

**Exercise  
Inventory and  
Program  
Design  
For Throwing  
Events**

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# EXERCISE PURPOSE

- Technique
- Strength
- Speed



# EXERCISE PURPOSE

- Technique

## Whole versus Part

- Part

Why?

Focus on technical patterns without interference

Best for-

Initial technical patterns

Improve weakness (physical or technical)

Reinforce small portion of the technical pattern

Specific strength

Rehabilitation (early stages)





# EXERCISE PURPOSE

- Technique

Technical Patterns PART

- Exercises without release
- Exercises with release



# EXERCISE PURPOSE

- Technique

## Whole versus Part

- Whole

Why?

The right combination of components

Best for-

Technical development

Specific strength

Specific speed

Rehabilitation (later stages)





# EXERCISE PURPOSE

## • Technique

### Technical Patterns WHOLE

- Slow rate of speed (<75%)
  - Novice
  - Light and standard implements
- Moderate rate of speed (75-90%)
  - Best for technical development
  - Light, standard and heavy implements
- High rate of speed (90%+)
  - Under stress (breakneck speed)
  - Light and standard implements



# EXERCISE PURPOSE

- Strength (Categories)

- General strength  
supportive training to enhance throwing
- Power
  - Upper (including core)
  - Lower
- Event specific strength

## Biomotor modalities

- Speed
- Endurance
- Flexibility
- Coordination
- Strength

\*more later





# EXERCISE PURPOSE

- Speed (Categories)
  - Explosive training
    - Olympic lifting
    - Upper
    - Lower
    - Jumps/throws
  - Event specific speed

## Biomotor modalities

- Speed
- Endurance
- Flexibility
- Coordination
- Strength

\*more later





## EXERCISE TYPES

- Competitive Exercises (CE)
- Specific Developmental Exercises (SDE)
- Specific Preparatory Exercises (SPE)
- General Preparation Exercises (GPE)



# Competition Exercises

- (50-60% shared time with SDE)

## *Technique*

- *full technical execution*
- *Speed (explosive)*  
*high neuromuscular demands under stress*
- *Strength (power)*  
*specific strength and positions*
- *Standard*  
*exact event demands*



# Specific Development Exercises

- (50-60% shared time with CE)
  - *similar to competition event physiologically*
  - *similar to competition movement*
- *Speed (explosive)*
  - *high neuromuscular*
- *Strength (power)*
  - *specific to performance*
- *Technique*
- *movements patterns (parts)*





# Specific Preparatory Exercises

- (25-35% of training time)
  - *similar to competition event physiologically*
- *Speed (explosive)*
  - *high correlation to neuromuscular elements*
- *Strength (power)*
  - *high correlation to strength demands*



# General Preparatory Exercises

- (15% of training time)
  - not similar to competition event physiologically
  - not similar to competition movement
- Supporting exercises to improve performance
- *Athletic abilities – biomotor*
  - Speed
  - Endurance
  - Flexibility
  - Coordination
  - Strength



# Exercises Types and Training Time



# Exercise Selection and Transfer

- Positive Transfer
  - Exercises go up together
  - Increase in snatch and increase in hammer
- Neutral Transfer
  - One exercises go up and the other stays the same
  - Increase in snatch and no increase in hammer
- Negative Transfer
  - One event goes up and the other goes down
  - Decrease in hammer and increase in snatch

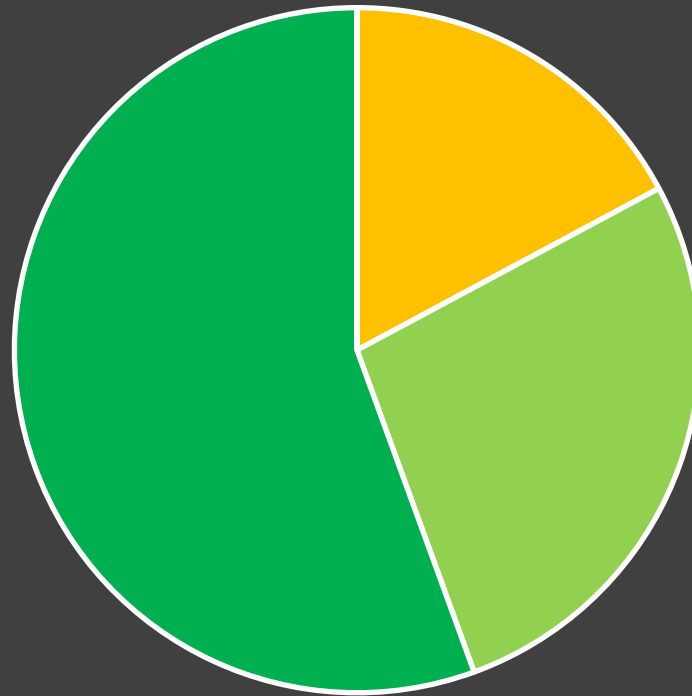




# Exercise Priorities

Training Background and Needs  
will determine %'s

■ GE ■ SPE ■ SDE/CE



# Individualized Training

**Program designed to throw far when it matters**

**Maximize time and energy in training session**

**Use exercises that relate to throwing far**

- **Exercises with positive transfer**

**Specific exercises determined by individual needs**

**Use record keeping and notes**



# Individualized Training

## Individualized Program

Cycle of training (daily/weekly)

