. You must know:
  - a. The score of the game.
  - b. The on-deck hitter.

- c. The guy you don't want to beat you – Pattern Three.
- d. Your own strengths and weaknesses at the time.
- e. Not to get beat with your third or fourth best pitch.

## **STATISTICAL ANALYSIS**

A large amount of information exists in today's baseball world regarding statistical data. The use of statistics can help better understand how to attack hitters as well as areas a pitcher needs to work on. The best part of statistics is their objectivity, eliminating the subjective analysis often associated with evaluating pitchers. The following areas are our focus when evaluating a pitcher's pitching process (the number indicates MLB averages):

- A. Working Ahead in the Count
  - a. First pitch strike (59%)
  - b. One of first two pitches for strikes (85%)
  - c. Two of first three pitches for strikes (60%)
  - d. Percentage of 0-1 counts that become 0-2 counts (47%)
  - e. Percentage of 1-1 counts that become 1-2 counts (53%)
  
- B. Command
  - a. Overall strike percentage (63%)
  - b. Fastball strike percentage (64%)
  - c. Breaking ball strike percentage (61%)
  - d. Changeup strike percentage (61%)
  
- C. Dominance
  - a. Percentage of outs that are strikeouts in four or less pitches (11%)
  - b. 1-2-3 innings percentage of completed innings pitched (31%)
  - c. Swing and miss percentage of pitches in the zone (14%)
  - d. Two strike at-bats that become outs (72%)
  
- D. Efficiency
  - a. Percentage of plate appearances that go to three ball counts (19%)
  - b. First batter of inning out (68%)
  - c. Three or less pitches per plate appearance (47%)
  - d. Four or less pitches per plate appearance (65%)
  
- E. Battle Tendency
  - a. Percentage of runners who score (36%)
  - b. Percentage of 2-0, 2-1, and three ball counts that end in outs (54%)
  
- F. Overall Effectiveness
  - a. On-base average vs. pitcher (.338)
  - b. Percentage of batters faced who score (12%)
  - c. Walks + hits per inning pitched – WHIP (1.41)

## PITCHER'S REPORT CARD

From this information collected using the Edge data system, we are able to create a pitcher's report card. This report card gives a letter grade and is based on the following categories (the number indicates the B grade level):

- A. Starts Ahead – first pitch strikes (59%)
- B. Has Good Stuff – chase percentage + miss percentage on pitches in the zone (22%)
- C. Keeps Runners Off Base – WHIP (1.54)
- D. Strands Runners – runners left on base (74%)
- E. Command and Dominance – K/BB ratio (2.1/1)
- F. Battles – OBP after falling behind in count (33%)
- G. Efficient – four or fewer pitch outs (72%)
- H. Effective – well hit average (20%)

Note: Has Good Stuff and Effective are both subjective categories based on the view of the data collector. Thus, these two categories are weighed less when determining a pitcher's grade.

## UNDERSTANDING THE COUNT

The basic sequence from which a pitch is thrown is dictated by many factors. Understanding the count can be an effective tool in selecting a particular pitch. The count itself leads to the hitter guessing what pitch is coming and when. The count is the single most important tool to exploit the hitter's "swing vs. take" decision. ***Our goal is early count contact!***

### 0-0 COUNT

- A. Concept:
  - a. First pitch to the hitter.
  - b. Getting a strike here is very important.
  - c. Getting ahead of the hitter early in the count sets pitchers up to go after hitter's weakness.
  - d. Fastball should be used and is best chance for strike in middle-down part of zone (boxed fastball).
  - e. With the first fastball hitter, change of speeds is an option but this is a chance for an out or at least a strike via first-pitch swing on a well executed fastball.
- B. Thought Process:
  - a. Get a strike
  - b. Contact on down location
  - c. First pitch for an out.
  - d. Challenge hitter early.
  - e. Know first ball hitters (Yes! in scouting report).
- C. Statistical Analysis:

- a. First Pitch Strike = 80% chance to get to strike two within next two pitches.
- b. First Pitch Ball = 30% chance to get to strike two within next two pitches.
- c. Hitters take the first pitch of an at-bat 50% of the time.
- d. 14% of at-bats are 0-0 counts.
- e. 18% of all RBI's come in this count (next highest 11% in 1-0 or 1-1 count).
- f. .335 batting average against.

### **0-1 COUNT**

- A. Concept:
  - a. Pitcher is ahead in count.
  - b. Be aggressive.
  - c. Hitter doesn't want to be 0-2.
  - d. Concentration should be aggressive and depending on situation, a chance to put self in "put away" situation.
  - e. Pitch inside with fastball.
- B. Thought Process:
  - a. Go after hitter's weakness (fastball elevated, etc.).
  - b. Use thirds of the plate.
  - c. Make hitters swing bat at pitcher's pitch.
  - d. No hurry to change speeds, exploit hitter's swing (long or slow).
  - e. Make hitter swing bat (no fear of contact).
- C. Statistical Analysis:
  - a. 10% of at-bats.
  - b. 10% of RBI's.
  - c. .309 batting average against.

### **1-0 COUNT**

- A. Concept:
  - a. Very important count in sequence.
  - b. Hitter mentality becomes more selective (or should).
  - c. Identify hitter's approach (adjustments in feet or hands).
  - d. Two of first three pitches for quality strikes.
- B. Thought Process:
  - a. Still in control of count even though behind.
  - b. Get count back with a strike.
  - c. If missed with first pitch off speed, good time for fastball to hitter weakness.
  - d. Exploit over aggressive hitter with change of speed.
  - e. Pitch the count - fastball away to pull hitter may result in middle of the field contact.
- C. Statistical Analysis:

- a. 8% of at-bats.
- b. 11% of RBIs.
- c. .324 batting average against.

### **1-1 or 2-2 COUNT**

#### A. Concept:

- a. If the 1-1 count is the action count, the 2-2 count is the close count. With 2-2 counts it is important to close out the hitter.
- b. Go after hitter down in the strike zone.
- c. Be aggressive to pitcher's strength or hitter's weakness.
- d. Identify previous pitcher's and hitter's approach.
- e. Aggressive on 2-2 count. Don't pick zone, go after hitter with action pitches. Make hitter swing it. Treat the 2-2 pitch like a 3-2 pitch.

#### B. Thought Process:

- a. Consider pitcher to be ahead.
- b. Use third of the plate, if command has developed.
- c. Exploit hitter's weakness.

#### C. Statistical Analysis:

- a. 1-1 Count
  - i. 9% of at-bats.
  - ii. 11% of RBIs.
  - iii. .320 batting average against.
  - iv. .854 OPS.
- b. 2-2 Count
  - i. 14% of at-bats.
  - ii. 10% of RBIs
  - iii. .189 batting average against.
  - iv. .503 OPS.

### **2-0 or 2-1 COUNT**

#### A. Concept:

- a. Behind counts. A good hitter mentality is one pitch to one spot and usually a fastball.
- b. Typically looking for ball middle in, though today's college hitters have adjusted to more of a middle away approach with the new bats.
- c. Get the count back with a strike.
- d. Don't give in to hitter and give him a cookie.
- e. Stay tough with low strike.
- f. In MLB, 63% of all fairly hit balls are outs.

#### B. Thought Process:

- a. Stay aggressively down with the fastball.

- b. Off speed command is a major weapon in these counts. Crossing hitters will cause problems throughout the line-up as they'll not know what to look for and will not be as aggressive or offensive.
  - c. Still consider pitching to the defense. Pitch away play away, jam it, etc.
- C. Statistical Analysis:
- a. 2-0 Count
    - i. 3% of at-bats.
    - ii. 5% of RBIs.
    - iii. .339 batting average against.
  - b. 2-1 Count
    - i. 6% of at-bats.
    - ii. 8% of RBIs.
    - iii. .338 batting average against.
    - iv. .910 OPS.

### **0-2 or 1-2 COUNT**

- A. Concept:
- a. Ahead in the count.
  - b. Exploit the hitter's weakness.
- B. Thought Process:
- a. Identify how the count got to 0-2 (two in, go away), etc.
  - b. Hard stuff (always) on 0-2; no change-ups or soft curveballs.
  - c. Fastball expanded away (be off) or Slider/Curveball down in zone (0-2).
  - d. Elevate fastball or repeat down breaking ball (1-2).
  - e. Extend catcher for location importance. Use box to its fullest.
  - f. Respect only the hitters you have to respect (Pattern Two Plus or Pattern Three)
- C. Statistical Analysis:
- a. 0-2 Count
    - i. 8% of at-bats.
    - ii. 4% of RBIs.
    - iii. .159 batting average against.
    - iv. .422 OPS.
  - b. 1-2 Count
    - i. 15% of all at-bats (highest percentage of at-bats).
    - ii. 9% of RBIs.
    - iii. .172 batting average against.
    - iv. .465 OPS.

### **3-0 or 3-1 COUNT**

- A. Concept:
- a. Hitter has large advantage if disciplined.

- b. Get a strike.
  - c. Hitter becomes either very selective or very aggressive. Know the difference.
  - d. If pitcher knows that hitter is aggressive, he has a good chance of getting hitter out on a pitcher's pitch.
- B. Thought Process:
- a. Get count back.
  - b. Pitch to situation (base runners, score).
  - c. Keep pitch away (keep it in the yard).
  - d. Know the hitter.
  - e. Never assume 3-0 is a take. Know who swings 3-0 (Stanford w/risp, team's best hitters)
- C. Statistical Analysis:
- a. 3-0 Count
    - i. .359 batting average against.
    - ii. 1.624 OPS.
  - b. 3-1 Count
    - i. 3% of at-bats.
    - ii. 4% of RBIs
    - iii. .357 batting average against.
    - iv. 1.324 OPS.

The count is a valuable tool. The ability to adjust before the hitter is the pitcher's goal. Development of location and change of speeds will allow pitcher to use count to attack balance of hitter. While every pitcher should strive to develop a complete repertoire of pitches, most will still have strong pitches and weaker pitches. As these strengths may vary in some cases from game to game, the pitch sequences will often vary substantially from previous performances. As a general rule, pitchers should go with their strength if there is some doubt as to pitch selection, ie low fastball hitter, low fastball pitcher... if there is a doubt go with the pitcher's best pitch and fundamental sequences (ie hard in soft away, double up in with fastball). Use the shake off to create doubt in the hitter.

## **SCOUTING REPORT**

The scouting report is handed out typically a day before the first game against an opponent. Ideally a discussion prior to the series will take place highlighting key areas of the scouting report and who the opposing players of concern are. Within each scouting report is information giving a general summary of the opponents and the game plan in attacking those hitters. While the information may be of great value heading in to a series, in game and in series adjustments will need to be recognized should a report contain misinformation. Included in the scouting report is as follows:

- A. Player Information - This section of the report includes the player number, last name, position, what side he bats from, and what year of school he's in.
- B. Defensive Positioning - This information is the pre-series plan for defensive positioning based on previous year's spray chart and current year shared reports.
  - a. Infield Positioning
    - i. Straight (ST)
    - ii. Pull
    - iii. Slight Pull (SL PULL)
    - iv. Pinch (Play up the middle)
    - v. Slight Oppo (SLOP)
    - vi. Oppo
    - vii. Jam It (Extreme shift to the pull side)
    - viii. Split (3B-Line, SS-six hole, 2B-four hole, 1B-Line)
    - ix. Six Hole - either shortstop or third base covers the hole between these two positions
    - x. Four Hole - either second base or first baseman covers the hole between these two positions
    - xi. Corners In (CRNR IN) - defend against the bunt
  - b. Outfield Positioning
    - i. LF CF RF - the order which the numbers appear on report
    - ii. Numbers Represent
      - 1. 5 = Straight Up
      - 2. 6 = Move towards LF line
      - 3. 4 = Move towards RF line
      - 4. 2 = Straight up and in
      - 5. 3 = In and towards LF line
      - 6. 1 = In and towards RF line
      - 7. 8 = Straight up and back (power hitter)
      - 8. 9 = Back and towards LF line
      - 9. 7 = Back and towards RF line
    - iii. Additional Information
      - 1. Slight Pull (SL PULL)
      - 2. Slight Oppo (SLOP)
      - 3. Flare - play straight up but take away flare w/twok
- C. Runner Type - how fast is the hitter
  - a. Blue - Fastest runner, sub 4.0 speed
  - b. Green - Plus runner, 4.0-4.3 speed
  - c. Yellow - Average runner, 4.4-4.7 speed
  - d. Gray - Poor runner, 4.8 speed or higher
- D. Stolen Base Total - number of stolen bases on the season. Helps indicate who biggest stolen base threats are.

- E. Power - Plus, Average or Poor power numbers (Doubles-Triples-Homers) or swing identification.
- F. Offensive Skills - What skills does the hitter implement to try and create action or get on base.
  - a. Drag
  - b. Push
  - c. Hit and Run
  - d. Slash
  - e. Safety
  - f. Sac
- G. Pattern of Hitter - a basic plan for attacking the hitter. Especially useful in critical situations.
  - a. Pattern One = poor hitter, attack the zone and make him hit.
  - b. Pattern One Plus = poor hitter but attack carefully with RISP.
  - c. Pattern Two = average college hitter, must pitch to carefully but aggressively.
  - d. Pattern Two Plus = above average hitter that is pitched to carefully and cautiously in critical situations.
  - e. Pattern Three = best college hitters, do not give him a pitch to hit, do not let him beat us!
- H. Sequence of Pitches / Location
  - a. A three pitch sequence indicating how we'd like to attack a hitter during their at-bat.
  - b. The sequence example AAJ means we'd attack the hitter with away-away-jam type pitches.
  - c. We approach each hitter with a fundamental plan of in-out, up-down or hard-soft.
  - d. The letters indicate the following:
    - i. A=Away
    - ii. J=Jam
    - iii. H=Hard
    - iv. S=Soft
    - v. U=Up
    - vi. D=Down
    - vii. X=Cross
    - viii. Y=Expand
- I. First Pitch Tendencies - Does the batter swing early in his at-bat.
  - a. No - Does not swing at first pitch.
  - b. Occ - Only once in a while will he swing at first pitch.
  - c. Yes - Regularly swings at first pitch, must execute location down early.

- d. Yes! - Always looking to swing at first pitch, must execute location down early, must look to cross with off speed pitches early.
- J. Out Pitches - What type of pitch we'll use to get the hitter out late in the at-bat.
- K. Pitch Plan - a summary of how we plan to attack the hitter. Typically the plan is mix away early and jam late, however, the plan may include crossing hitters in certain counts and what pitches the hitter typically struggles with.
- L. General Notes - a summary of all the notes taken on the hitter from previous reports and previous opponents. The basis for what the pitch plan looks like.
- M. Yearly Statistics - includes Average, Doubles, Triples, Home Runs, Walks, Strikeouts, Stolen Bases, and Stolen Bases Attempted. Gives a pretty good indication of what type of offensive player he is, however, each hitter is a Division One hitter and has shown offensive skill at some point in their career to warrant their place on the team. Statistics can give a good indication of who he is, but also can be misleading due to factors earlier in the year (injuries, major slump, etc.).

## **HITTER IDENTIFICATION**

The ability to identify a hitter's strength and weaknesses, and make adjustments, can give the pitcher an important edge. It is never too early to learn the process of hitter identification. These situations provide the pitcher an opportunity to identify hitters:

- A. Batting Practice
  - a. Use batting practice to see hitter's priorities (exp. opposite field, pull, raw power (if any)).
- B. Game - Each pitcher should look at game to see how he should attack particular hitters and situations.
  - a. Hitting adjustments (first ball, 2k adjustment).
  - b. Skills (bunts, hit and run).
  - c. Strike out candidates.
  - d. Match-ups (RHH vs. RHP, etc).
- C. On Deck - Watch on-deck hitter for particular habits that hitter is trying to keep or break.
  - a. Low arc (possible low ball hitter).
  - b. High arc (possible high ball hitter).
  - c. Nervous (possibly aggressive, undisciplined).
  - d. Long/short (hands direction).
- D. Stats/Chart - The numbers and spray charts may show tendencies.

- a. First ball hitters.
- b. Aggressiveness / Patience.
- c. Running skills.
- d. Hitting order / defensive position.
- e. Where he hits the ball (opposite field, ground balls, fly balls, etc.).

## **SIGN SYSTEM**

### **BASICS**

The sign system for relaying pitches includes an indicator for the zone (location) and pitch type. With no one on the system starts with the location first followed by the pitch type.