Change is very small within cycle

Training cycle length individualized

Change every 2-6 weeks (individual)

Based on feedback and record keeping

When changed it is drastic

75% of training is changed

Change loads and change exercises

Program outline stays the same

# Individualized Training

## Overload and Adaptation

Overload:  
more work than the athlete is accustomed to

Adaptation:  
change as the result of training

**“training leads to adaptation turns out to differ greatly from individual to individual and even from time to time within a single individual”**

***Frans Bosch***

***Strength Training and Coordination: An Integrative Approach***





# Individualized Training

Drop off in performance before adaptation (5% or less) before rise in performance

Adjust volume and/or intensity of work if a bigger drop off occurs that is not planned  
-maladaptation

Progression in performance is not linear but in waves or curves but should trend upward



# Individualized Training

## **Feedback\***

Measure What Matters

Measure What You Can Capture

Measure What You Will Use

Minimize The Variables

Don't Overreact

\*Martin Bingisser HMMR MEDIA

<http://www.mcmillanspeed.com/2015/11/a-coaches-guide-to-strength-development.html>

# Exercise Inventory – SPECIFIC EXERCISES

## SHOT PUT

- Medicine Ball (SPE/SDE)
- Stand Throws (SDE)
- Dynamic Movements (SDE)
  - Glide
  - Spin
- Competition Exercises (CE)
  - Standard
  - Heavy (shots and balls)
  - Light (shots and balls)



# Shot Put Glide 1 of 2– SPECIFIC EXERCISES

Shot Put Style Throws	Glide Variations
Chest pass	A-position start to stand throw
Shoulder punch	Walking glide throw
180 degree turn (crunch)	Straight leg mini glide pause to stand throw
Stand throw start shuffle pause stand throw	Straight leg mini glide
Stand throw start shuffle to throw	Toe up start glide pause to stand throw
Stand throw start shuffle x2 to throw	Basic start glide - MB centered
270 degree stand throw	Dynamic start glide - MB centered
Stand throw start, jump up to throw	Double glide - MB Centered
Stand throw start, jump forward to throw	Line glide repeats

# Shot Put Glide 2 of 2– SPECIFIC EXERCISES

<b>Barbell/Heavy Bar/Stick</b>	<b>Box Glide Variations</b>
Walking glide throw	Box drop to power position
Straight leg mini glide	Box drop stand throw start pause stand throw
Glide pause lift up	Box drop stand throw start to stand throw
Glide pause drive out	Box drop to glide pause stand throw
Glide and lift up (bar on back)	Box drop to glide
Glide and lift up (bar at knees)	
Double glide	
Double glide to throw	
Glide to throw	

# Shot Put Spin 1 of 2– SPECIFIC EXERCISES

Shot Put Style Throws	Rotational Variations (with and without throws)
Chest pass	Start to position 1+2+3+4
Shoulder punch	Start to position 1+3+4
180 degree turn (crunch)	Start to position 4 to stand throw
Stand throw start shuffle pause stand throw	Start to position 3+4
Stand throw start shuffle to throw	Start to position 3 to 1/2 turn to finish
Stand throw start shuffle x2 to throw	Shuffle to 1/2 turn position
270 degree stand throw	Shuffle x2 to 1/2 turn position
Stand throw start, jump up to throw	Slow full throw to finish
Stand throw start, jump forward to throw	Slow full throw w MB centered to finish



# Shot Put Spin 2 of 2– SPECIFIC EXERCISES

Barbell/Heavy Bar/Stick	Box Variations with Throw
Repeat ½ turns	Box drop stand throw start pause stand throw
Slow full throw w barbell up	Box drop stand throw start to stand throw
Slow full throw w barbell out	180 box drop to ½ turn throw
Step straight 180 degree turn, repeats	270 box drop to ½ turn throw
Shuffle to 1/2 turn	
Shuffle x2 to 1/2 turn	
Start to position 3 to 1/2 turn	
Start to position 1+2+3+4	
Start to position 1+3+4	