### **ZONES**

The location of a pitch is indicated by a zone coordinating within or outside of the strike zone. These zones include:

- A. Four Zone - Down and away to the hitter.
- B. Three Zone - Down and in to the hitter.
- C. Two Zone - Down and buried to the hitter, ideally just beyond the back tip of home plate.
- D. One Zone - Up and in to the hitter, however the general rule is to go up then go up and in.
- E. Zero Zone - Expanded away to the hitter indicated by the catcher with either his pinky (RHH) or thumb (LHH).
- F. Five Zone - Expanded in to the hitter indicated by the catcher with either his pinky (LHH) or thumb (RHH)

### **RUNNER ON BASE**

If a runner is on base a series of systems are in place to assist the pitcher catcher communication and prevent the opponent from tipping pitches. These systems include:

- A. Tap System - the catcher taps a series of places on his body indicating which sign in a five sign sequence is either the location or the pitch type.
- B. ABE System - this system uses the Ahead, Behind, Even method, where the pitch location or type is indicated by first sign (ahead), second sign (behind), or third sign (even) in a five sign sequence.
- C. Outs Plus One - based on the number of outs in the inning, the pitch type or location is indicated by the first sign (0 outs), second sign (1 out), or third sign (2 outs) in a five sign sequence.

- D. Strikes Plus One - based on the number of strikes in the at-bat, the pitch type or location is indicated by the first sign (0 strikes), second sign (1 strike), or third sign (2 strikes) in a five sign sequence.
- E. Pre-Determined Hot Sign - the pitcher and catcher determine a sign that is always hot during a five sign sequence.
- F. Fundamental Series - the upside down longhorn indicator allows the catcher to call a pick type. The indicator is followed by a number or hand signal indicating the type of pick that has been requested by the coach or catcher.

### **NIGHT SIGNS**

At certain ballparks it is very difficult to see the catcher's signs at night. To address this problem, we will have a standard format for giving signs at night. All pitchers and catchers should know these signs so there is no confusion during the game. Catcher should give the sign while crouching using his bare hand. Secondary pitches should be located based on the count. Even = Quality Breaking Ball. Behind = Cookie Breaking Ball. Ahead = Chase Breaking Ball. Pitchers can change signs by swiping with their glove. An example of night signs:

Indicator:	Mask
Fastball Away:	One touch after indicator
Curveball:	Two touches after indicator
Slider:	Three touches after indicator
Changeup:	Four touches after indicator
Fastball In:	Five touches after indicator

To continue with running game using night signs, a double tap of the indicator would indicate a pick series based on the location of the runner.

Indicator:	Double Tap the Mask
Good Move/Inside Move:	One touch after indicator
Pitch Out:	Two touches after indicator
Pitch Up:	Three touches after indicator
Hold and Pick/Spin Move:	Four touches after indicator
31/Best Move:	Five touches after indicator

If no indicator is touched during a sequence then that is an effort to get the pitcher to hold the baseball until the hitter calls timeout. If in the stretch simply come set once the catcher is done with his touches and wait for the time out call by the hitter while anticipating a step off call should the runner start his actions early. If in the windup simply shake multiple times then step off as if to indicate a new pitch is desired from the catcher.

This is an example of the night sign system that can be used should the lighting dictate at certain parks. This can be changed at any time, with the primary change being the indicator. To change the indicator the catcher can simply step out and give a sign to the pitcher and infielders such as a rolling of the bare hand indicating he is changing the indicator. From there the first thing he touches on his body becomes the new indicator and the count starts from there.

**SECTION V:**  
**DEFENDING YOUR POSITION**

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## **DEFENSIVE FUNDAMENTALS**

### **BASICS**

Receive ball with rear down, hands out in front and chest square to ball. If ball bounces high the pitcher may pre-turn to facilitate the throw. If the pitcher bobbles the ball the rule is to automatically get the out at first base. At no time should a pitcher bare hand a moving baseball. If the ball is moving the pitcher should use their glove to pick up the baseball. Only bare hand a stopped baseball.

### **FOOTWORK**

- A. Receive ball (let ball close glove)
- B. Look ball into glove
- C. Pull ball into body (belt area) with both hands
- D. Turn front shoulder to direction of throw
- E. Feet stay under control

### **COMEBACKERS**

- A. Running Technique
  - a. After receiving ground ball comebacker that is directly at pitcher, or takes pitcher's momentum towards right side of diamond, begin controlled jog towards first base.
  - b. Underhand toss the baseball to first baseman. The toss should be similar in style as if pitcher were holding a glass of milk and throwing the milk at the first baseman.
  - c. Be sure to clear the glove from the first baseman sight line so as not to cause any deception from the underhand toss.
- B. Back Hand Technique (RHP)
  - a. On ball hit to left side of the diamond, the RHP should position himself to field the ball using his backhand.
  - b. Position the feet in the direction of the throw, ideally with the right foot planted and in a ready position to throw the baseball.
  - c. Backhand the ball inside the right foot.
  - d. Bend at the knees and get butt down.
  - e. Bring ball to waist and transfer to throwing hand.
  - f. Use short arm arc in back to stay short and quick.
  - g. Use a small rhythm step or no step as feet should be in a spread base position and only require a small weight transfer to throw.
  - h. Note: the backhand technique is preferred over the effort to get in front of the baseball to make the play to the backhand side. Getting in front causes momentum to continue towards the third base line and may cause inaccurate throws with less velocity. The backhand technique allows the pitcher to throw the baseball in a spread base position worked on daily in practice.

- C. Back Hand Technique (LHP)
  - a. On ball hit to right side of diamond, the LHP should use the backhand technique.
  - b. Field the backhand inside either leg as dictated by ball pace.
  - c. Bend at the knees and lower the butt to stay down with the ball.
  - d. Bring the ball to waist and continue with running technique.
  - e. Note: it is highly unlikely the backhand technique with a LHP would be used for anything other than running technique.
  
- D. Throw to Second Base (1-6-3 or 1-4-3 DP)
  - a. After receiving ground ball comebacker, turn feet, shoulder in line with second base. Line up front side and control throw to make sure of lead out.
  - b. If shortstop covers throw should be to left side of second base.
  - c. If second baseman covers throw should be to right side of second base.
  - d. Note: throw should not lead infielder over bag. Get ball to him as quick as possible. Make sure second baseman is under control at the bag in order to be balanced for the next throw.
  
- E. Throw to Plate (1-2-3 DP)
  - a. Receive ground ball.
  - b. Close front shoulder.
  - c. Turn feet to plate.
  - d. Use firm throw above the waist over the middle of the plate.
  - e. Use short arm arc in back to stay short and quick.
  - f. Note: Keep your poise. Panic can set in because of possible importance of the play.

## **THE RUNNING GAME**

### **CONTROLLING THE RUNNING GAME**

The ability to throw quality pitches with runners on base will be a great indicator of the success and failure rate of that pitcher. Understanding the mental and physical ability of the pitcher will help in aiding him in his ability to separate holding runners and the actual pitch to the plate. The running game is controlled by the coach/catcher and middle infielders. While pitchers have the ability to pick on their own if they see something unusual, the general rule is to execute the sign relayed to them. This allows the pitcher to focus on execution and eliminates the need to think about the opponents running game. A basic knowledge of who the best, most likely runners are on the opposition is key to having a feel for the running game in the Cougar Pitcher system.

### **RIGHT HANDED PITCHERS**

- A. Stretch Delivery

- a. Pitcher should have the goal of delivering the ball to the plate from the stretch in 1.30 seconds or less with command.
  - b. Use a modified leg lift or slide step to quicken the delivery from the stretch. With this quick step, the pitcher should set up by placing more weight on the flexed back leg.
  - c. Bouncing the hands up during the stretch can cause the delivery to be slower. Instead use a small rhythm bounce with the hands at the beginning of the delivery.
  - d. The 1.3 seconds goal along with the ability to vary the hold patterns will give the catcher an excellent chance to throw the runner out, even without picking.
  - e. Pitchers with quick ball-glove separation have a better chance to maintain "stuff" while making the stretch movement quicker. The sequence is hand separation before leg lift.
- B. Vary Tempos - The pitcher must vary the amount of time between coming set and throwing to the plate.
- a. Set, throw: quick tempo, be sure to stop. Pause and pitch. This is approximately a one second pause.
  - b. Set, hold, throw: a two second pause.
  - c. Set, hold, hold, throw: a three plus second pause.
  - d. Hold until time out - disrupt base runner's rhythm and see if he flinches.
  - e. Vary the tempo at which you pitch, and at which you pick off. Often pitchers pick and pitch on the same tempo thus giving the base runner a chance to time your delivery and steal bases.
- C. Pick Off Moves
- a. First Base
    - i. Basic: quick feet, short arm action, ball to ear, snap throw knee high to inside corner of the base.
    - ii. The pitcher must move the left foot toward the base during the footwork portion of the movement.
    - iii. Goal is to execute best pick move in 1.0 seconds or less.
    - iv. Tempo: vary the hold time before the pick. This is effective for all pitchers. Varying the hold time will cause the runner to get on his heels or disrupt his rhythm to get a jump.
  - b. Second Base
    - i. Always vary the number of "looks" or "rhythms" to second base so that runners cannot recognize a tempo pattern.
    - ii. Spin:
      1. Turn left shoulder and feet toward second in counter clockwise manner.
      2. The right foot should move forward and the left foot should spin to a point behind the rubber in a direct line with second base.

3. The arm action should be short and quick as with the pick throw to first base.
  4. The throw should be belt high over the middle of the base.
  5. Quick feet quick arm.
- iii. Inside move:
1. Pitcher lifts stride leg and swings the leg toward second base and makes the pick throw.
  2. This move is valuable against a runner with an overly aggressive secondary lead.
  3. To improve this move:
    - a. Pre-turn the heel of the pivot foot toward home plate. This will facilitate the turn.
    - b. Make the leg movement smooth.
    - c. Eyes on target all the way through the turn.
    - d. Break hands at top of lift leg. Do not keep hands together as the leg swings back. Short arc to apex to ready throw position.
    - e. Turn head and lock in front side before throw. A loose front side will often lead to an errant throw.
- iv. Looks and Rhythms:
1. Make runner stop with looks or rhythm holds.
  2. Runner should never be moving towards third base before delivery to plate.
  3. Exception to this rule is if we are in "go with the hitter" mode, where the runner's actions at second have no meaning to us.
- v. Use the no look pitch. This can upset a runner's timing.

### **LEFT HANDED PITCHERS**

- A. Balance - If the LHP is to develop the ability to shut down the opponent's running game, a delivery with balance is critical. The ability to balance on the backside is the first component in the good pick-off sequence.
- B. Leg Lift: there are some basic keys to the proper leg lift.
- a. Pitcher should have the goal of delivering the ball to the plate from the stretch in 1.30 seconds or less with command.
  - b. Do not allow the free foot to break the plane of the rubber. This should be adhered to even with the full wind up delivery.
  - c. Keep the knee action consistent.
  - d. Keep the toes of the right foot pointing down during the leg lift.
  - e. Move the heel of the pivot foot slightly away from the rubber.
  - f. Keep the free foot underneath the knee. Do not kick the foot out towards first base.
  - g. Pre-turn the heel of the pivot foot toward home plate. This will facilitate the turn with a runner at second base.

### C. Head Movement

- a. First and home:
  - i. Look at first until the hands separate, then move the eyes and head toward the plate.
  - ii. If the pitcher is to pick move the eyes and head back to first base just before release.
  - iii. Practice will allow the pitcher to delay returning the eyes to first base until the last possible moment.
  - iv. Avoid reverse looking (looking at home throwing to first). This is a common read for the good base runner.
- b. Half-way:
  - i. Some pitchers may get more consistent head movement by looking half way between home and first base.
  - ii. This move is called the quarter turn.

### D. Short Jab Step Move

- a. Come to a set position.
- b. Quick step to the plate by lifting the right foot about three".
- c. Drift toward first base and throw to first.
- d. This gives runner a different look, close to a quick step or slide step.
- e. This can also pick off a runner who goes on first movement.

### E. Walk to First

- a. After the ball is released, the LHP should walk toward first base.
- b. This body movement will give the appearance of a direct step towards the base.

### F. Torso

- a. The LHP must keep the upper body action consistent.
- b. Many pitchers will tilt before throwing to the plate.
- c. During the windup, as well as the stretch, the torso should remain either perpendicular to the ground or bent slightly forward.

### G. Tempo

- a. The pick-off move and delivery from the stretch should progress at the same pace or tempo.
- b. A very rapid pace makes balance difficult.
- c. A very slow tempo may allow the runner to steal on first movement and beat the throw from the first baseman.

### H. Picks at Second Base

- a. The footwork is simply the mirror image of the RHP footwork for picks at second base.
- b. Under control to close front side.

- c. Always keep feet under shoulders.

### **FUNDAMENTAL SERIES - PICK OFF MOVES**

We will control the running game as a staff. In order to be competent at controlling the running game and to be able to consistently execute all the picks around the diamond we must practice these fundamentals on a regular basis.

#### **A. Holds**

- a. Come set and count three full seconds in a normal pitching pattern.
- b. We want our pitchers to become comfortable varying their times to the plate.
- c. Getting comfortable in holding for three seconds before pitching enables us to disturb a base runner's timing.
- d. We will Hold to Time Out, Hold and Pick, and Hold and Pitch in this drill sequence.
- e. Hold the ball is a vital part of disrupting the runner's timing and rhythm.
- f. Some general rules:
  - i. Come to set position.
  - ii. Hold the ball for one, two or three seconds.
  - iii. On occasion hold to time out, specifically as instructed by catcher.
  - iv. This mechanic also facilitates the pitcher riding his back leg down the hill as he often does not hurry his delivery during holds.
  - v. Pitchers that come to the set position slowly must discipline themselves to not start the hold count until coming to a full set position.

#### **B. Quick Step-Off**

- a. Work on a quick step-off two or three seconds into the normal pitching pattern.
- b. Many big league clubs have concluded it is more effective to simply step-off and put doubt in the runner's mind than it is to actually continue to throw over.
- c. Some general rules:
  - i. Avoid head bounce.
  - ii. Be quick but in control.
  - iii. RHP remove right foot quickly with the ball removed quickly from the glove and pointed down.
  - iv. LHP remove left foot quickly with the ball being removed from glove and put in 90degree slot away from head.
  - v. LHP may throw to first base but this move is primarily a no throw move.

#### **C. Slide Step**

- a. Must be comfortable in performing the slide step and must be able to throw strikes.
- b. If pitcher can master the slide step, it will go a long way in controlling the base runner. 1.3 seconds or quicker.
- c. Regular slide step mechanics or bounce hands mechanics.

D. Good Move / Great Move

- a. Work on your pick move to first base.
- b. The first move will be a move to first with quick feet, but a long arm action.
- c. This move is followed by a great move, which uses the same footwork as the good move, but utilizes a short arm action.
- d. By using the good move / great move in succession, the base runner will think the good move is your best move, and thus when you shorten the arm up, you'll gain several inches on the base runner in regards to his timing.
- e. A balk shall never be called when executing a Good/Great Move!!!

E. Pick from Signs

- a. Work on taking sign from catcher and pick over prior to coming set.
- b. Vary your spots where you pick so as to create doubt in base runner's head.
- c. If ball starts in glove then the pick must initiate when the hands come together on the way up.
- d. LHP work step-off pick from signs.

F. Inside Move to Second Base

- a. Work on maintaining similar tempo and body angle in your leg lift, then spin around towards second base.
- b. Occasionally this move will catch the runner napping, but mainly it is utilized to keep them honest at second base, especially teams who like to walk into their lead and timing when stealing third base.
- c. If a runner is at second base with no one out, we will use the move to read the hitter's intentions.
- d. Some general rules:
  - i. Get sign from middle infielder or catcher.
  - ii. Hold for a two count.
  - iii. Head look returns to catcher.
  - iv. Lift leg to balance.
  - v. Keep head to catcher as long as possible.
  - vi. Turn lower half to throw to second base.
  - vii. Line up front side before throwing.
  - viii. The pitcher does not have to throw the baseball! Only throw the ball if there is daylight between the infielder and the base runner.
  - ix. Our hope is runner tries to steal third base. Anticipate the rundown. Back up third base if rundown occurs.

G. Spin Move to Second Base

- a. This move is used by a pick call from the middle infield or catcher, or as part of our bunt defenses.
- b. Practice varying your looks to second base and the plate, as our middle infield may call a pick after so many looks.
- c. There is no excuse why you should not be comfortable doing this move.

- d. Once again it will go a long way in controlling teams who like to steal third base.
  - e. Must use a short arm action to have a chance.
  - f. A throw is not required.
- H. Fake to Third / Pick to First (31 Move) - RHP
- a. The idea here is to deceive the runner at first base, thus your pick to third base must look as much like a throw to the plate as possible.
  - b. Good leg lift balance and tempo are keys to maintaining deception from the first base side.
  - c. Stride leg should go to a point 45 degrees down the mound for greatest deception, followed by a full arm fake.
  - d. The quick step and turn will not be as effective in deceiving the runner at first base.
- I. Pitch Outs
- a. It is imperative that we execute this fundamental.
  - b. It is often ignored in the daily practice plan until a failed pitch out results in a positive for the opponent.
  - c. The pitch out is a tool used by the coaches and catchers in holding runners.
  - d. This gives the catcher a throwing lane to second base and time to execute the throw.
  - e. Some general rules:
    - i. Pitcher must use a modified slide step to the plate as a true slide step will often shut down the runner and a normal leg lift will take too long to give the catcher a chance.
    - ii. Pitcher receives pitch out sign from catcher.
    - iii. Come to set position.
    - iv. Use a comfortable hold. Do not quick pitch and do not hold the ball too long.
    - v. Use the four seam fastball.
    - vi. Throw pitch into opposite batter's box, chest high. Trust your catcher will get there.
    - vii. Visualize throw zone before the pitch.
    - viii. Incorporate into flat ground and bullpen routines.
- J. Pitch Ups
- a. Similar to a pitch out, but chest to shoulder high over the plate with a hitter.
  - b. We will use this skill in an effort to entice the hitter into a swing, while at the same time giving the catcher a pitch they can handle if the runner is going.
  - c. We will use this pitch a lot in bunt situations, so execution is critical.
  - d. The true slide step is okay as we are not certain the base runner is stealing as when we call a pitch out.
- K. Best Move

- a. This move by both the RHP and LHP should be conducted in a time of 1.0 seconds or less.
  - b. LHP should push the envelope as far as their stride leg going to the 45 degrees point or further.
  - c. RHP should incorporate quick feet and quick arm, or use the front knee flinch move otherwise known as a balk move.
- L. No Look Pitch
- a. While base runners focus on rhythm or pitcher's looks.
  - b. No look gives the runner only a time to plate to gauge the pitcher.
  - c. Some general rules:
    - i. Come set looking at catcher.
    - ii. No long holds – one second is enough.
    - iii. Runner in scoring position, “go with the hitter” focus.

### HOLDING RUNNERS

- A. First base related - Holding runners at first base is done by disrupting the runner's rhythm. This is accomplished by the following techniques:
- a. Hold ball for one, two or three seconds, or until time out.
  - b. Hold ball then quick step off move.
  - c. Hold ball and pitch.
  - d. Come set and quick pitch.
  - e. Short hold and pitch.
  - f. Pick on way up or on way down.
  - g. Pitch out.
    - i. Note: Holding the ball is the single most important way to deter the steal of second base. To be able to come to the set position and be poised and relaxed will disrupt the runners timing. He will either get a poor jump or not go at all. Long hold must be mastered before any quick set or quick pick.
- B. Second base related - With runners in scoring position the quality of pitch and the ability to keep the runner from stealing third is done with the following sequences:
- a. Mixing looks - come set looking at the base runner and vary the looks based on the number given by the middle infielder.
  - b. Mixing rhythms - come set looking at the base runner and vary the rhythm/hold based on the count given by the middle infielder.
  - c. No look pitch, or one look / one rhythm pitch - used when in "go with the hitter" mode. ***The hitter is the pitcher's priority.***
  - d. Inside Move
  - e. Spin Move
- C. Third base related - With a runner at third base the pitcher will go from the stretch position at all times. Too many teams now incorporate the fake steal of home routine

at third base. If in the stretch position it is highly unlikely a team will attempt to steal home. The step off with pivot foot should be taught to all pitchers should they inadvertently go to full wind-up position to avoid the balk when they step off.

- a. Right Handed Pitcher
  - i. From stretch position get the sign.
  - ii. Check runner with eyes on way to set position.
  - iii. Come set.
  - iv. Pitch
  
- b. Left Handed Pitcher
  - i. Get sign.
  - ii. Check runner over right shoulder on way to set position.
  - iii. Come set.
  - iv. Pitch

### **PRACTICE APPROACH - RUNNING GAME**

The ability to practice against the running game not only provides the pitcher with an opportunity to work on these skills, but also allows base runners to practice their stolen base technique. Running Game is a great way to practice this skill set. Runners can be placed on a certain base, or can work from all bases, with a hot runner being indicated for each series. A series of picks, pitches, pitch outs and pitch ups can be scripted to provide work on the sign system between pitcher and catcher as well as the pick system. Catchers are also able to work on their receiving, footwork and throwing fundamentals during this practice drill. The Running Game script is set up by the coach and is read to the catcher at home plate. The catcher then relays the appropriate sign to the pitcher, at which time the pitcher executes the sign given.

## **BUNT DEFENSES**

### **BASICS**

- A. Bunt play will be relayed to players from catcher. Be sure all eyes are on catcher during sign presentation. Review responsibilities prior to engaging rubber.
  
- B. Be aware of runners and their speed on the bases and at-bat.
  
- C. Get pitch selection from catcher. No matter what the situation, the priority is pitch concentration and execution, then move on to fielding your position.
  
- D. After ball is bunted, bust hard to ball as if no one else is fielding it.
  
- E. Listen for "ball" call from other fielders as they will have priority over the pitcher. If the play is a no doubt play for the pitcher verbalize "ball" immediately and attack the baseball to make the play.

- F. Field ball inside throwing side foot with glove positioned between the ball and the base you are throwing it to.
- G. Hands in front of body with knees bent and butt low.
- H. Pull ball into belt area to lock in front side. Stay low and in your legs. Standing up can cause ball to sail once thrown.
  - a. Note: Stopped bunted balls can be barehanded. All moving balls should be gloved. Do not bare hand a moving ball.
- I. Point front side with feet directed to desired base (keep feet moving).
- J. Throw with short arm arc in back to be quick with release.
- K. Keep feet under shoulders to stay balanced.
  - a. Note: Arm slot should be normal. Bad throws come from rushed or lazy body positioning. Avoid flying open by staying low in an athletic position and firm up your glove arm while throwing to keep you online.

#### **PITCHER BUNT PLAY RESPONSIBILITIES**

- A. Runner at First Base – Out
  - a. The priority for all players fielding the bunt is the out at first base.
  - b. Pitcher is responsible for right side of diamond and is to attack the baseball until called off by first baseman, who will be late to charge as he holds the runner on.
  - c. Right handed pitcher reads the third baseman and allow him to creep towards home before pitching the ball. He should be 25-33% of the way towards home when delivery is initiated.
  - d. Left handed pitcher reads the first baseman's glove flip for initiating delivery. He will read the third baseman and indicate when it is time to pitch by flipping his glove towards you.
  - e. Execute a quality strike and finish the delivery before moving to fielding position.
  - f. Identify bunt speed and runner and adjust accordingly to speed of play. If a hurry play, step and throw.
  - g. Ball on or near the first base line pitcher is able to clear the throw and listen for inside or outside call for sight line of throw. As long as the ball and pitcher stay inside the first base line there should be a clear sight line inside as the runner is required to stay in the runner's lane.
  - h. If third baseman makes the play the catcher rotates to cover third base and the pitcher rotates to cover home.
  - i. Be quick but under control.
- B. Runner at First Base – Lead Out
  - a. The priority for all players fielding the bunt is the lead out at second base.

- b. Pitcher is responsible for right side of diamond and is to attack the baseball until called off by first baseman, who will be late to charge as he holds the runner on.
  - c. Right handed pitcher reads the third baseman and allow him to creep towards home before pitching the ball. He should be 33-50% of the way towards home when delivery is initiated.
  - d. Left handed pitcher reads the first baseman's glove flip for initiating delivery. He will read the third baseman and indicate when it is time to pitch by flipping his glove towards you.
  - e. Execute a quality strike.
  - f. Begin moving towards fielding position while ball is in midflight towards batter. Attack the baseball until called off.
  - g. Identify bunt speed and runner and adjust accordingly to speed of play. Lead out is typically a hurry play wherever the ball is bunted. Step and throw with short arm arc.
  - h. While fielding the ball listen for "ball" call from other fielders and for "base" call from catcher. Anticipate lead out at second base but the catcher will decide to check down to first base if there is no play at second base. He will indicate base by verbalizing "one" or "two".
  - i. Ball on or near first base line be able to clear the throw and listen for inside or outside call for sight line of throw. As long as the ball and pitcher stay inside the first base line there should be a clear sight line inside as the runner is required to stay in the runner's lane.
  - j. If third baseman makes the play the catcher rotates to cover third base and the pitcher rotates to cover home.
  - k. Don't be surprised by anything. Anticipate, be quick and under control.
- C. Runner at First Base – Pick
- a. The priority of this play is to execute a pitch out to the batter with a back pick to first base from the catcher.
  - b. Pitcher comes set with eyes on the first baseman. He will begin crashing immediately after the pitcher comes set.
  - c. As soon as the first baseman takes a couple steps towards home the pitcher executes the pitchout using a slide step technique.
  - d. Anticipate a back pick or possible rundown after pitch execution.
  - e. Note: A normal pitchout requires a modified slide step, but on this bunt play we want a normal slide step to prevent any stolen base action from the runner at first should he vacate when the first baseman crashes. If he continues to steal the quicker to the plate the better for the pitchout.
- D. Runner at Second Base – Out
- a. The priority for all players fielding the bunt is the out at first base.
  - b. Pitcher is responsible for left side of diamond and is to attack the baseball until called off by third baseman, who will be late to charge as he holds his ground reading the bunt and play in front of him.

- c. The shortstop will indicate initiation of delivery with a glove flip to pitcher. He will stand behind the runner at second. Do not confuse his flip with a flash pick. He is reading the first baseman who is charging and waits until he is 25-33% of the way towards home.
  - d. Execute a quality strike and finish the delivery before moving to fielding position.
  - e. Identify bunt speed and runner and adjust accordingly to speed of play. If a hurry play step and throw.
  - f. If third baseman makes the play the pitcher rotates and covers third base for back pick throw.
  - g. Be quick but under control.
- E. Runner at Second Base – Lead Out
- a. The priority for all players fielding the bunt is the out at third base.
  - b. Pitcher is responsible for left side of diamond and is to attack the baseball until called off by third baseman, who will be late to charge as he holds his ground reading the bunt and play in front of him.
  - c. The shortstop will indicate initiation of delivery with a "back" call to pitcher. He will stand behind the runner at second. He is reading the first baseman who is charging and waits until he is 33-50% of the way towards home.
  - d. Execute a quality strike.
  - e. Begin moving towards fielding position while ball is midflight towards batter. Attack the baseball until called off.
  - f. RHP - clear stride foot directly toward third base and use short arm action with hand above elbow.
  - g. LHP - step directly toward third base with right foot.
  - h. Identify bunt speed and runner and adjust accordingly to speed of play. Lead out is typically a hurry play wherever the ball is bunted. Step and throw with short arm arc.
  - i. If runner at second base only the play is a tag play and the ball needs to be thrown waist to knee high for catch and tag by third baseman.
  - j. While fielding the ball listen for "ball" call from other fielders and for "base" call from catcher. Anticipate lead out at third base but the catcher will decide to check down to first base if there is no play at third base. He will indicate base by verbalizing "one" or "three".
  - k. If third baseman makes the play the pitcher rotates and covers third base for back pick throw.
  - l. Don't be surprised by anything. Anticipate, be quick and under control.
- F. Runner at Second Base – Pick
- a. The priority of this play is to execute a spin pick at second base.
  - b. After receiving all running game signs from shortstop, pitcher will look in and receive a dummy sign from the catcher.
  - c. Pitcher comes set with eyes on the shortstop. The shortstop will wait for a two count and yell "back" while crashing towards second base.

- d. The pitcher initiates the spin pick on the "back" call.
  - e. Anticipate a back pick or possible rundown after pick execution.
  - f. Note: this play is run to keep the runner at second base close to the bag in preparation for lead out. This play is run once and if the catcher does not give a new bunt defense the bunt defense turns in to lead out on the next pitch. All sequences from lead out then take precedent.
- G. Runners at First and Third – Safety Play
- a. The priority for this play is getting the out at home plate on a first and third safety squeeze.
  - b. Pitcher is responsible for left side of diamond and is to attack the baseball until called off by third baseman.
  - c. The pitcher will come set in this situation with an eye on the first baseman.
  - d. The first baseman will crash towards home as soon as the pitcher comes set.
  - e. The pitcher must pitch to the plate after seeing the first baseman begin his crash. The runner at first base will be uncovered by a player and will have an opportunity to leave (steal) second base if the pitcher holds the ball too long as the first baseman crashes.
  - f. Execute a quality strike.
  - g. Begin moving towards fielding position while ball is in midflight towards batter. Attack the baseball until called off.
  - h. If the first baseman fields the ball his priority is to throw home, however, he has full view of the runner at third base and can check down to an out at first base if the runner at third base reads the defense and stays home.
  - i. If the pitcher fields the ball his priority is to get the out at first base as a properly executed safety squeeze needs the ball bunted to the first base side of the diamond thus the runner at third base should stay home. However, the catcher has a full view of the runner at third base and can check down to a play at the plate by calling for the ball "four!", at which time the pitcher will redirect the ball to home.
  - j. If first baseman makes the play there is a high probability of a rundown between home and third base. The pitcher will proceed to home and backup the catcher in a rundown, at which time all rundown protocol between home and third base will take over the play.
  - k. Note: If the play is ran and the runner at first base attempts to steal second as the first baseman crashes then 31 defense takes precedent with an emphasis on the runner at third base to prevent him from scoring. If this happens early enough before the pitch is started the right handed pitcher will step off and full arm fake to second and spin around counterclockwise to immediately check the runner at third. The left handed pitcher will step off and immediately rotate clockwise to check the runner at third. The runner at first base is not a priority during this play.
  - l. Don't be surprised by anything. Anticipate, be quick and under control.

**PRACTICE APPROACH - LITTLE GAME**

Besides the PFP approach to fielding bunts, pitchers can get quality, game-like repetitions through a team defense called Little Game. Little Game allows the pitcher to throw live to the hitter as he attempts to execute various bunts. The catcher indicates which bunt play is on prior to each pitch. The format of Little Game is as follows:

- A. Little Game - This sequence can be repeated based on the number of available arms
  - a. Drag - No one on base, pitcher in the wind-up
  - b. Push - No one on base, pitcher in the wind-up
  - c. Sac - Runner at first, out play
  - d. Pick - Runner at first, pick play, pitch out
  - e. Sac - Runner at first, lead out play
  - f. Sac - Runner at second, out play
  - g. Pick - Runner at second, pick play, spin move
  - h. Sac - Runner at second or first and second, lead out play
  - i. Safety - Runner at first and third, safety play
  - j. Squeeze - Runner at third, stretch, squeeze play
  - k. Valentine - Runner at third, stretch, valentine play

**31 DEFENSES**

The premise of Cougar Baseball's 31 Defense is to select a hot runner and have each of the four plays focus on that runner. If the runner at first base is hot as selected by the coaches, then the defense's job is to get that runner out, regardless of the actions of the runner at third base. Only when the out is achieved on the runner at first base may the defense turn and focus on the runner at third base. Conversely, if the runner at third base is selected as the hot runner, then all focus is placed on him regardless of the actions of the runner at first base. Our 31 Defense plays are as follows:

- A. Play One
  - a. With runners at first and third base, and a potential safety squeeze in order, the primary focus of the defense is the runner at third base.
  - b. Read bunt defenses for details on defending the safety squeeze.
  - c. All actions / reactions will be with the intent of not allowing the runner at third to score, regardless of the runner at first base and his actions.
  - d. The catcher will full arm fake to second base and look/throw to third base, and the pitcher will full-arm fake to second base and look/throw to third base/home if the runner leaves early or during a 31 move.
- B. Play Two
  - a. With runners at first and third base, the primary focus of the defense will be to record an out with the runner at first base who is trying to steal second base.
  - b. All intent will be directed at the runner at first regardless of the runner at third base and his actions.
  - c. The catcher will throw to second base, and the pitcher will throw the ball to second base if the runner leaves early or during a 31 move.

C. Play Three

- a. With runners at first and third base, the primary focus of the defense is the runner at third base.
- b. All actions / reactions will be with the intent of not allowing the runner at third base to score, regardless of the runner at first base and his actions.
- c. The catcher will snap throw to third base, the first baseman will full-arm fake to second base and look/throw to third base/home, and the pitcher will full-arm fake to second base and look/throw to third base/home if the runner leaves early or during a 31 move.

D. Play Four

- a. With runners at first and third base, the primary focus of the defense is the runner at third base.
- b. All actions / reactions will be with the intent of not allowing the runner at third to score, regardless of the runner at first base and his actions.
- c. The catcher will full arm fake to second base and look/throw to third base, the first baseman will full-arm fake to second base and look/throw to third base/home, and the pitcher will full-arm fake to second base and look/throw to third base/home if the runner leaves early or during a 31 move.