CE: Competition Exercises + = higher correlation	SHOT PUT
<b>Men &lt; 18.00m</b>	<b>Women &lt;15.25m</b>
5k (+1)	3k (+1)
6k (+2)	3.5k (+2)
6.36k (+3)	3.75k (+3)
8k (+1)	4.5k (+2)
9k (0)	5k (+1)
<b>Men &gt;18.00m</b>	<b>Women &gt;15.25m</b>
5k (+1)	3k (+0)
6k (+1)	3.5k (+2)
6.36k (+2)	3.75k (+3)
8k (+3)	4.5k (+3)
9k (+1)	5k (+3)



**Correlational Interrelationship Between Preparatory Results in Several Specialized-Preparatory, Specialized-Developmental Exercises with Lighter and Heavier Implements with Results in the Shot Put Throw by Athletes Having Various Qualifications**

Exercise	Sports Result, Coefficient of Correlation						
	14-15m	15-16m	16-17m	17-18m	18-19m	19-20m	20-21m
Throwing a 5kg shot	0.768	0.702	0.724	0.564	0.512	0.456	0.365
Throwing a 6kg shot	0.872	0.765	0.689	0.654	0.607	0.582	0.498
Throwing a 8kg shot	0.654	0.669	0.754	0.788	0.845	0.824	0.754
Throwing a 9kg shot	---	---	0.706	0.806	0.765	0.824	0.724
Throwing a 10kg shot	---	---	0.552	0.605	0.786	0.765	0.714
Throwing a 6kg shot from place	0.882	0.786	0.765	0.806	0.776	0.721	0.687
Throwing a 8kg shot from place	0.712	0.687	0.722	0.742	0.825	0.786	0.670

# Exercise Inventory – SPECIFIC EXERCISES

## DISCUS

- Medicine Ball (SPE/SDE)
- Stand Throws (SDE)
- Dynamic Movements (SDE)
- Competition Exercises (CE)
  - Standard
  - Heavy (discus/bars/tools/balls)
  - Light Heavy (discus/bars/tools/balls)

# Discus 1 of 2– SPECIFIC EXERCISES

Discus Style Throws	Rotational Variations (with and without throws)
180 degree turn	Start to position 1+2+3+4
Stand throw start shuffle pause stand throw	Start to position 1+3+4
Stand throw start shuffle to throw	Start to position 4 to stand throw
Stand throw start shuffle x2 to throw	Start to position 3+4
270 degree stand throw	Start to position 3 to 1/2 turn to finish
270 degree+ stand throw	Shuffle to 1/2 turn position
Stand throw start, jump up to throw	Shuffle x2 to 1/2 turn position
Stand throw start, jump forward to throw	Slow full throw to finish
	Slow full throw w MB centered to finish
	Start to 3/4 and drive forward with MB throw
	Repeat ½ turns to throw



# Discus 2 of 2— SPECIFIC EXERCISES

Barbell/Heavy Bar/Stick	Box Variations with Throw
Repeat ½ turns	Box drop stand throw start pause stand throw
Slow full throw w barbell up	Box drop stand throw start to stand throw
Slow full throw w barbell out	180 box drop to ½ turn throw
Step straight 180 degree turn, repeats	270 box drop to ½ turn throw
Shuffle to 1/2 turn	
Shuffle x2 to 1/2 turn	
Start to position 3 to 1/2 turn	
Start to position 1+2+3+4	
Start to position 1+3+4	

<b>CE: Competition Exercises + = higher correlation</b>	<b>DISCUS</b>
<b>Men &lt; 46m</b>	<b>Women &lt; 46m</b>
Light (+2)	Light (+3)
Heavy (+2)	Heavy (+2)
Super Heavy (+0)	Super Heavy (+0)
<b>Men 47m - 57m</b>	<b>Women 47m - 54m</b>
Light (+2)	Light (+2)
Heavy (+2)	Heavy (+2)
Super Heavy (+1)	Super Heavy (+1)
<b>Men 58m+</b>	<b>Women 55m+</b>
Light (+1)	Light (+2)
Heavy (+3)	Heavy (+3)
Super Heavy (+2)	Super Heavy (+1)

**Correlational Interrelationship Between Preparatory Results in the Women Discus Throwers Having Various Qualifications when Using Lighter, Heavier and Competitive Implements Throwing from Place and in the Entire Movement**

No. n/n	Indices	1	2	3	4	5	6	7
1	Throwing a 0.75kg disc	*	$\frac{0.886}{0.642}$	$\frac{0.668}{0.765}$	$\frac{0.456}{0.789}$	$\frac{0.425}{0.765}$	$\frac{0.786}{0.665}$	$\frac{0.459}{0.874}$
2	Throwing a 1kg disc		*	$\frac{0.668}{0.765}$	$\frac{0.456}{0.789}$	$\frac{0.425}{0.765}$	$\frac{0.724}{0.845}$	$\frac{0.456}{0.607}$
3	Throwing a 1.25kg disc			*	$\frac{0.686}{0.782}$	$\frac{0.546}{0.678}$	$\frac{0.624}{0.675}$	$\frac{0.409}{0.524}$
4	Throwing a 1.5kg disc				*	$\frac{0.660}{0.745}$	$\frac{0.488}{0.452}$	$\frac{0.376}{0.566}$
5	Throwing a 2kg disc					*	$\frac{0.355}{0.393}$	$\frac{0.586}{0.654}$
6	Throwing a 1kg disc from place						*	$\frac{0.554}{0.607}$
7	Throwing a 3kg shot from place							*



# Exercise Inventory – SPECIFIC EXERCISES

## HAMMER

- Medicine Ball (SPE/SDE)
- Winding (SDE)
- Releases/Toss (SDE)
- Multiple Turns (with/without release) (SDE)
- Competition Exercises (CE)
  - Standard
  - Heavy
  - Light
  - Various Length/Weights (hammers and other implements)

# Hammer 1 of 3— SPECIFIC EXERCISES

Hammer Basic Turning	Winding Series
0-90-180	Walking winds (left, right, forward, backwards)
90-180-270-0	Walking single arm winding
180-270-0	Walking winds with lunge (L, R, F, B)
270-0	Heavy Primoz winding
270-180	Wind and release
270-180 x3 with release	Left arm wind and release
270-270	Right arm wind and release
270-repeats with release	Left arm wind and connect with both arms
Continuous slow turns	Right arm wind and connect with both arms

# Hammer 2 of 3— SPECIFIC EXERCISES

Turn Variations	Release Series (no winding)
Static start	270 degree start to release
Walk around start	180 to 270 to release
On the ground (single or double arm)	90 to 270 to release
On the ground to in the air (single or double arm)	1 turn and release
Continuous slow turns	2 turns and release
Left arm	3 turns and release
Right arm	4 turns and release
Left arm wind and connect with both arms	
Right arm wind and connect with both arms	
Hammer board	
2 hammers wide arms	
2 hammer in tight	



# Hammer 3 of 3— SPECIFIC EXERCISES

<b>Kettle/Plate/DB Series</b>	<b>Wind and Release Combo Series</b>
180 degree turn repeats	Pitch start and turn(s)
270 to 180 slow orbit repeats	1 wind and turn repeat and throw
Multiple turns with static start	1 winds and 2 turn repeat and throw
Wind and multiple turns	2 winds and 2 turn repeat and throw
Walking plate twist (forward, backward)	2 winds and 3 turns and throw
Walking plate twist with lunge (F, B)	2 winds and 4 turns and throw
Walking plate twist (forward, backward) Speed	1 winds and 2 turn repeat and throw
Single arm 2 plate turns with hammer path	2 winds and 2 turn repeat and throw
	2 winds and 3 turns and throw
	2 winds and 4 turns and throw
	Winds and 4+ turns and throw

<b>CE: Competition Exercises + = higher correlation</b>	<b>HAMMER</b>
<b>Men 50-60m</b>	<b>Women 50-59m</b>
5k (+3)	3.5k (+2)
6k (+2)	4.5k (+3)
8k (+2)	5k (+2)
9k (+1)	6k (+1)
10k (+1)	7k (+1)
Weight (L +3) H (+1)	Weight (L +2) H (+1)
<b>Men 60-68m</b>	<b>Women 60m-68m</b>
5k (+1)	3.5k (+2)
6k (+3)	4.5k (+3)
8k (+2)	5k (+3)
9k (+2)	6k (+2)
10k (+1)	7k (+1)
Weight (L +1) H (+2)	Weight (L +2) H (+2)

**Correlational Interrelationships Between Several Specialized-Preparatory,  
Specialized-Developmental Exercises and Exercises with Lighter and Heavier  
Implements With Results in the Hammer Throw by Men Athletes Having Various  
Qualifications**

Exercise	Sports Result, Coefficient of Correlation						
	45- 50m	50- 55m	55- 60m	60- 65m	65- 70m	70- 75m	75- 80m
Throwing a 5kg hammer	0.867	0.765	0.789	0.824	0.542	0.645	0.564
Throwing a 6kg hammer	0.812	0.866	0.875	0.786	0.766	0.790	0.664
Throwing a 8kg hammer	0.564	0.521	0.689	0.869	0.805	0.842	0.798
Throwing a 9kg hammer	---	---	---	0.675	0.589	0.745	0.765
Throwing a 10kg hammer	---	---	---	0.542	0.745	0.801	0.824
Throwing a 16kg weight	---	---	---	0.452	0.586	0.677	0.609



# Exercise Inventory – SPECIFIC EXERCISES

## JAVELIN

- MB/Ball Single Arm Throws (SDE/CE)
- MB Double Arms Throws (SDE)
- Approach Development (GPE/SPE/SDE)
- Power Position (SPE/SDE)
- Javelin throws with 5 steps or less (SDE)
- Javelin throws with 5 steps or more (SDE/CE)