**RIGHT-HANDED PITCHER**

- A. Play Two – Runner at first base is the hot runner. DO NOT concern yourself with runner at third base.
  - a. Early Recognition
    - i. When executing “Fundamental Aloha” with runners at first and third and pitcher recognizes “Runner” call prior to starting arm fake to third base.
    - ii. Do not worry about runner at third base – no need to even look at him as you are positioning yourself to get the guy at second base.
    - iii. Pitcher turns 90 degrees to his right and throws the ball to second base (primarily shortstop covering) for the out/rundown.
    - iv. If run down occurs pitcher will move to first base to back up first baseman in a rundown.
    - v. If for some reason the ball gets moved to the runner at third base (this should not happen since runner at first is our only concern), pitcher will run to cover/back-up catcher at home plate.
  - b. Late Recognition
    - i. When executing “Fundamental Aloha” with runners at first and third and pitcher recognizes “Runner” call during or after arm fake towards third base.
    - ii. After executing 31 move with arm fake towards third base, pitcher will turn 270 degrees to his left and throw the ball to second base for the out/rundown.

- iii. If run down occurs pitcher will move to first base to back up first baseman in a rundown.
    - iv. If for some reason the ball gets moved to the runner at third base (this should not happen since runner at first is our only concern), pitcher will run to cover/back-up catcher at home plate.
  - c. Leave Early
    - i. When coming to the set position with runners at first and third, the runner at first leaves early in an attempt to steal second base.
    - ii. Step Off - Pitcher turns 90 degrees to his right and throws the ball to second base (primarily shortstop covering) for the out/rundown.
    - iii. Pitcher does not worry about runner at third base – no need to even look at him as pitcher is positioning himself to get the guy at second base.
    - iv. If run down occurs pitcher will move to first base to back up first baseman in a rundown.
    - v. If for some reason the ball gets moved to the runner at third base (this should not happen since runner at first is our only concern), pitcher will run to cover/back-up catcher at home plate.
- B. Play One, Three or Four – Runner at third base is the hot runner. DO NOT concern yourself with runner at first base.
  - a. Early Recognition
    - i. When executing “Fundamental Aloha” with runners at first and third and pitcher recognizes “Runner” call prior to starting arm fake to third base.
    - ii. Pitcher DOES NOT look at runner at third base.
    - iii. Pitcher will turn 90 degrees to his right and execute full-arm fake to second base.
    - iv. After arm-fake to second, pitcher will turn 90-180 degrees to his left to pick up runner at third base.
    - v. Pitcher will make one of four decisions:
      - 1. Hold the Ball – runner at third did not make a move
      - 2. Snap throw to third base – runner at third is off enough to pick him at third.
      - 3. Run at the runner – runner at third has wandered off but has not committed to running to either third base or Home plate. Pitcher will run at him at an angle to get runner going towards third base.
      - 4. Throw the ball home – runner at third has made a commitment towards home and is more than 50% down the line (45’). Rundown rules between third and Home dictate if runner is more than 50% towards home automatically throw the ball to home (no need for ball call).
        - a. If run down occurs, pitcher will run to back-up catcher at home plate. If first baseman arrives he has priority in the run down and pitcher will thus back up first baseman at home.

- b. Late Recognition
  - i. When executing “Fundamental Aloha” with runners at first and third and pitcher recognizes “Runner” call during or after arm fake towards third base.
  - ii. After executing 31 move with arm fake towards third base, pitcher will turn 270 degrees to his left and execute full arm fake towards second base.
  - iii. After arm-fake to second, pitcher will turn 90-180 degrees (continue turning in same direction) to his left to pick up runner at third base.
  - iv. Pitcher will make one of four decisions:
    - 1. Hold the Ball – runner at third did not make a move
    - 2. Snap throw to third base – runner at third is off enough to pick him at third.
    - 3. Run at the runner – runner at third has wandered off but has not committed to running to either third base or Home plate. Pitcher will run at him at an angle to get runner going towards third base.
    - 4. Throw the ball home – runner at third has made a commitment towards home and is more than 50% down the line (45’). Rundown rules between third and Home dictate if runner is more than 50% towards home automatically throw the ball to home (no need for ball call).
      - a. If run down occurs, pitcher will run to back-up catcher at home plate. If first baseman arrives he has priority in the run down and pitcher will thus back up first baseman at home.
- c. Leave Early
  - i. When coming to the set position with runners at first and third, the runner at first leaves early in an attempt to steal twob.
  - ii. Pitcher steps off and DOES NOT look at runner at third base.
  - iii. Pitcher will turn 90degrees to his right and execute full-arm fake to second base.
  - iv. After arm-fake to second, pitcher will turn 90-180degrees to his left to pick up runner at third base.
  - v. Pitcher will make one of four decisions:
    - 1. Hold the Ball – runner at third did not make a move
    - 2. Snap throw to third base – runner at third is off enough to pick him at third.
    - 3. Run at the runner – runner at third has wandered off but has not committed to running to either third base or Home plate. Pitcher will run at him at an angle to get runner going towards third base.
    - 4. Throw the ball home – runner at third has made a commitment towards home and is more than 50% down the line (45’). Rundown rules between third and Home dictate if runner is more

than 50% towards home automatically throw the ball to home (no need for ball call).

- a. If run down occurs, pitcher will run to back-up catcher at home plate. If first baseman arrives he has priority in the run down and pitcher will thus back up first baseman at home.

### **LEFT HANDED PITCHER**

- A. Play Two – Runner at first base is the hot runner. DO NOT concern yourself with runner at third base.
  - a. When executing “Fundamental Fundamental” or “Fundamental Aloha” with runners at first and third and runner takes off on first movement.
  - b. Pick to first Base as called. Follow pick and back up first base or first baseman for potential rundown.
  - c. If run down occurs pitcher will move to first base to back up first baseman in a rundown. If the ball gets moved to the runner at third base (this should not happen since runner at first is our only concern), pitcher will run to cover/back-up catcher at home plate.
  - d. Leave Early
    - i. When coming to the set position with runners at first and third, the runner at first leaves early in an attempt to steal second base.
    - ii. The pitcher will step off the mound and make a 90 degree turn to his left to throw the ball to second base.
    - iii. If runner does not fully commit to stealing second, the pitcher will run at him at an angle to cut off his momentum to second base and get the run down started going back to first base.
    - iv. In the event the pitcher starts the run down with angle, he will have no concerns over the runner at third base and all focus will be on getting the runner at first base out.
    - v. If run down occurs pitcher will move to first base to back up first baseman in a rundown. If the ball gets moved to the runner at third base (this should not happen since runner at first is our only concern), pitcher will run to cover/back-up catcher at home plate.
- B. Play One, Three or Four – Runner at third base is the hot runner. DO NOT concern yourself with runner at first base.
  - a. When executing “Fundamental Fundamental” or “Fundamental Aloha” with runners at first and third and runner takes off on first movement.
  - b. Pitcher will pick to first Base as called.
  - c. First baseman’s responsibility is to full arm fake to second base and turn to runner at third base immediately. Therefore, it is imperative for the pitcher to keep his head on a swivel and see what is happening so as to stay out of the line of fire should the first baseman have to make a throw home or to third base.

- d. If runner at third base commits to going home, pitcher will run to cover/back-up catcher at home plate to assist in the ensuing run down. If first baseman arrives he has priority in the run down and pitcher will thus back up first baseman at home.
  - e. Leave Early
    - i. When coming to the set position with runners at first and third, the runner at first leaves early in an attempt to steal second base.
    - ii. The pitcher will step off the mound and make a 90 degree turn to his left and make a full arm fake to second base.
    - iii. Pitcher will continue to turn to his left to pick up the runner at third base, potentially making a 180-270 degree turn.
    - iv. Pitcher will make one of four decisions:
      - 1. Hold the Ball – runner at third did not make a move.
      - 2. Snap throw to third base – runner at third is off enough to pick him at third.
      - 3. Run at the runner – runner at third has wandered off but has not committed to running to either third base or Home plate. Pitcher will run at him at an angle to get runner going towards third base.
      - 4. Throw the ball home – runner at third has made a commitment towards home and is more than 50% down the line (45'). Rundown rules between third and Home dictate if runner is more than 50% towards home automatically throw the ball to home (no need for ball call).
        - a. If runner at third base commits to going home, pitcher will run to cover/back-up catcher at home plate to assist in the ensuing run down. If first baseman arrives he has priority in the run down and pitcher will thus back up first baseman at home.
- C. Hat Tap/Spencer Play: Play One, Three or Four - Runner at third base is the hot runner. DO NOT concern yourself with runner at first base.
- a. The Hat Tap / Spencer Play is used to prevent the double steal attempt of our opponents.
  - b. With runners at first and third, opponents may leave early or go first movement on a read pitcher to try and draw the throw to first base. At the same time as the runner at first, the runner at third takes off for home. If run properly, there is very little chance the ball can be exchanged from the pitcher to the first baseman to the catcher in time to get the runner at home.
  - c. This play allows the pitcher to know that in all instances he is to pitch the ball to the plate.
  - d. If the pitcher has a read move, he will not use it in this play.
  - e. This play's indicator is given from the dugout by a coach and is simply a tap to the top of his hat.

- f. Leave Early - If the runner leaves early, the pitcher will step off and immediately turn 180 degrees to his right and pick up the runner at third base. If the runner at first base does anything, ignore him. Let the runner go to second base or return to first. The pitcher's priority and only focus is the runner at third base.

## **FIVE WAYS TO COVER FIRST BASE**

### **BASICS**

- A. On ball hit to right side of the diamond run towards first base in a manner dictated by the rules of the Five Ways to Cover First.
- B. At edge of orange turf or cut of grass get feet under control.
- C. Hold glove up by head area for target and poor throw adjustment.
- D. Touch inside of base with right foot and push off to fair ground.
- E. Communicate with first baseman "I got bag!". First baseman has priority on bag coverage and can call you off. If called off simply stop in fair territory if you are too close to the bag, or continue into foul territory and back up the play at first base. Be sure to avoid any contact or interfere with the hitter's right to first base.

### **COVERING FIRST BASE**

- A. Banana Route – No One On
  - a. Pitcher will take off to cover first in a banana route, aiming towards a spot 75% up the line then running parallel with the line to give the first or second baseman a clear line of throw to the pitcher.
  - b. The basics still apply but without a runner on base the pitcher is able to continue through the bag.
  - c. Stay on the inside of the bag in fair territory to avoid late contact with the base runner.
- B. Banana Route – Runner on Base
  - a. Pitcher will take off to cover first in a banana route, aiming towards a spot 75% up the line then running parallel with the line to give the first or second baseman a clear line of throw to the pitcher.
  - b. The basics apply here but the pitcher must "Look In" at the conclusion of touching of first base.
  - c. Know where the base runner started and where he would likely be and set your feet to set your throw. A short arm arc is needed to get in a ready position quickly and to release the ball as soon as possible.
  - d. Runner starts at first base look for the advanced out at third and check down to the back pick at second base.

- e. Runner starts at second base look for the advanced out at home and check down to the back pick at third base.
  - f. Call timeout after the play is finished to gather yourself and return to the mound area without any chance for the base runners to advance.
  - g. Do not be an umpire on this play. Assume the out is called and look for the advancing runner. Any delay can cause the base runner to advance.
- C. Banana Route – Bobbled Ball
- a. Pitcher will take off to cover first in a banana route, aiming towards a spot 75% up the line then running parallel with the line to give the first or second baseman a clear line of throw to the pitcher.
  - b. The basics apply here but as soon as the ball is bobbed by the fielder the pitcher must break down at the bag and become a first baseman.
  - c. Failing to breakdown will cause the pitcher to run past the bag or attempt to reach back to the bag with his foot as he'll likely receive the throw after passing the bag due to his momentum.
  - d. The rules of no one on or runner on base apply after touching the bag.
- D. Straight Line Route – Slow Roller
- a. Pitcher will take off in a straight line to the bag on all slow rollers.
  - b. The basics will apply with an extra emphasis on touching the inside of the bag and clearing towards fair territory as this will likely be a close play with a collision imminent if the pitcher stays in the baseline or crosses in to foul territory.
  - c. The rules of no one on or runner on base will apply.
  - d. While running the straight line all efforts should be made to field the ball by the pitcher, with the first baseman being the next line of defense. If the pitcher is able to field the ball immediately call for "ball" to allow the first baseman to retreat to the bag for the running technique toss. If the play is a last second decision the pitcher must continue towards first base with the ball and plan on touching the bag himself as the first baseman will likely not be in position to catch the ball at the bag.
  - e. The rules of no one on or runner on base apply after touching the bag.
- E. Straight Line Route – Double Play Cover
- a. Pitcher will take off in a straight line to the bag on all balls hit to first baseman with runner at first base.
  - b. The pitcher must plan on being the first baseman on this play until called off by the first baseman. After being called off continue to foul territory to back the play up.
  - c. RHP place right foot on the bag in a balanced pre-stride position. Do not stride towards the baseball until the ball is in flight and the direction is known. Then stride towards the ball for the catch.

- d. LHP place left foot on the bag in a balanced pre-stride position. Do not stride towards the baseball until the ball is in flight and the direction is known. Then stride towards the ball for the catch.
- e. Priority is to catch the ball or to block and stop an errant throw.
- f. Footwork and receiving drills for this play can be worked on during early work or pre-game BP.

*NOTE: Depending on the speed of the pitcher, the banana route may be replaced by the straight line route on all Five Ways to Cover First in order to give the pitcher the best opportunity to be there on time. This decision will be a coach's decision and communicated towards the pitcher accordingly.*

## **PASSED BALL**

- A. Communication
  - a. Move toward the ball and point.
  - b. Use verbal ("one", "three", "feet", or "back").
  - c. On ball on the ground underneath the catcher the pitcher should repeatedly point to the ground using the verbal command "feet!".
- B. Cover Plate
  - a. Feet placed in front of the plate to make tag on third base side of home plate.
  - b. Bent knees.
  - c. Receive throw and tag with the back of the glove.
  - d. Tag and get out.
  - e. Do not block the plate. Avoid contact. This play is not worth a career. Protect the body and record the out.

## **BACKING UP BASES**

- A. First Base
  - a. Go deep behind first base position.
  - b. Line up with the throw from the second baseman or shortstop.
  - c. Know where the dugout is.
  - d. Anticipate overthrow or deflection.
- B. Third Base
  - a. Go deep behind third base position.
  - b. Know where the dugout is.
  - c. Line up with the throw.
  - d. Come in to the throw slowly.
  - e. Anticipate overthrow or deflection.
- C. Home Plate
  - a. Come off the mound in the opposite direction of the batted ball.

- b. Get to the backstop as quick as possible.
- c. Read the throw from the field.
- d. Come in to the throw slowly.
- e. Anticipate overthrow or deflection.
- f. If receiving the ball, keep head up, look for a possible play on the bases.

*NOTE: If unsure of where to go, keep your head on a swivel, go to the area between third and home and react to the direction of the throw.*

## **POP FLY COMMUNICATION**

The pitcher should let the infielder catch pop flies in the mound area unless the pop fly lacks the hang time to allow another player to make the play. The pitcher should not automatically release the mound area on pop flies. He will be called off the ball by the infielder that can make the play. If the pitcher has an easy play on the ball, he will wave his arms in the air to indicate he can make a play. Do not call "ball"! Position players can respond by calling out the pitcher's name or by making a "you!" call to inform the pitcher to continue on with the catch of the pop up. If the position player calls for ball the pitcher should move opposite of the player coming in for the ball.

Any ball hit in the air the pitcher will point at it and loudly communicate with position players. Make a decisive decision on the potential position player who can catch it and call his name or position. Be loud.

Balls hit in the air and down the lines that result in two position players chasing the ball the pitcher will be responsible for the base that is vacated.

Pitcher must look for places on the field to be. Avoid watching the play as a fan. Either back up a base, cover a base or anticipate being part of a potential rundown.

## **RUNDOWNS**

### **BASICS**

Executing a rundown in one throw is the goal of every rundown. Within the rundown we will do the following:

- A. Win (runner is out) or tie (runner goes back to original base) never lose (runner advances) in a rundown.
- B. Set the pace by charging the runner and making him commit.
  - a. Pick a lane inside or outside the runner to allow clear throwing lane.
  - b. Do not let the runner hangout.
  - c. Get him to turn his back to you as you chase him.
- C. Hold the ball in throwing hand prepared to throw at all times.

- a. When called upon to throw the baseball, the pitcher should be close enough to partner that they can throw the ball in a dart throwing manner.
  - b. Partner calls for baseball by verbalizing "ball" loudly.
- D. After throwing the ball clear yourself from the lane by moving further inside or outside.
- a. Do not cross into lane.
  - b. Interfering with the runner allows everyone to be safe.
  - c. Follow your throw to the next base and be ready for the rundown to come back your way.
- E. If receiving the throw, shorten the distance between the runner and yourself and call for the baseball at the moment you believe you can take a couple of steps and tag the runner.
- a. Calling for it too early allows the runner to change direction and calling for it too late allows the runner to get by you and be safe.
- F. Tag the runner in a forceful manner with two hands securing the baseball.
- a. A soft tag allows the runner to initiate force and possibly jar the ball loose.
  - b. Clear yourself after the tag and look in for other runners.
- G. Know the situation and pay attention for two runners at a bag.
- a. If two runners are at a base, tag the second runner first, then tag the runner you were chasing.
  - b. Create an angle to cut off the second runner to prevent him from trying to retreat to previous base.
- H. The rule of 50% applies on all rundowns between home and third base.
- a. If the runner is headed towards home then give the ball up automatically when that runner passes half way to home.
  - b. Do not wait for a ball call.
  - c. Do not attempt to chase runner entire way home and try to tag late or dive and tag.
  - d. Get the rundown headed back to third base by giving the ball up early to partner.
  - e. The timing of the ball call and tag at third base is critical to prevent multiple change in directions and throws.
- I. Practice allowing only one throw to create better tempo and timing with ball call and tag.

### **PRACTICE APPROACH – RUNDOWN DRILL SERIES**

Each of these series will be performed with infielders, and the outfielders acting as base runners. Three pitchers are at the mound area at the same time, with one pitcher at a time performing the drill repetition.

#### **A. Fungo Series**

- a. Runner at first base
  - i. Groundball to first baseman
    - 1. First baseman touches bag and throws to shortstop.
    - 2. Runner stops and gets in a rundown.
    - 3. Pitcher starts on mound.
    - 4. Pitcher backs up first base in rundown.
  - ii. Groundball to left field
    - 1. Left fielder throws to home plate.
    - 2. Cut man (third baseman) redirects throw to second base.
    - 3. Rundown between first and second base.
    - 4. Pitcher starts backing up home.
    - 5. Pitcher backs up first base in rundown.
  - iii. Groundball to right field
    - 1. Right fielder throws to home plate.
    - 2. Cut man (first baseman) redirects throw to second base.
    - 3. Rundown between first and second base.
    - 4. Pitcher starts backing up home.
    - 5. Pitcher backs up first base in rundown .
- b. Runner at second base
  - i. Comebacker to pitcher.
  - ii. Runner at second base gets in rundown between second and third.
  - iii. Pitcher will cut runner off and start rundown, throw to third base, or throw to second base.
  - iv. Pitcher backs up third base during rundown.
- c. Runner at third base
  - i. Infielders play in.
  - ii. Groundball hit to infielders or pitcher.
  - iii. Runner at third base is green going in looking, stopping and getting in a rundown after reading throw to plate.
  - iv. Pitcher backs up home during the rundown.

## B. Pick Series

- a. Runner at first base
  - i. RHP 31 move with throw to second base (two outs)
    - 1. Pitcher executes 31 move and throws to second base.
    - 2. Runner at first takes off first movement then stops after seeing 31 move and gets in a rundown.
    - 3. Pitcher backs up first base during rundown.
    - 4. Out during rundown must be executed quickly to prevent run from scoring.
  - ii. RHP 31 move with throw to first base (0-1 outs)
    - 1. Pitcher executes 31 move and throws to first base.
    - 2. Runner at first base plays dumb and extends secondary during move to get caught off base and in a rundown.

3. Pitcher backs up first base during rundown.
  4. Do not worry about runner at third base during this rundown.
- b. Runner at second base
    - i. Inside move to second base
      1. Pitcher comes set and executes an inside move to second base
      2. Runner starts technique on first movement and gets hung up in a rundown by the pitcher's inside move.
      3. Pitcher will either cut the runner off and chase him back to second, throw the ball to third, or throw the ball to second base.
      4. During the rundown the pitcher is responsible for backing up third base.
  - c. Runner at third base
    - i. 31 defense – Play Four
      1. Pitcher will come set and execute a pitch to home plate.
      2. The catcher will full arm fake to second and look to third for rundown.
      3. Runner will break towards home on the full arm fake and remain in the rundown between home and third.
      4. Pitcher is responsible for backing up home during the rundown.
    - ii. Squeeze play
      1. Pitcher will come set and execute a pitchout.
      2. Runner will break towards home at foot strike to simulate a squeeze play.
      3. Catcher will chase runner in rundown between home and third.
      4. Pitcher is responsible for backing up home during the rundown.
- C. Long Throw Series
- a. Runner at first base
    - i. LHP will execute a good move to first base.
    - ii. Runner will take off on first movement drawing the long throw from the first baseman.
  - b. Runner at second base
    - i. Pitcher will come set and execute a spin move to second on two looks or two rhythm.
    - ii. Runner will take off on spin towards third drawing the long throw from the shortstop or second baseman.
  - c. Runner at third base
    - i. 31 defense – Play Three
      1. Pitcher will throw a pitch to catcher at home plate.
      2. Catcher will snap throw to third base.
      3. Runner will take off towards home on snap throw and draw a long throw from third baseman.

## **PITCHER'S FIELDING PRACTICE (PFP) - ROUTINES**

One of the goals of the pitching staff at Washington State University is to be the best pitching staff at fielding their position in the country. Statistically this is difficult to quantify, however, the daily effort to become a great fielding pitcher will be part of the norm at WSU. The ability to field the pitcher position is vital. The pitcher who has a difficult time performing any particular part of the game will be exploited throughout the season. PFP will be done on a consistent basis as a staff, however, opportunities exist with managers, coaches, and the Fungoman to receive early work or post-practice work on fielding the pitcher position. The following are PFP routines used by Cougar Pitchers:

### **ROUTINE #1 - FIVE WAYS TO COVER FIRSTBASE**

- A. Banana - No One On
  - a. All pitchers on mound area.
  - b. Coach with bucket of balls stands at first base positioning area.
  - c. From landing pit (no shadow mechanic), bust hard to first executing banana route technique.
  - d. Coach throws feeds from three different angles including bad throws.
  - e. Pitcher clears base to fair territory to avoid collision with hitter.
  
- B. Banana - Runner on Base
  - a. All pitchers on mound area.
  - b. Coach with bucket of balls stands at first base positioning area.
  - c. From landing pit (no shadow mechanic), bust hard to first executing banana route technique.
  - d. Coach throws feeds from three different angles including bad throws.
  - e. Pitcher clears base to fair territory and looks in for lead runners.
  - f. Pitchers communicate "look in" call to pitcher covering.
  
- C. Banana - Bobbled Baseball
  - a. All pitchers on mound area.
  - b. Coach with bucket of balls stands at first base positioning area.
  - c. From landing pit (no shadow mechanic), bust hard to first executing banana route technique.
  - d. Pitcher breaks down at first and becomes a first baseman anticipating a rushed and errant throw from position player who bobbled the ball.
  - e. Coach bobbles the baseball and throws feeds from three different angles including bad throws.
  
- D. Straight Line - Slow Roller
  - a. Coach at plate tosses ball between first baseman and pitcher's mound.
  - b. Pitcher stays on line being sure to not go outside reach distance. There is no communication.

- c. The pitcher goes for the ball and if able to field it continues to the bag assuming he will have to beat the hitter to the base.
  - d. If unable to field the ball continue aggressively to first base.
  - e. The throw from the position player will likely be behind the pitcher so keep the head on a swivel and be athletic.
  - f. Clear to the inside of the bag after receiving the throw and look in if done with a runner on base.
- E. Straight Line - Double Play
- a. Coach with bucket feeds from second base area.
  - b. Pitcher runs hard to first base in a straight line and follows the technique described.
  - c. Coach will throw the ball leading the pitcher, waiting for the pitcher to arrive then throw, and throwing a bad throw to the pitcher, especially balls in the dirt.

### **ROUTINE #2 - COMEBACKER - PLAYS AT FIRST**

- A. Running Technique
- a. One pitcher at a time on the mound and extras lined up to third base side of mound.
  - b. Extra pitcher acts as first baseman.
  - c. Coach with fungo hits medium groundball to first base side of mound.
  - d. RHP fields the ball with forehand and executes running technique, running ball to the bag and underhand tossing the ball to first baseman as if it were a cup of milk.
  - e. LHP fields the ball with backhand and executes running technique, running ball to the bag and underhand tossing the ball to first baseman as if it were a cup of milk.
- B. Backhand Plays
- a. One pitcher at a time on the mound and extras lined up behind the mound.
  - b. Extra pitcher acts as first baseman.
  - c. Coach with fungo hits soft to medium groundball to third base side of mound.
  - d. RHP fields the ball using their backhand technique, sets their feet and throws with short arm arc to first base.
  - e. LHP fields the ball with their forehand technique and completes a clockwise spin to set their feet to throw with a short arm arc.
- C. Bobbled Ball Plays
- a. One pitcher at a time on the mound and extras lined up to third base side of mound.
  - b. Extra pitcher acts as first baseman.
  - c. Coach with fungo hits medium to hard groundball right at the pitcher.
  - d. Pitcher will bobble the ball on purpose, pick it up with their bare hand being sure to not tap their glove with the ball, and throw to first with a short arm arc.

**D. Check 'Em Go to One**

- a. One pitcher at a time on the mound and extras lined up to first base side of mound.
- b. Extra pitchers act as third baseman, shortstop, first baseman and base runner.
- c. Coach with fungo hits medium to hard groundball right at the pitcher.
- d. Pitcher will look runner at second base back to the bag and proceed to set feet and throw to first base with a short arm arc.
- e. Occasionally base runner should run to third base to keep pitcher honest on his reads of base runner at second base.
- f. If pitcher bobbles the comebacker he will proceed to throw the ball to first base.

**ROUTINE #3 - COMEBACKER - DOUBLE PLAY FEEDS****A. 1-6-3 Double Play**

- a. One pitcher at a time on the mound and extras lined up to third base side of mound.
- b. Extra pitchers act as shortstop and first baseman.
- c. Coach with fungo hits medium to hard groundball right at the pitcher.
- d. Pitcher will set feet to throw the ball to infielder as soon as possible with short arm arc.
- e. Pitcher should throw ball to shortstop side of bag on this double play feed.
- f. If pitcher bobbles the comebacker he will proceed to throw the ball to first base.

**B. 1-4-3 Double Play**

- a. One pitcher at a time on the mound and extras lined up to third base side of mound.
- b. Extra pitchers act as second baseman and first baseman.
- c. Coach with fungo hits medium to hard groundball right at the pitcher.
- d. Pitcher will set feet to throw the ball to infielder as soon as possible with short arm arc.
- e. Pitcher should throw ball to second base side of bag on this double play feed.
- f. If pitcher bobbles the comebacker he will proceed to throw the ball to first base.

**C. 1-2-3 Double Play**

- a. One pitcher at a time on the mound and extras lined up to third base side of mound.
- b. Extra pitchers act as catcher and first baseman.
- c. Coach with fungo hits medium to hard groundball right at the pitcher.
- d. Pitcher will set feet and close the front side to throw the ball to catcher chest high as soon as possible with short arm arc.
- e. If pitcher bobbles the comebacker he will proceed to throw the ball to first base.

**ROUTINE #4 - BUNT PLAYS - RUNNER AT FIRSTBASE****A. Runner at First base - Out**

- a. One pitcher at a time on the mound.
  - b. Extra pitchers acting as infielders.
  - c. Read either the third baseman charging (RHP) or the first baseman's glove flip (LHP) before starting shadow mechanic.
  - d. Coach rolls or throws ball in front of plate to simulate bunt.
  - e. Pitcher reacts to ball and makes play at first base.
  - f. Only bare hand a stopped ball. Use glove and throwing hand on moving ball.
- B. Runner at First base - Lead Out
- a. One pitcher at a time on the mound.
  - b. Extra pitchers acting as infielders.
  - c. Read either the third baseman charging (RHP) or the first baseman's glove flip (LHP) before starting shadow mechanic.
  - d. Coach rolls or throws ball in front of plate to simulate bunt.
  - e. Pitcher reacts to ball and makes play at second base.
  - f. If "first" is called or the ball is bobbled pitcher will throw ball to first base.
  - g. Only bare hand a stopped ball. Use glove and throwing hand on moving ball.
- C. Runner at First base - Pick
- a. One pitcher at a time on the mound with a ball.
  - b. Extra pitchers acting as first baseman and catcher.
  - c. Come set looking at first baseman.
  - d. Read the first baseman's charge and throw pitchout to the plate.

#### **ROUTINE #5 - BUNT PLAYS - RUNNER AT SECONDBASE**

- A. Runner at Second base - Out
- a. One pitcher at a time on the mound.
  - b. Extra pitchers acting as infielders.
  - c. Read the shortstop and execute shadow mechanic upon his glove flip.
  - d. Coach rolls or throws ball in front of plate to simulate bunt.
  - e. Pitcher reacts to ball and makes play at first base.
  - f. Only bare hand a stopped ball. Use glove and throwing hand on moving ball.
- B. Runner at Second base - Lead Out
- a. One pitcher at a time on the mound.
  - b. Extra pitchers acting as infielders.
  - c. Read the shortstop and execute shadow mechanic upon his "back!" call.
  - d. Coach rolls or throws ball in front of plate to simulate bunt.
  - e. Pitcher reacts to ball and makes play at third base.
  - f. If "first" is called or the ball is bobbled pitcher will throw ball to first base.
  - g. Only bare hand a stopped ball. Use glove and throwing hand on moving ball.
- C. Runner at Second base - Pick
- a. One pitcher at a time on the mound with a ball.

- b. Extra pitchers acting as infielders.
- c. Read the shortstop and execute the spin pick upon his "back!" call and movement towards second base.

#### **ROUTINE #6 - BUNT PLAYS - DRAG PUSH SAFETY SQUEEZE**

##### A. Drag

- a. One pitcher at a time on the mound.
- b. Extra pitchers acting as infielders.
- c. Pitcher works in both the wind-up and the stretch.
- d. As soon as he reads hitters hands indicating bunt he jumps off the mound to cover third base line.
- e. Pitcher aggressively makes play for the ball until called off by the third baseman.
- f. RHP backhand technique highly encouraged on pressure bunts and hurries.
- g. Use short arm arc on all pressure and hurry bunts.
- h. Only bare hand a stopped ball. Use glove and throwing hand on moving ball.

##### B. Push

- a. One pitcher at a time on the mound.
- b. Extra pitchers acting as infielders.
- c. Pitcher works in both the wind-up and the stretch.
- d. As soon as he reads hitters hands indicating bunt he jumps off the mound to cover first base line.
- e. Pitcher aggressively makes play for the ball until called off by the first baseman.
- f. Running technique on balls that take you to first base.
- g. Use short arm arc on all pressure and hurry bunts.
- h. Only bare hand a stopped ball. Use glove and throwing hand on moving ball.

##### C. Safety / Squeeze

- a. One pitcher at a time on the mound.
- b. Extra pitchers acting as infielders.
- c. Pitcher works in both the wind-up and the stretch.
- d. As soon as he reads hitters hands indicating bunt he jumps off the mound and reacts to the ball.
- e. Pitcher aggressively makes play for the ball until called off by infielder.
- f. Pitcher will use shovel toss, underhand flip, backhand flip and overhand toss to catcher.
- g. If checked to first, pitcher will use appropriate technique based on where he fields the ball.
- h. It is okay to bare hand a squeeze play bunt, even if it's a moving ball and if the play is possible at home plate.

##### D. Valentine Play

- a. One pitcher at a time on the mound.
- b. Extra pitchers acting as infielders.

- c. Pitcher works in both the wind-up and the stretch.
- d. As soon as he reads hitters hands indicating bunt he jumps off the mound and reacts to the ball.
- e. Pitcher aggressively makes play for the ball until called off by infielder.
- f. Pitcher will use short arm arc and throw the ball at the back of the hitter running up the first base line. Place a hitting dummy at the appropriate spot up the line for target practice.
- g. It is okay to bare hand a squeeze play bunt.
- h. Play is only used if winning run is scoring from third and there is no play at the plate in hopes of getting a batter's interference call resetting the play for another opportunity on defense.