# Javelin 1 of 5– SPECIFIC EXERCISES

<b><i>Approach Development</i></b>	<b><i>Dynamic Movements into Javelin Finish</i></b>
Start position build up (50% to 80%) runs	1-2-3-+ high knee walk-withdraw-1-2-3+
Cross over build up (50% to 80%) runs	1-2-3-+ high knee (50%)-withdraw-1-2-3+ (60%)
Walk (3-6 steps)-wd-1-2-3-(4) (70-90% speed)	Skip into 3 step
Short approach runs	Skip into multiple cross-overs into 3 step
Walk/Jog into short approach	Skip into multiple shuffles into 3 step
Shuffle into short approach	Hops into 3-5 step
Approach run build ups (10m/10m/20m)	<b><i>Approach Development with Mini-Hurdles</i></b>
Full approach run	Start over mini hurdles
	Start w high knee javelin runs over mini hurdles
	Start over mini hurdles into wd (no hurdles)

# Javelin 2 of 5– SPECIFIC EXERCISES

<b><i>Power Position with Dynamic Movements</i></b>	<b><i>Power Position with Movement</i></b>
1-2-3-+ high knee walk-wd-1-2-3+ into pp	1 step off box to hold power position
1-2-3-+ high knee (50%)-wd-1-2-3+ (60%) into pp	Walking 3 step to power position
Skip into power position	Dynamic 3 step to power position
Skip into 3 step to power position	Walking 5 step to power position
Skip into multiple cross-overs to power position	
Skip into multiple shuffles to power position	<b><i>Power Position with Lifting Movements</i></b>
Shuffles into power position	Hang snatch to power position
Skip into multiple shuffles to power position	Overhead squat to power position
	Side snatch to power position
	Jump squat to power position



# Javelin 3 of 5– SPECIFIC EXERCISES

<b><i>BASIC: Double Arm-Dynamic</i></b>	<b><i>ADVANCED: Double Arm-Dynamic</i></b>
Walking 1 step throw	Dynamic 1 step throw
Walking 3 step throw	Dynamic 3 step throw
Walking 5 step throw	Dynamic 5 step throw
Javelin style 3 single leg hops to throw	Ball centered chest pass 3-5 steps throws
1-2-3-withdraw-1-2-3 throw (walking)	Javelin style shuffle into 3-5 step throw
1-2-3- high knee in place-wd-1-2-3 throw (jog)	SP style 3-5 steps/shuffles throws
<b><i>BASIC: Double Arm-Dynamic</i></b>	Ball centered chest pass shuffles throws
Walking 1 step throw	1-2-3- high knee in place-wd-1-2-3 throw (jog)
Walking 3 step throw	1-2-3- high knees move-wd-1-2-3 throw (70-80%)
Walking 5 step throw	Walk (3+ steps)-withdraw-1-2-3 throw (70-90%)
	Jog into 3-5 step throw
	Shuffle into 3-5 step throw

# Javelin 4 of 5– SPECIFIC EXERCISES

<b><i>BASIC: Single Arm-Dynamic</i></b>	<b><i>ADVANCED: Single Arm-Dynamic</i></b>
1 step throw	Dynamic 1 step throw
3 step throw	Dynamic 3 step throw
Walk into 3 step throw	Dynamic 5 step throw
1-2-3-withdraw-1-2-3 throw (walking)	Short approach throw
1-2-3- high knee in place-wd-1-2-3 throw (walk)	1-2-3- high knee in place-wd-1-2-3 throw (jog)
SP side style 3 step/shuffle throw	1-2-3- high knees move-wd-1-2-3 throw (70-80%)
SP side style 1 step off box	Walk (3-6 steps)-wd-1-2-3-(4) throw (70-90%)
SP side style 1 step off box	Jog into 3-5 step throw
Vertical bouncing jumps to throw	Shuffle/Gallop into 3-5 step throw
Single leg hops to throw	Javelin style 3 single leg hops to 3-5 step throw

# Javelin 5 of 5– SPECIFIC EXERCISES

<b><i>BASIC: Javelin Style Throws</i></b>	<b><i>ADVANCED: Javelin Style Throws</i></b>
Easy picks in the grass	1-2-3- high knee in place-wd-1-2-3 throw (jog)
Arch and throw with straight arm	1-2-3- high knees move-wd-1-2-3 throw (70-80%)
Arch and throw with bent arm	3-6 steps-wd-1-2-3-(4) throw (70-90% speed)
1 step throw	
3 step throw	<b><i>SDE/CE: Competition Throws</i></b>
Walk into 3 step throw	<b><i>Javelin Throws</i></b>
Dynamic 1 step throw	Short approach throw
Dynamic 3 step throw	Walk into short approach throw
Dynamic 5 step throw	Jog into short approach throw
Javelin style 3 single leg hops to throw	Shuffle into short approach throw
	Modified full approach throw
	Full approach throw