### **ROUTINE #7 - RUNNING GAME - BASIC PICKS**

- A. Good Move / Great Move
  - a. One pitcher at a time. Pitcher comes to set position.
  - b. Good move, quick feet, long arm w/two second hold.
  - c. Great move, quick feet, quick arm w/two second hold.
  - d. Each pitcher does a set before switching.
- B. Hold and Pick / Hold and Pitch
  - a. Same as above however hold the ball for four seconds then execute good/great pick.
  - b. Follow pick by holding ball for four seconds then pitch.
  - c. Each pitcher does a set before switching.
- C. Pick From Signs
  - a. This play is best utilized with an aggressive runner or a peeker at first base (a runner looking in to catcher's signs).
  - b. This pick is best executed with ball in hand, however if ball starts in glove pitcher can execute pick once hands come together in the glove.
  - c. Right handed pitcher pick on the way up with front shoulder slightly opened once sign is relayed from catcher to gain better sight and to minimize the time it takes.
  - d. Left handed pitcher use step off pick to execute this on the way up.
- D. Best Move to First
  - a. Right handed pitcher use the front knee flinch balk move with quick feet and quick arm.
  - b. Left handed pitcher use the balk move with stride leg at or beyond 45 degree mark.
- E. Step Off Move / Pitch Up
  - a. Pitcher comes set and holds for a two-four count.
  - b. Quick step off without a throw.

- c. Follow the step off move with a pitch up after a two-four count. Pitch should be letters to shoulders high.
  - d. Each pitcher does a set before switching.
  - e. Designed to read the runners actions and see a flinch at first.
- F. Hold to Time Out / Pitch Out
- a. Pitcher comes set and holds until the batter or catcher calls timeout.
  - b. The hold must be identical to a hold and pitch used earlier. Sell it!
  - c. Other pitchers are encouraged to distract the pitcher and try to get a balk.
  - d. After the hold to time out is executed follow it up with a pitch out.
  - e. Each pitcher does a set before switching.
  - f. Designed to read the runners actions and see a flinch at first.

### **ROUTINE #8 - RUNNING GAME - SPECIALITY PICKS/PLAYS**

- A. Inside Move to Second
- a. Regardless of stride type to home, pitcher does full leg lift on inside move to allow coaches to read hitters actions or runner's actions.
  - b. It is okay to pre-set your pivot foot with heel away from rubber in order to facilitate a quicker effort.
  - c. Clear from the rubber and anticipate a throw to second base if the runner has vacated.
  - d. Pitcher does not have to throw the baseball on the inside move to second.
- B. Spin Move to Second
- a. One pitcher at a time.
  - b. Pitcher works spin move to second base.
  - c. Use extra pitcher to simulate middle infielder.
  - d. Practice the following plays:
    - i. Timed pick with middle infielder with a throw.
    - ii. Called pick by catcher without a throw. Middle infielder may not be there.
    - iii. "Back" call pick with middle infielder on a bunt play with runner at second base.
- C. Cover Home
- a. Extra pitchers in three spots with bucket feed pitcher covering plate on passed ball or wild pitch.
  - b. Pitcher should verbalize location of pitchers to simulate communication with catcher and indicate which extra pitcher throws to him covering plate.
  - c. Extra pitchers throw the ball from all angles.
  - d. Pitcher will catch, tag and release from play.
- D. Intentional Walk
- a. One pitcher at a time.

- b. Each pitcher goes through the process of intentionally walking a batter.
- c. Walk both a right handed hitter and a left handed hitter.
- d. Switch after walking either a right handed hitter or left handed hitter (four pitch walk then switch).
- e. Pitcher must come set for a one count before throwing each pitch.
- f. Use extra pitcher or coach to simulate catcher's technique.

### **ROUTINE #9 - 31 DEFENSES**

*Note: See 31 Defense for play descriptions.*

- A. Runner at First - Priority
  - a. Late Recognition
  - b. Early Recognition
  - c. Runner Leaves Early
  
- B. Runner at Third - Priority
  - a. Late Recognition
  - b. Early Recognition
  - c. Runner Leaves Early
  - d. LHP Play

### **ROUTINE #10 - INSIDE GAME**

Inside game is executed with the full infield and is a series of groundballs requiring communication and either pitcher fielding the ball or covering bases. The sequence of inside game is as follows:

- A. Three-One Cover
  - a. Pitcher covers first base on ball hit to right side of diamond.
  
- B. Six Hole.
  - a. If third baseman makes the play five-four-three double play.
  - b. If shortstop makes the play then six-five force.
  
- C. Four Hole.
  - a. If first baseman makes the play then three-six-one double play.
  - b. If second baseman makes the play the four-one cover.
  
- D. 1-6-3 Double Play
  - a. Come backer to pitcher.
  
- E. 1-4-3 Double Play
  - a. Come backer to pitcher.
  
- F. 1-2-3 Double Play
  - a. Come backer to pitcher.

- G. 2-6-3 Double Play
  - a. Bunt in front of plate.
  
- H. 3-6-1 Double Play
  - a. Ball hit to first baseman that carries him away from bag.
  - b. Shortstop throws to Pitcher covering first base.
  
- I. Jam It
  - a. Infield on heavy defensive shift to pull side (Left Handed Hitter).
  - b. Ball hit to third base who throws to shortstop for five-six-three double play.
  
- J. Drag
  - a. Pitcher / third base communication on drag bunt.
  
- K. Push
  - a. Pitcher / first base / second base communication on push bunt.

**SECTION VI:**  
**PHYSICAL PREPARATION**

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## **EARLY TREATMENT**

To be a prolific pitcher, you must first be a prolific thrower. Having injuries that prevent you from throwing on a daily basis will also prevent you from reaching your potential as a pitcher. With that in mind early treatment is an avenue all pitchers must take at WSU.

This program is designed to facilitate blood flow for warm-up and flush programs for the shoulder. In addition these exercises are used to assist in added rotator cuff strengthening and stretching of the shoulder capsule. These exercises are to be performed before daily practice/games and also used for post-game flush.

- A. PNF Series: All exercises are set of 12
  - a. D1, On Back
    - i. Hand palm down on opposite hip.
    - ii. Resist overhead motion.
    - iii. Finish palm up, and return to start.
  - b. D2, on back:
    - i. Hand palm down on opposite shoulder.
    - ii. Resist extension of elbow, and finish palm up.
    - iii. Return to start.
  - c. Scapular Punches Vertical
    - i. On back.
    - ii. Make fist, elbow extended.
    - iii. Resist punching to sky.
  - d. Scapular Punches Horizontal
    - i. On back.
    - ii. Make fist, elbow flexed.
    - iii. Resist horizontal punching across and back.
  - e. Scapular Punches Diagonal
    - i. On back.
    - ii. Same as above but punching is at a diagonal motion across face.
  - f. Overhead Wing
    - i. On back.
    - ii. Arm on stomach with elbow flexed.
    - iii. Resist moving arm overhead and back to stomach.
  - g. Rhythmic Stabilization
    - i. On back.
    - ii. Arm locked out and straight up in air.
    - iii. Have athlete hold arm in place while you move it around.
    - iv. Three sets of 30 seconds.
  - h. Internal/External Rotation
    - i. Lying on non-dominant side.
    - ii. Elbow flexed and resting on side.
    - iii. Resist internal and external rotation motions.

- i. Shrugs/Depressions
    - i. Lying on non-dominant side.
    - ii. Elbow flexed and resting on side.
    - iii. Resist shoulder shrug and depression of shoulder.
  - j. Superman Pulls
    - i. On stomach.
    - ii. Arms straight out in front.
    - iii. Resist athlete pulling arms towards body.
    - iv. Repeat.
- B. Dumbbell Series: All Exercises are three sets of 10. No more than five lbs.
- a. Dumbbell Lateral Raise
    - i. On stomach.
    - ii. Squeeze shoulder blades together.
    - iii. Raise arm laterally.
  - b. Dumbbell Full Can Raise
    - i. On stomach.
    - ii. Squeeze shoulder blades together.
    - iii. Thumb up raise arm at 45 degree angle.
  - c. 90/90
    - i. On stomach.
    - ii. Squeeze shoulder blades together.
    - iii. Raise arm to 90 degrees then externally rotate 90 degrees.
    - iv. May need to lower weight on this one if too difficult.
- C. Tubing Series: All Exercises are three sets of 10
- a. Standing internal/external rotation
    - i. Elbow flexed and arm at side.
    - ii. Internally rotate to stomach.
    - iii. Place arm against stomach and flex elbow
    - iv. Externally rotate to 90 degrees.
  - b. Standing Overhead Internal/External Rotation
    - i. Arm raised and elbow flexed.
    - ii. Internally rotate.
    - iii. Reverse and externally rotate.
- D. Body Blade: three sets of 30 seconds
- a. Kneel on one knee.
  - b. Go through throwing motion with the body blade.
  - c. Three times with 30 second rotations.
- E. Stretch: All stretches done daily (three times 30 Seconds each)
- a. Internal Rotation – 90/45 degrees.
  - b. Horizontal Adduction.

- c. Inferior Capsule.
- d. Sleeper Stretch – 90/45 degrees

### **SOFT TISSUE THERAPY (SELF MASSAGE)**

Muscle tissue can be bound up through training, overuse, and even dysfunction. This can give the feeling of muscles being tight and restricted from range of motion. A muscle is generally elastic and pliable, but when these “knots” occur it can present a problem to the individual. Massage therapy as a prior and post exercise is a great way to loosen up the “tight” muscles and get range of motion back to the joints. Coupled with active isolated stretching after exercise activity, it can help speed up the process to recovery. Your strength and conditioning coach will take you thru self-massage using foam rolls and tennis balls.

## **DYNAMIC AND STATIC STRETCH**

### **MOVEMENT PREP**

Preparing the body to endure the rigors of activity can help reduce the chance of injury during the activity. Properly activating muscles thru dynamic movement will provide the body to withstand the game’s demands. Start out with light activity with the following movements:

### **PRE-PRACTICE AND GAMETIME WARM-UP**

- A. Light stride/jog out 30-50 yards
- B. Back pedal back 30-50 yards
- C. Carioca down and back 10-20 yards
- D. Side Shuffle down and back 10-20 yards

### **DYNAMIC LOWER BODY MOVMENTS**

All of these stretches are done while moving straight ahead about 10 yards for each movement.

- A. Ankle Cradle w/ Instep Lunge
  - a. Grab one foot underneath ankle and gently pull upward for one second.
  - b. Release foot and lunge forward with same foot.
  - c. Place opposite hand on the ground parallel with forward foot.
  - d. Keep back leg straight and hold position for one second.
  - e. Repeat with other side.
- B. Reverse Lunge w/ Twisted Reach
  - a. Lunge backwards with one leg.
  - b. While in reversed lunge position and twist upper body over the front leg.
  - c. Repeat with other side.
- C. Side Lunge w/ Drop Step
  - a. Step out sideways toward one side lowering hips down to the floor and opposite leg straight.
  - b. Keep feet facing forward.
  - c. Bring lagging leg up and then behind the leading leg.

- d. Keep chest up thru the entire movement.
- e. Repeat with same side.
- D. Walking Hi Knee Hugs
  - a. Pull knee up towards chest and hug.
  - b. Repeat with opposite leg.
- E. Walking Quad Stretch w/ Toe Touch
  - a. Raise foot behind body and grab with same side hand.
  - b. Bend over and reach toward foot on the floor with other hand.
  - c. Repeat with opposite side.
- F. Walking RDL (aka Airplane Walks)
  - a. Keep one foot on the floor and keep opposite leg straight while raising behind.
  - b. Keep back flat, chest up, arm out to the side.
  - c. Repeat with opposite side.
- G. Hi Leg Kicks (aka Frankenstein)
  - a. Keep leg straight and kick upwards.
  - b. Repeat with opposite leg.

### **HIP MOBILITY SEGMENT**

- A. Left Side March
  - a. Drive right knee up and forward
  - b. After knee comes back to the floor drive left knee up and to the side.
  - c. Repeat same side.
- B. Left Side A Skip
  - a. Drive right knee up and forward in a skipping motion.
  - b. After knee comes back to the floor drive left knee up and to the side in a skipping motion.
  - c. Repeat same side.
- C. Right Side March
  - a. Drive left knee up and forward
  - b. After knee comes back to the floor drive right knee up and to the side.
  - c. Repeat same side.
- D. Right Side A Skip
  - a. Drive left knee up and forward in a skipping motion.
  - b. After knee comes back to the floor drive right knee up and to the side in a skipping motion.
  - c. Repeat same side.

### **STATIC LOWER BODY STRETCH**

- A. ½ Kneeling Lunge (Hip flexor)
  - a. Kneel down on one knee in a lunged position
  - b. Push hips forward and hold.
- B. ½ Kneeling Lunge (w/ Twist)
  - a. In the kneeling lunged position, twist over the front leg and hold.
- C. ½ Kneeling Lunge (Open Twist)

- a. In the same kneeling lunged position, twist body toward the leg behind and hold.
- D. Sumo Stretch
  - a. Squat down as low as possible keeping heels down on the ground.
  - b. Place elbows on the inside of the knees with hands together and hold.

### **DYNAMIC UPPER BODY STRETCH**

- A. Trunk Rotation
  - a. Stand tall raise arms straight out to the side and twist torso back and forth.
- B. Trunk Rotation at diagonal angle
  - a. Keep twisting in a back and forth motion and slightly bend at the waist keeping back flat.
- C. Windmill
  - a. Spread legs out wider than shoulder width.
  - b. Bend at the waist.
  - c. In same twisting motion, reach with hand toward opposite foot.
- D. Overhead Press
  - a. Stand tall and put arms out to the side with elbows parallel with shoulders and bent to 90 degrees.
  - b. Keeping scapula retracted, raise arms up over head straightening elbows.
  - c. Bend elbows back to 90 degrees.
  - d. Repeat action.
- E. Elbows In and Out
  - a. Stand tall and put arms out to the side with elbows parallel with shoulders and bent to 90 degrees.
  - b. Make sure scapula is retracted.
  - c. Keeping elbows up, bring them forward meeting at the midline of the body.
  - d. Bring them back to the starting position.
  - e. Repeat action.
- F. Arms Protract and Retract
  - a. Reach out with both arms fully extended. Keep palms down.
  - b. Pull arms back keeping elbows close to sides. Rotate palms up.
  - c. Repeat action.
- G. Snakes
  - a. Completely extend arms out to the sides.
  - b. Twist upper arm downward, simultaneously twisting the opposing arm in the other direction.
  - c. Repeat action with opposite sides.
- H. No Money
  - a. Place arms by side of the body with palms facing forward.
  - b. Bend elbows to 90 degrees with palms facing up.
  - c. Keeping elbows close to the body, rotate forearms away from the midline of the body.
  - d. Bring back to starting position with elbows still bent at 90 degrees.
  - e. Repeat action.

- I. 90/90 INT/EXT
  - a. Stand tall and put arms out to the side with elbows parallel with shoulders and bent to 90 degrees.
  - b. Make sure scapula is retracted.
  - c. Internally rotate arms downward and raise back up in a ballistic motion.

### **STATIC UPPER BODY STRETCH**

- A. Arm Across body
  - a. Bring straight arm across chest.
  - b. Place opposite hand along the triceps and gently pull and hold.
  - c. Repeat with other arm.
- B. Arm behind head
  - a. Bring arm up over head and bend elbow in order to place hand behind head.
  - b. Use opposite to grab the elbow overhead, and slightly pull and hold towards the other side.
  - c. This should give a nice subtle stretch to the tricep and latissimus.
  - d. Repeat with other arm.
- C. Handcuff Stretch
  - a. Reach with both arms behind low back.
  - b. Clasp hands together and pull the shoulders back retracting scapula.
  - c. Push hands downward to the floor and hold.

### **CENTRAL NERVOUS SYSTEM (CNS)**

- A. Base Pogo Swivel (AKA Quick Hips)
  - a. Get in a good “athletic position”.
    - i. Slightly bend knees with hips slightly back.
    - ii. Keep chest up and back flat.
  - b. On cue, slight hop and rotate both feet to one direction and back to starting position as fast as possible.
  - c. Repeat actions.

## **SHOULDER EXERCISES**

These shoulder exercises are part of the daily routine. These exercises are tremendously important and will be done consistently throughout the season. Completing the exercises in order and to their entirety is a key factor in this program benefitting the pitcher. Occasional use and poor effort will not be tolerated during these exercises. These exercises not only stretch but also strengthen the shoulder and rotator cuff area.

- A. Jaeger Band Exercises – Each pitcher will be issued a Jaeger Band and will be expected to have this band with them at all practices and games.
  - a. J-Band Workout Reminders
    - i. Quality vs. quantity.
    - ii. Allow the arm to do the work.
    - iii. Maintain proper technique.

- iv. Keep pace under control.
  - v. Keep arm, body and mind relaxed.
  - vi. Keep long, fluid breathing patterns.
  - vii. Walk closer to the fence to reduce tension.
  - viii. Walk away from the fence for more resistance.
  - ix. Work to the point of fatigue rather than failure.
- b. Dual Arm Exercises
- i. Over the head forearm extensions
    1. Clip at mid-back height.
    2. Front knee over front heel at right angle.
    3. Elbows stay stationary
    4. Palms extended forward.
  - ii. Side extensions
    1. Clip at mid-back height.
    2. Front knee over front heel at right angle.
    3. Lengthen (not round) the side.
    4. Extend from back hip through finger tips.
  - iii. Diagonal extensions
    1. Clip at mid-back height.
    2. Front knee over front heel at right angle.
    3. Lengthen (not round) the side.
    4. Extend from back hip through finger tips.
  - iv. Forward flies
    1. Clip at chest height.
    2. Slightly bent elbows at shoulder height.
    3. Palms toward each other.
  - v. Reverse flies
    1. Clip at mid-back height.
    2. Same as forward flies in reverse direction.
    3. Palms move away from each other.
    4. Bend knees; keep chin over toes and head still.
- c. Throwing Arm Specific Exercises
- i. Internal rotation
    1. Clip at hip height.
    2. Elbow on hip.
    3. Arm at right angle.
    4. Place off hand under armpit.
  - ii. External rotation
    1. Clip at hip height.
    2. Same as internal rotation in opposite direction.
    3. Opposite hand on outside of elbow to stabilize.
  - iii. Elevated internal rotation

1. Clip at shoulder height.
2. Arm at right angle.
3. Throwing elbow stabilized directly in front of shoulder at shoulder height.
- iv. Elevated external rotation
  1. Clip at shoulder height.
  2. Same as internal rotation in opposite direction.
- v. Reverse throwing
  1. Clip at waist height.
  2. Take arm in reverse direction maintaining the same arm action and arm slot.
  3. Front shoulder facing clip.
- vi. Forward throwing motion
  1. Clip at chest height.
  2. Use two fingers through wrist cuff.
  3. Keep proper throwing mechanics.
  4. Keep tubing in line with arm slot.

#### B. Cross Symmetry Exercises

- a. Perform all exercise with both arms moving together
- b. Row
  - i. 10 reps.
  - ii. High intensity cord.
  - iii. Cords at eye level.
  - iv. Start with hands in front of body and bring back to chest.
- c. Reverse Fly
  - i. 10 reps.
  - ii. Low intensity cord.
  - iii. Cords at eye level.
  - iv. Start with hands in front of body and pull out to "T" position.
- d. Punch Plus
  - i. 10 reps.
  - ii. High intensity cord.
  - iii. Cords at eye level.
  - iv. Start with hands next to chest, back to the wall.
  - v. Extend arms out front of body.
- e. 90/90
  - i. 10 reps.
  - ii. Low intensity cord.
  - iii. Cords at knee level.
  - iv. Start with hands at waist.
  - v. Pull hands up to Y position with elbows at shoulder height.
- f. Scaption
  - i. 10 reps.

- ii. Low intensity cord.
  - iii. Cords at knee level.
  - iv. Start with back to wall, hands behind back.
  - v. Extend arms up so hands are out front of body at shoulder height.
- g. Incline Plus
  - i. 10 reps.
  - ii. High intensity cord.
  - iii. Cords at knee level.
  - iv. Start with back to wall, hands in front of shoulder.
  - v. Reach hands up to 135 degrees in front of body.
- h. Victory
  - i. 10 reps.
  - ii. Low intensity cord.
  - iii. Cords at knee level.
  - iv. Start with hands down together below the waist.
  - v. Bring hands up above the head in H position.

## **STRENGTH TRAINING**

The pitcher's weight training program must produce strength resistance along with maintaining flexibility. The Cougar's strength program is designed to allow our pitchers to stay healthy and improve performance. Consistent weight training throughout the season will help maintain health and performance. Emphasis on the core and legs is essential for balance and overall strength for a pitcher. Also make sure you do not lose an inning on the field due to your irresponsibility in the weight room!

Strength is a key component to performing at the best of your abilities. Baseball requires strength, power, speed, quickness, agility, flexibility, endurance, and stamina. Each of these can be enhanced through a proper weight-training program. Although there are many exercises used to strengthen a baseball athlete, the following exercises are just a few key components of our strength training program:

- A. Squats
  - a. Starting Position
    - i. Stand upright with feet shoulder width apart and barbell resting behind the neck on your traps with hands placed slightly wider than shoulder-width apart using an overhand grip.
    - ii. Keep your back straight and your head tilted up.
  - b. Lift
    - i. With your back remaining straight and your head tilted up, slowly lower the weight by bending your knees until the upper part of your legs is parallel with the floor.
    - ii. Explode upward back to the starting position.
    - iii. Be sure that the back remains in an upright position as you ascend to the starting position.

- B. Box Step Ups (can be used with either barbell or dumbbells)
- a. Starting Position
    - i. Stand upright with feet shoulder width apart and barbell resting behind the neck on your traps with hands placed slightly wider than shoulder-width apart using an overhand grip or holding dumbbells at your side.
    - ii. Keep your back straight and your head tilted up.
    - iii. Stand with a box, bench, or some sort of stable elevated apparatus in front of you.
  - b. Lift
    - i. Step forward up on the elevated surface with one foot.
    - ii. Bring your other knee up so that its' thigh is parallel to the floor.
    - iii. Lower your left leg all the way back down to the floor and bring your right leg back down to meet it.
    - iv. Repeat with other leg.
- C. Lunges
- a. Starting Position
    - i. Stand upright with feet shoulder width apart and barbell resting behind the neck on your traps with hands placed slightly wider than shoulder-width apart using an overhand grip or holding dumbbells at your sides.
    - ii. Keep your back straight and your head tilted up.
  - b. Lift
    - i. With everything remaining still, slowly take a large step forward with one leg, bending both knees.
    - ii. The weight on your back foot should come up on your toes, and the knee on your back leg should come very close, but not touch the floor.
    - iii. Using your forward leg, thrust yourself back to the starting position the same way you came down.
    - iv. The entire lift should be in one smooth, fluid motion.
- D. Lat Pulldowns
- a. Starting Position
    - i. Sit at a lat pulldown machine.
    - ii. Keep your back straight and lean backward a few inches with your feet resting on the floor.
    - iii. Grab the bar with both hands, using an overhand grip.
  - b. Lift
    - i. Keeping your body stationary, pull the bar down in front of your neck by squeezing your shoulder blades together and bending your arms at the elbows.
    - ii. Pull the bar down until the bar grazes your chest.
    - iii. Let the bar come down to a complete brief stop before slowly and controllably guiding it back up to its original starting position.

## **CORE TRAINING**

Core training is a very important factor in pitching performance and overall athletic ability. Without a strong durable core an athlete could not be able to properly transfer power generated from the lower body to the upper body. Training from the middle section to our outer body parts is how we want to accomplish this. This doesn't mean go out and do sit ups and crunches every day, be practical and smart. We train the core for function (meaning stability, mobility, and rotational force), not the beach.

- A. Medicine Ball Lateral Throws
  - a. Starting Position
    - i. Stand in an athletic based position.
    - ii. Keep feet pointing straight ahead as your body is perpendicular to a wall (or throwing partner).
    - iii. Make sure your knees are slightly bent.
    - iv. Keep chest up, and hold medicine ball to the outside hip furthest from the object you will throw the ball at.
  - b. Movement
    - i. Rotate upper body away from the ball.
    - ii. In a quick and violent motion, rotate upper body initiated by the hips toward the object you're throwing at and release the ball in that direction.
- B. Planks
  - a. Starting Position
    - i. Lay down on your front side, with your toes tucked under your feet and lower arms firmly on the ground.
  - b. Movement
    - i. Keeping your shoulders directly over your elbow, raise your body off the ground so that only your toes and lower arms are touching the ground.
    - ii. Make sure that your abdominals are tightly braced and flexed.
    - iii. Make your entire body as straight and rigid as possible.
    - iv. Hold this position for prescribed time.
- C. Russian Twists
  - a. Starting Position
    - i. Sit on floor with your chest out and back flat and leaned back at a 45 degree angle.
    - ii. Raise feet off the ground keeping your thighs together.
  - b. Movement
    - i. Rotate shoulders back and forth to either side keeping your chest out, back flat, and feet off the floor.
    - ii. Do this for the prescribed time or repetitions.

## **CONDITIONING**

## **RUNNING**

Our running program for starters and relievers involve similar types, however, there is a yardage difference for starters and relievers. These runs focus on both anaerobic and aerobic development, with an emphasis on anaerobic. The pitcher's stride down the mound is similar in nature to a runner who is sprinting, thus we will simulate that action as much as possible to incorporate the mechanic similarity. More studies have shown the benefits of sprinting as a pitcher instead of the old long slow jog we used to do. With that in mind, below is a list of run types within each category, as well as a weekly plan for the season for both starters and relievers, with the yardage total included.

Conditioning is a critical component to the overall health and mentality of a pitcher. Due to the number times a pitcher has to make a throw at near max velocity during a given outing, it is important that the pitcher has a solid level of fitness in order to last throughout the game. Although pitching is not an aerobic activity, it is an anaerobic activity which involves being able to recover quickly between pitches and outings. The more fit an athlete is, the quicker they will be able to bounce back from one outing to the next.

- A. Anaerobic Running
  - a. Long – A long anaerobic run can be any sprint lasting longer than 20 seconds but cannot be maintained for more than two minutes.
    - i. “Hard” Poles - Full pole (200 yards).
      - 1. Ran in 30 seconds or less.
    - ii.  $\frac{3}{4}$  poles (150 yards)
      - 1. Ran in 20 seconds or less.
    - iii. Gassers (200 yards)
      - 1. Shuttles 50 yards down and back twice.
      - 2. Ran in 25-35 seconds or less.
  - b. Short – A short anaerobic run can be any sprint lasting between 10 and 20 seconds.
    - i.  $\frac{1}{2}$  poles sprints (100 yards)
    - ii.  $\frac{1}{2}$  Gassers (100 yards)
- B. Creatine Phosphate Running (CrPH) – This is true sprint work that can only last 10 seconds or less.
  - a. Sprint Ladder
  - b. 10, 20, 30, 40 yard shuttle sprints.
  - c. 20 or 30 yard sprints
- C. Aerobic Conditioning – Utilized sparingly to help with a pitcher's flush. It is physical activity in a “steady state” form and used to provide some general fitness effects. Generally done the day after he throws.
  - a. Continuous Poles – Run at 65-75% of max sprint back and forth without stopping for prescribed amount (i.e. 10 to 15 times).

## **SIX INNINGS OF HECK**

This conditioning program is modeled to identify and focus on the areas of the body the pitcher utilizes the most during the delivery. It focuses on the shoulders, core and legs and is a circuit type conditioning unit. It is typically done two days after a live appearance and can be done two-three times a week. Modifying this program can be done by eliminating the medicine ball part of the circuit. The reps indicated is a baseline amount used during the season. Reps can be increased as the pitcher increases his workload, especially during off-season conditioning.

- A. 1<sup>st</sup> Inning
  - a. Reverse Throw (Med Ball) - 6
  - b. 10/10/10 (Gasser) - 5
  - c. Rolling Push Up – Hindus (Push Ups) - 4
  - d. Reverse Plank w/Three Second Pause (Core – Back) - 3
  - e. Medicine Ball Seated Twist w/Punches – 10+10=one Rep (Core – Abs) - 2
  
- B. 2<sup>nd</sup> Inning
  - a. Granny Throw (Med Ball) – 6
  - b. 10/15/10 (Gasser) – 4
  - c. Wide + Close Grip (Push-Ups) – 2
  - d. Plank w/Alternating Glute Lifts (Core – Back) – 10
  - e. Medicine Ball Twist w/Punch (Core – Abs) - 6
  
- C. 3<sup>rd</sup> Inning
  - a. Forward Squat Throws (Med Ball) – 6
  - b. 10/20/10 (Gasser) – 3
  - c. Glute Presses w/ Leg Raises (Push-Ups) – 5
  - d. Hamstring Reverse Plank (Core – Back) – 4
  - e. Alternating Reverse Crunch (Core – Abs) – 20
  
- D. 4<sup>th</sup> Inning
  - a. Reverse Squat Throws (Med Ball) – 6
  - b. 10/30/10 (Gasser) – 2
  - c. Staggered Arm Push Ups (Push Up) – 3
  - d. Reverse Push Ups (Core – Back) – 3
  - e. Tom House Abs (Core – Abs) - 2
  
- E. 5<sup>th</sup> Inning
  - a. Side Throws (Med Ball) – 8
  - b. 10/40/10 (Gasser) – 2
  - c. Push Up w/Hip Twist (Push Up) – 4
  - d. Medicine Ball Full ROM Single Leg RDL (Core – Back) – 4
  - e. Medicine Ball V Ups (Transfer Med Ball Each Time) (Core – Abs) - 6
  
- F. 6<sup>th</sup> Inning
  - a. Reverse Side Throws (Med Ball) – 8

- b. 10/60/10 (Gasser) – 2
- c. Medicine Ball Plyometric Push Ups (Push Up) – 4
- d. Reverse Plank with three Second Pause (Core – Back) – 4
- e. Pretzels or Iron Crosses (Core – Abs) - 8

**IN SEASON - STARTERS**

- A. Week 1-4
  - a. Anaerobic – Long 600yds
  - b. Anaerobic – Short 400yds
  - c. Cr-Ph Sprints 300yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 2000yds
  
- B. Week 5-8
  - a. Anaerobic – Long 800yds
  - b. Anaerobic – Short 600yds
  - c. Cr-Ph Sprints 300yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 2000yds
  
- C. Week 9-10
  - a. Anaerobic – Long 1000yds
  - b. Anaerobic – Short 600yds
  - c. Cr-Ph Sprints 200yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 2400yds
  
- D. Week 11-12
  - a. Anaerobic – Long 1000yds
  - b. Anaerobic – Short 600yds
  - c. Cr-Ph Sprints 200yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 2800yds
  
- E. Week 13
  - a. Anaerobic – Long 800yds
  - b. Anaerobic – Short 600yds
  - c. Cr-Ph Sprints 400yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 2000yds
  
- F. Week 14-15
  - a. Anaerobic – Long 1000yds
  - b. Anaerobic – Short 600yds

- c. Cr-Ph Sprints            300yds
- d. Six Innings                Four Innings
- e. Aerobic (Poles)           2400yds
  
- G. Week 16-17 (Regional Week)
  - a. Anaerobic – Long        1000yds
  - b. Anaerobic – Short       600yds
  - c. Cr-Ph Sprints            300yds
  - d. Six Innings                Four Innings
  - e. Aerobic (Poles)          2000yds
  
- H. Week 18-19 (Super Regional Week)
  - a. Anaerobic – Long        800yds
  - b. Anaerobic – Short       600yds
  - c. Cr-Ph Sprints            300yds
  - d. Six Innings                Four Innings
  - e. Aerobic (Poles)          2200yds
  
- I. Week 20-21 (Omaha)
  - a. Anaerobic – Long        800yds
  - b. Anaerobic – Short       600yds
  - c. Cr-Ph Sprints            300yds
  - d. Six Innings                Four Innings
  - e. Aerobic (Poles)          2200yds

**IN SEASON - RELIEVERS**

- A. Week 1-4
  - a. Anaerobic – Long        600yds
  - b. Anaerobic – Short       500yds
  - c. Cr-Ph Sprints            400yds
  - d. Six Innings                Four Innings
  - e. Aerobic (Poles)          2000yds
  
- B. Week 5-8
  - a. Anaerobic – Long        600yds
  - b. Anaerobic – Short       500yds
  - c. Cr-Ph Sprints            400yds
  - d. Six Innings                Four Innings
  - e. Aerobic (Poles)          1600yds
  
- C. Week 9-10
  - a. Anaerobic – Long        800yds
  - b. Anaerobic – Short       500yds
  - c. Cr-Ph Sprints            200yds

- d. Six Innings Four Innings
- e. Aerobic (Poles) 1600yds
  
- D. Week 11-12
  - a. Anaerobic – Long 1000yds
  - b. Anaerobic – Short 500yds
  - c. Cr-Ph Sprints 300yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 1800yds
  
- E. Week 13
  - a. Anaerobic – Long 1000yds
  - b. Anaerobic – Short 500yds
  - c. Cr-Ph Sprints 300yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 1200yds
  
- F. Week 14-15
  - a. Anaerobic – Long 1000yds
  - b. Anaerobic – Short 500yds
  - c. Cr-Ph Sprints 200yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 1600yds
  
- G. Week 16-17 (Regional Week)
  - a. Anaerobic – Long 1000yds
  - b. Anaerobic – Short 500yds
  - c. Cr-Ph Sprints 200yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 1600yds
  
- H. Week 18-19 (Super Regional Week)
  - a. Anaerobic – Long 1000yds
  - b. Anaerobic – Short 500yds
  - c. Cr-Ph Sprints 200yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 1600yds
  
- I. Week 20-21 (Omaha)
  - a. Anaerobic – Long 1000yds
  - b. Anaerobic – Short 500yds
  - c. Cr-Ph Sprints 200yds
  - d. Six Innings Four Innings
  - e. Aerobic (Poles) 1600yds

## **NUTRITION**

Research has clearly documented the positive attributes proper nutrition has on athletic performance, such as the enhancement of strength, power, speed, endurance, immunity, and reaction time, reducing soreness and inflammation, and decreasing risk of injury. Proper nutrition or fueling is the foundation for training, performing, and dominating your competition! Keeping a food first approach to enhancing athletic performance is the best approach. Remember, dietary supplements cannot make-up for poor nutrition, but may enhance if added to a well-balanced diet.