CE: Competition Exercises + = higher correlation	Javelin
Men < 60.00m	Women < 45.00m
Light(+2)	Light(+3)
Heavy(+1)	Heavy(+1)
Men 61m - 70m	Women 46m - 54m
Light(+2)	Light(+2)
Heavy(+1)	Heavy(+1)
Men >71.00m	Women >55.00m
Light(+2)	Light(+2)
Heavy(+2)	Heavy(+2)

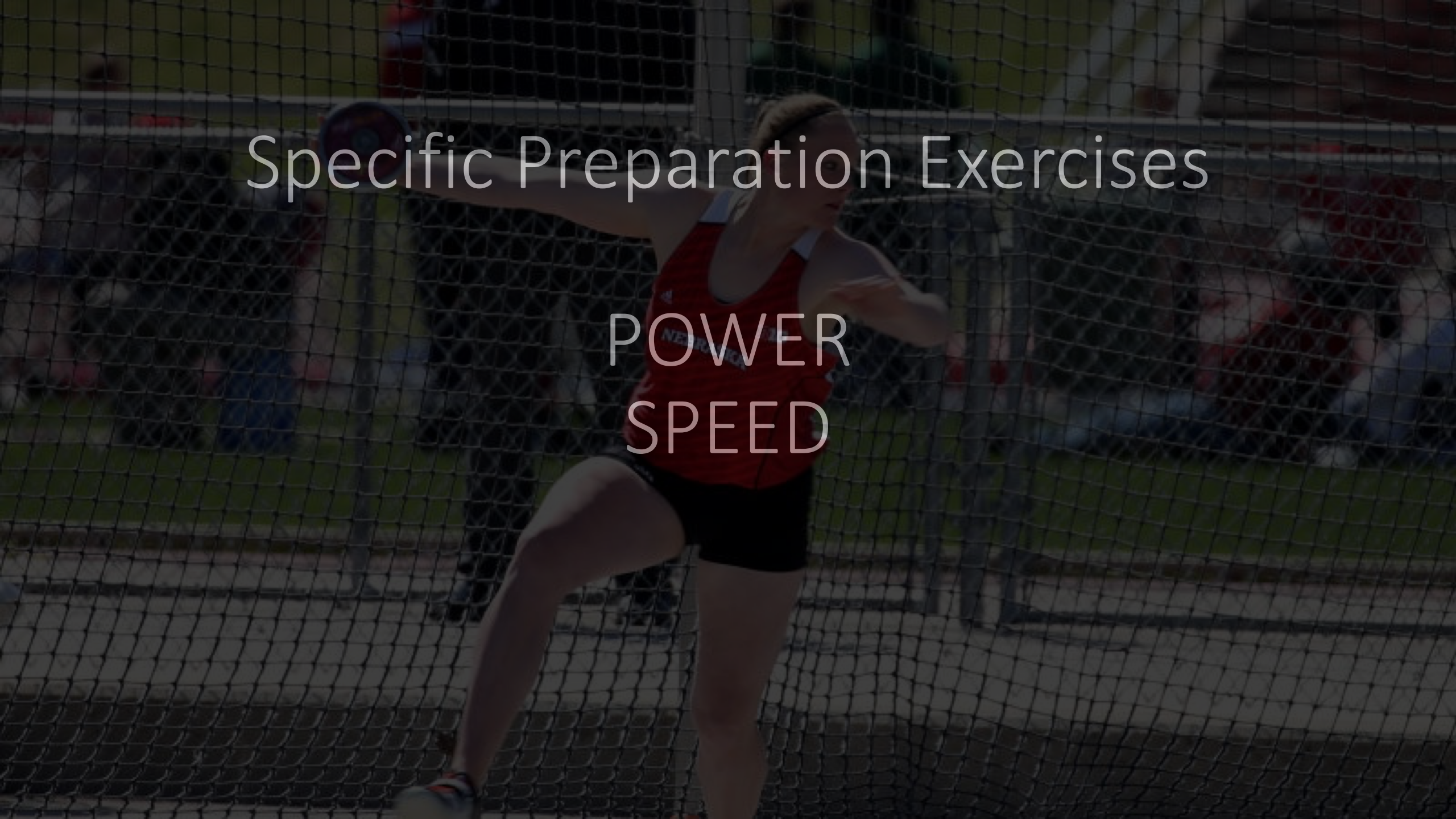
**Correlational Interrelationship Between Several Specialized-Preparatory,  
Specialized-Developmental Exercises and Exercises with Lighter and Heavier  
Implements With Results in the Javelin Throw by Women Athletes Having Various  
Qualifications**