### **CARBOHYDRATES**

Carbohydrates are the primary fuel source for your muscles during training and competition. They are also the most efficient fuel source for your brain as they enhance the ability to concentrate and focus. Carbohydrates help maximize the body's usage of protein and fat for growth, repair and energy. The majority of a pitcher's diet needs to be made up of carbohydrates. They contain vital vitamin, minerals, and fiber to keep an athlete's body healthy.

### **PROTEIN**

The primary building block of your body's cells, protein promotes tissue growth and repair. Protein from animal and soy sources contain essential amino acids that may help improve endurance and increase and preserve muscle mass. 15-25% of your diet needs to be made up of protein. It should only provide a small amount of energy during exercise and is used primarily for building and repairing muscle/tissue.

### **FAT**

Fat acts as a continuous fuel supply for your body. It is the primary fuel source during low intensity exercise. Certain fats can decrease inflammation in the body and improve heart health. Fats from nuts, seeds, fish, and plant oils can help supply important fat soluble vitamins and boost immunity.

### **PRE-COMPETITION NUTRITION**

This is an opportunity to top-off your body's stores of carbohydrates before competition. Proper pre-competition nutrition will help maintain blood glucose levels, which will improve mental focus and concentration. It also helps prevent hunger, fatigue, and light headedness during competition. Fluids will help hydrate your body and control body temperature during competition. Don't forget to drink fluids during competition.

- A. Timing is the Key
  - a. 3-5 Hours Prior to Competition – Moderate size meal and liquids.
  - b. 2-3 Hours – Small meal and liquids.
  - c. 1-2 Hours – Small snack and liquids.
  - d. 30 Minutes – Mostly liquids.

**RECOVERY NUTRITION**

Consuming a carb/protein snack with ample amounts of fluid within 30 minutes of completing a weight room workout, practice, or game will help repair damaged muscle fibers, promote muscle growth, and replenish energy stores more efficiently than if you wait longer or do not consume anything at all. Your recovery snack needs to always consist of three things: fluids, carbohydrates and protein.

**BREAKFAST**

Eat a balanced breakfast. Breakfast sets the body's metabolic balance for the rest of each day. If you don't eat breakfast, no matter how healthy you eat the remainder of your day your metabolic thermostat is messed up. You must eat a balance breakfast within one hour of waking up each day.

**EATING HABITS**

It is better for your body to eat around five smaller meals throughout the day. Dinner should be the smallest meal of the day. Lunch should be the biggest. The caloric intake should match your energy needs. Small portions of healthy foods are more beneficial and more satisfying than big portions of junk food.

- A. Eat a wide variety of foods. Food sensitivities and allergies can result from the consistent eating of specific foods on a regular basis.
- B. The amount of protein you eat is a function of lean body mass and your level of physical activity. A good rule of thumb is to eat one gram of protein every pound of lean body mass.
- C. Eat five or more servings of fruit and vegetables daily. Fruits and vegetables should be your primary source of carbohydrates. Balance is the key and your goal should be to have 40% of your meals and snacks to be complex carbohydrates.
- D. Eat more smart fats. Fish oils and nuts are examples of smart fat. Anything with omega three is a source of a smart fat. Beware of saturated fats that facilitate inflammatory responses.
- E. Eat foods with high fiber content. Fiber helps shield the carbohydrates in food from immediate digestion. The sugar in fiber-enriched food tends to be absorbed into the bloodstream more slowly.

**HYDRATION**

Over 60% of your body is made up of water. Proper fluid balance is a necessity in maintaining proper body temperature. Body fluids are essential for the physiologic processes of digestion, absorption, and excretion. The slightest decrease in water weight can have a detrimental impact on athletic performance. You need to replace electrolytes you lose through your sweat during training and competition.

**DEHYDRATION**

Two percent dehydration of one's body weight can equate to the loss in performance by 15-20%. In most cases dehydration has already occurred when the athlete feels thirsty. Proper hydration should supply both fluids and electrolytes to the body. Water does not provide all the body's needs. Especially if exercise or competition last longer than one hour. Drinking only plain water over a 3-4 hour competition can lead to "water intoxication". This results in the dilution of sodium in the blood due to increased blood volume and excess sodium losses from sweating. All this adds up to headache, nausea, muscle cramping, and lethargy.

So how do you know if your sports drink is a good rehydration beverage? For a sports drink to be effective, must contain at least 75mg of sodium for every 8oz. of fluid. In addition to electrolytes, research has show that carbohydrates should be in the sports drinks. Research has shown that carbohydrate and sodium work together to increase water absorption. Drinks that provide these qualities would include Powerade and Gatorade.

**A. Proper Hydration Tips**

- a. Urinate every 1-2 hours.
- b. Urine color is a pale yellow or colorless. If you don't produce much urine or the color is very dark chances are you are dehydrated.
- c. Do not rely on thirst as an indicator to hydrate; you are already dehydrated at this point.
- d. Drink throughout the entire day, starting in the morning with three big glasses of water, juice or milk.
- e. Drink eight to ten big gulps of fluid every 15-20 minutes of activity.
- f. Use a carb/electrolyte containing drink primarily during training/competition lasting longer than 60 minutes or when the environment is hot and/or humid.
- g. If you are prone to cramping, you need to be proactive with consuming an electrolyte containing drink prior to activity.
- h. Know your sweat losses. For every one pound loss during activity replace with 20oz of fluid. Make sure to minimize sweat losses to less than 2% of your total body weight.

**SLEEP HABITS**

Your REM cycle affects how much energy you have each day. You should wake up at the end of a REM cycle: 4 ½ hours, 6 hours, 7 ½ hours, or 9 hours of rest. It is important that you wake up at the end of a sleep cycle so that your body literally wakes up as well.

**SECTION VII:**  
**OFF-SEASON PROGRAMS**

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## **SHOULDER AND ARM CARE**

In coordination with the strength coach and the training staff at Washington State University, the baseball program has adopted the off-season shoulder and arm care manual developed by the Pittsburgh Pirates organization. The program allows pitchers to maintain shoulder strength and flexibility during the winter and summer months.

### A. Weighted Exercises

#### a. Pushup Plus

- i. MWF three sets of 10.
- ii. Start with hands shoulder width apart, head and neck in neutral position.
- iii. Retract scapula and keep shoulders straight.
- iv. Protract scapulas and return to starting position.
- v. Hold each position for three-four seconds.

#### b. Seated Press Up

- i. MWF three sets of eight.
- ii. Start with hands just wider than hips, scapula elevated and retracted.
- iii. Elbows remain straight.
- iv. Press up, depressing scapulas while keeping shoulders retracted.
- v. Raise up for a one count and drop down in a two count.

#### c. Cuff Weight Exercises

- i. MWF three sets of eight.
- ii. Protraction
  1. Lay on table with chest on table.
  2. Start with shoulder off table and scapula protracted.
  3. Retract scapula while maintaining elbow extension.
- iii. Retraction
  1. Lay on table with back on table.
  2. Start with scapula off table or half foam roll and punch towards ceiling.
  3. Return to retracted position.

### B. Stretching

#### a. Sleeper Stretch

- i. Every day exercise.
- ii. Lay on side on table with throwing arm down on table.
- iii. Hold stretches for 5-7 seconds.
- iv. Repeat 10 times at both 90 degrees and 45 degrees.

#### b. Horizontal Adduction Stretch

- i. Every day exercise.
- ii. Lay on side on table with throwing arm down on table.
- iii. Position in 90/90 with towel under throwing arm.
- iv. Roll up on arm.

#### c. Y's

- i. MWF one set of 15.

- ii. Lay on table face down.
  - iii. Start in Y position with palms facing down arms straight at table height.
  - iv. Retract scapulas and lift arms above table.
  - v. Hold with palms down for six seconds and turn thumbs up for six seconds.
- d. T's
  - i. MWF one set of 15.
  - ii. Repeat same exercise as "Y" position but arms are in a "T" position.
- e. I's
  - i. MWF one set of 15.
  - ii. Repeat same exercise as "Y" and "T" but arm are down by side in an "I" position.
  - iii. Palms are down.
  - iv. Hold for six seconds.
- f. Bilateral Prone Row
  - i. MWF two sets of 10.
  - ii. Lay face down on the table.
  - iii. Start with arms in a "T" position hanging off the table.
  - iv. With thumbs pointing forward, retract your scapulas and lift elbows to 90 degrees and lift your hands to 90/90.
  - v. Hold position for six seconds.
- g. Kibler Scapula Exercises
  - i. MWF three sets of 10.
  - ii. Stand facing a wall.
  - iii. Start with hands at chest and retract and depress your scapulas.
  - iv. Do a lateral step to your right as you lateral punch at 135 degrees, palm facing down.
  - v. Return to starting point and step to your left.
- h. Lawn Mower
  - i. MWF two sets of 15.
  - ii. Squat down and take right arm to opposite knee while maintaining good posture.
  - iii. Stand up and raise elbow above shoulder height.
  - iv. Repeat on left arm.
- i. Four Point Movements
  - i. MWF three sets of eight.
  - ii. Squat down and take right hand just below right knee.
  - iii. Stand up while bringing your elbow to shoulder height and retract scapulas.
  - iv. Forward punch and protract scapula.
  - v. Bring elbow back and retract scapula.
- j. Standing RC Exercises
  - i. MWF three sets of 10.
  - ii. Standing, start with arms at sides.

- iii. During exercise retract scapula.
- iv. Shoulder flexion with thumbs up.
- v. Shoulder scaption at 30 degrees with thumbs up.
- vi. Shoulder abduction with palms down.
- vii. Shoulder abduction with thumbs up.
- k. Bent Over Horizontal Abduction
  - i. MWF two sets of 10.
  - ii. Bent over with forehead resting on training table.
  - iii. Bring arms up, palms down while retracting scapula.
- l. Side Lying External Rotation
  - i. MWF one set of 15.
  - ii. Lay on side on table with throwing arm up.
  - iii. Place roll or towel under arm.
  - iv. Finish with thumb up.
- m. Shoulder Flexion
  - i. MWF one set of 15.
  - ii. Standing with arms at side, use weights if necessary.
  - iii. Retract scapula and forward flex arm.
  - iv. Hold for a five count.
  - v. Repeat for throwing shoulder.
  - vi. Use a pronation grip.
- C. Theratubing Exercises
  - a. Horizontal Abduction
    - i. TTH two sets of 10 each.
    - ii. Start with tubing elevated and then place tubing at shoulder height.
    - iii. Non-tubing hand touching back of head.
    - iv. Pull tubing towards side of chest.
  - b. Internal Rotation/External Rotation with Towel
    - i. TTH three sets of 10.
  - c. Scapula Retraction
    - i. TTH three sets of 10.
    - ii. Arm stays straight while retracting the scapula
  - d. Shoulder Protraction
    - i. TTH three sets of 10.
    - ii. Arm stays straight while protracting the scapula
  - e. Shoulder Abduction with External Rotation
    - i. TTH three sets of 10.
  - f. Shoulder Extension
    - i. TTH three sets of 10.
  - g. Dtwo Diagonal Extension
    - i. TTH three sets of 10.

## **SUMMER THROWING PROGRAM**

The summer throwing program is designed to give pitchers a chance to take a break following their summer season and still be ready for fall baseball upon arriving at school. This program is modeled after a recovery program used by the Tampa Bay Rays when a pitcher is shut down for five-10 days. After a maximum 10 day break, pitchers will do the following:

- All throwing is preceded by a three minutes to 45 feet warm-up period.
- On average one minute of throwing is equal to 10 throws
- Bullet Catch on way back in when throwing beyond 90' unless noted.
  - Day 1: three min at 45' / three min at 60'
  - Day 2: five min at 45' / five min at 60'
  - Day 3: 15 min at 60'
  - Day 4: 10 min at 60' / three min at 90' / two min at 60'
  - Day 5: Off
  - Day 6: 10 min at 60' / three min at 90' / two min at 60'
  - Day 7: five min at 60' / five min at 90' / five min at 60'
  - Day 8: five min at 60' / five min at 90' / three min at 120' (25 throws) / two min at 60'
  - Day 9: Off
  - Day 10: five min at 60' / two min at 90' / six min at 120' (50 throws) / two min at 60'
  - Day 11: five min at 60' / two min at 90' / six min at 120' (50 throws) / two min at 60'
  - Day 12: Off
  - Day 13: 10 min at 60' / Bullpen: 25 Fastballs at 75% effort
  - Day 14: five min at 45' / three min at 90' / two min at 120' / five min at 45' (All Easy Toss)
  - Day 15: 10 min at 60' / Bullpen: 35 Fastballs and Changeups at 80% effort
  - Day 16: Off
  - Day 17: 10 min at 60' / Bullpen: 45 Pitches – All Pitches at 100%
  - Day 18: five min at 45' / three min at 90' / two min at 120' / five min at 45' (All Easy Toss)
  - Day 19: Pre-Game Throwing / Pre-Game Bullpen / Simulate Game – 25 Pitches
  - Day 20: five min at 45' / three min at 90' / two min at 120' / five min at 45' (All Easy Toss)
  - Day 21: Released to normal throwing routines and bullpen routines.

## **WINTER THROWING PROGRAM**

The winter throwing program is dedicated to preparing the pitchers at Washington State University for the upcoming spring season. The program allows pitchers to build-up their endurance while developing their pitches. It is imperative pitchers follow this program during the winter months and winter break as their will be a high emphasis on preparation once school starts in January, and being able to handle the workload injury free is key to the pitcher

progressing through the winter program and subsequent spring season. Pitchers who ignore the necessary preparation will likely see a setback in their preparation for the upcoming season. We will start the program at a date allowing us 11 weeks of build-up, with the 11<sup>th</sup> week being the first week back to school during winter semester.

- A. Week One
  - a. Long Toss – 15 Min Max (MWF)
- B. Week Two
  - a. Long Toss – 18 Min Max (MWF)
- C. Week Three
  - a. Long Toss – 21 Min Max (MWF)
- D. Week Four
  - a. Long Toss – 24 Min Max (MW)
  - b. Long Toss – Feel Good Max (Sa)
- E. Week Five
  - a. 10 Min to 60ft + 25 Pitch Bullpen - FB Only (SuW)
  - b. 10 Min to 60ft + 35 Pitch Bullpen - FB/CH (Sa)
  - c. Long Toss – Feel Good Max (TuF)
- F. Week Six
  - a. 10 Min to 60ft + 35 Pitch Bullpen - FB/CH (Tu)
  - b. 10 Min to 60ft + 45 Pitch Bullpen - All Pitches (F)
  - c. Long Toss – Feel Good Max (MTh)
- G. Week Seven
  - a. 10 Min to 60ft + 45 Pitch Bullpen - All Pitches (M)
  - b. Long Toss + 45 Pitch Bullpen + 10 Pitch Live - All Pitches (Th)
  - c. Long Toss – Feel Good Max (SuWSa)
- H. Week Eight
  - a. Long Toss + 45 Pitch Bullpen + 10 Pitch Live - All Pitches (Su)
  - b. Long Toss + 45 Pitch Bullpen + 20 Pitch Live – All Pitches (W)
  - c. 10 Min to 60ft + 45 Pitch Bullpen – All Pitches (Sa)
  - d. Long Toss – Feel Good Max (TuF)
- I. Week Nine
  - a. Long Toss + 45 Pitch Bullpen + 30 Pitch Live - All Pitches (Tu)
  - b. 10 Min to 60ft + 45 Pitch Bullpen – All Pitches (F)
  - c. Long Toss – Feel Good Max (MTh)

## J. Week Ten

- a. Long Toss + 45 Pitch Bullpen + 40 Pitch Live - All Pitches (M)
- b. 10 Min to 60ft + 45 Pitch Bullpen – All Pitches (Th)
- c. Long Toss – Feel Good Max (SuWSa)

## K. Week Eleven

- a. Long Toss + 45 Pitch Bullpen + 30 Pitch Live - All Pitches (Su)
- b. Long Toss + 45 Pitch Bullpen + 40 Pitch Live – All Pitches (Sa)
- c. 10 Min to 60ft + 45 Pitch Bullpen – All Pitches (W)
- d. Long Toss – Feel Good Max (TuF)