Exercise	Sports Result, Coefficient of Correlation					
	40- 45m	45- 50m	50- 55m	55- 60m	60- 65m	65- 70m
Throwing a 0.5kg javelin	0.765	0.765	0.654	0.688	0.724	0.622
Throwing a 0.7kg javelin	0.560	0.665	0.786	0.865	0.789	0.755
Throwing a 0.9kg javelin	0.424	0.365	0.642	0.569	0.724	0.675
Throwing a 2kg shot from place	0.365	0.388	0.678	0.721	0.654	0.561



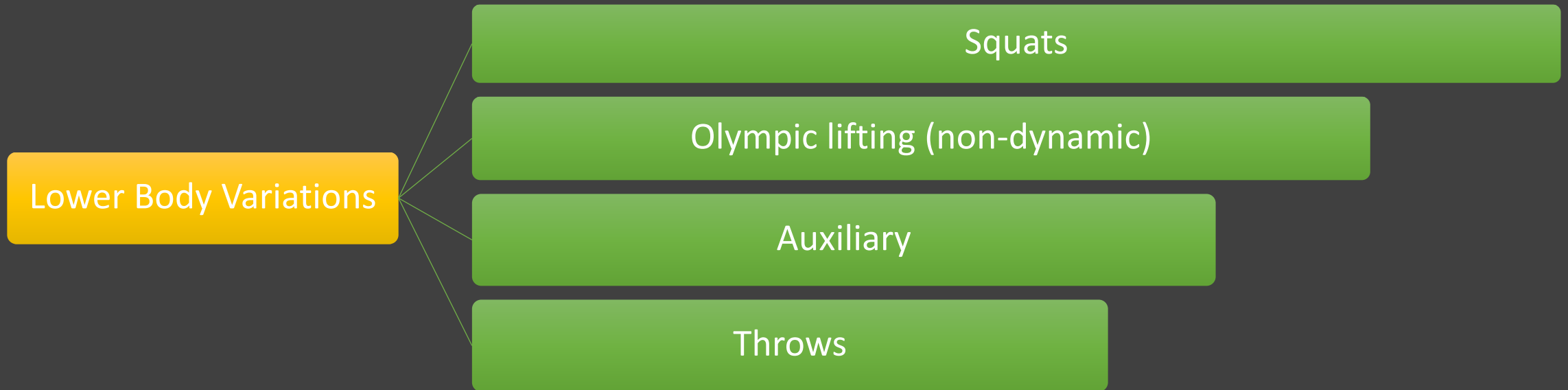
# Specific Preparation Exercises

POWER  
SPEED

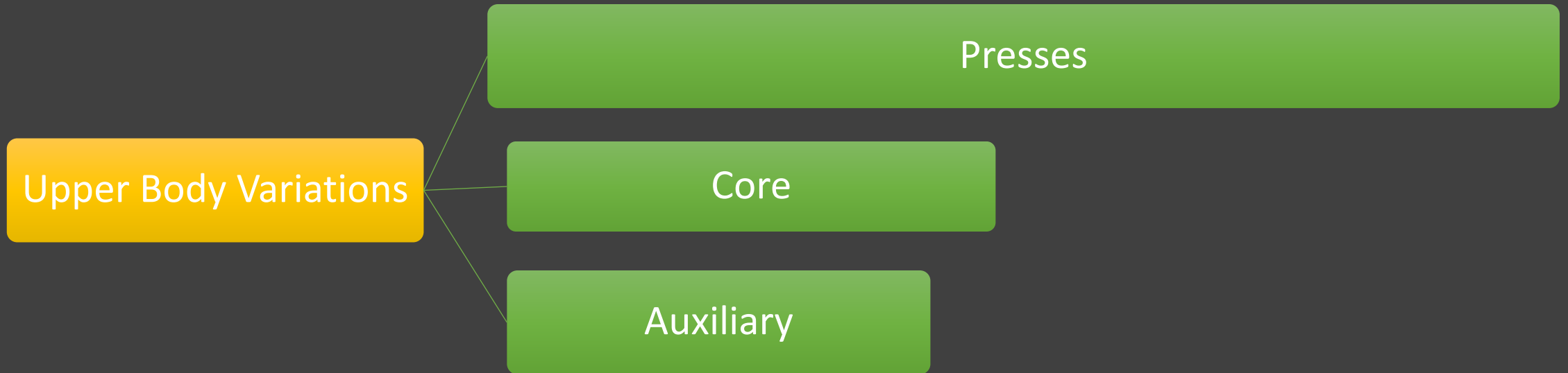




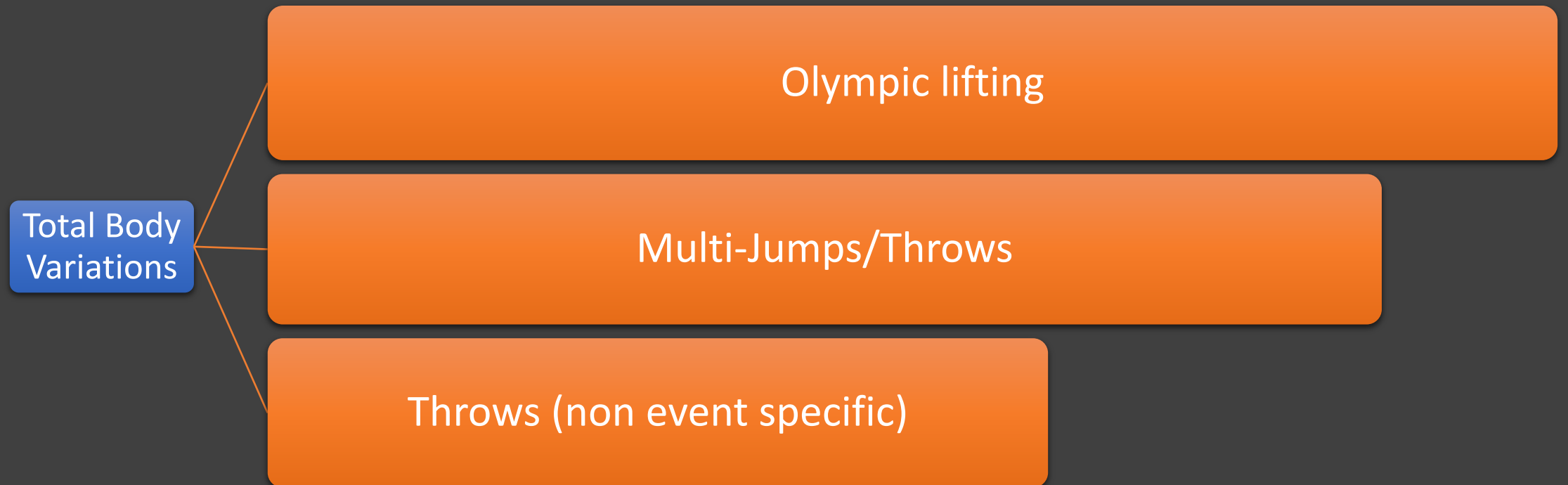
# Exercise Inventory – Power (SPE)



# Exercise Inventory – Power (SPE)

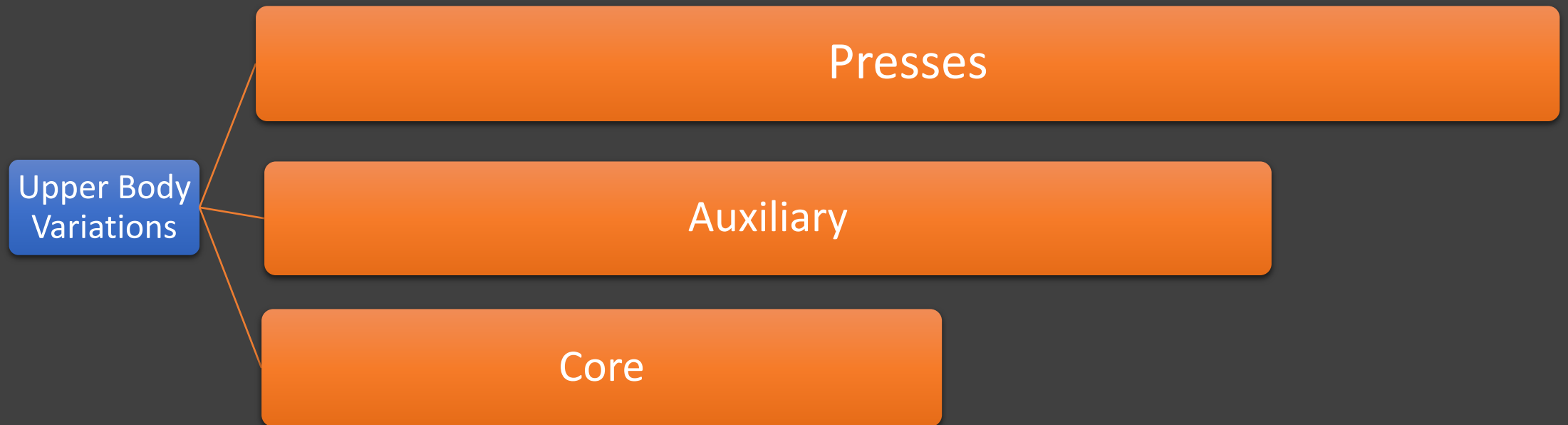


# Exercise Inventory – Explosive (SPE)

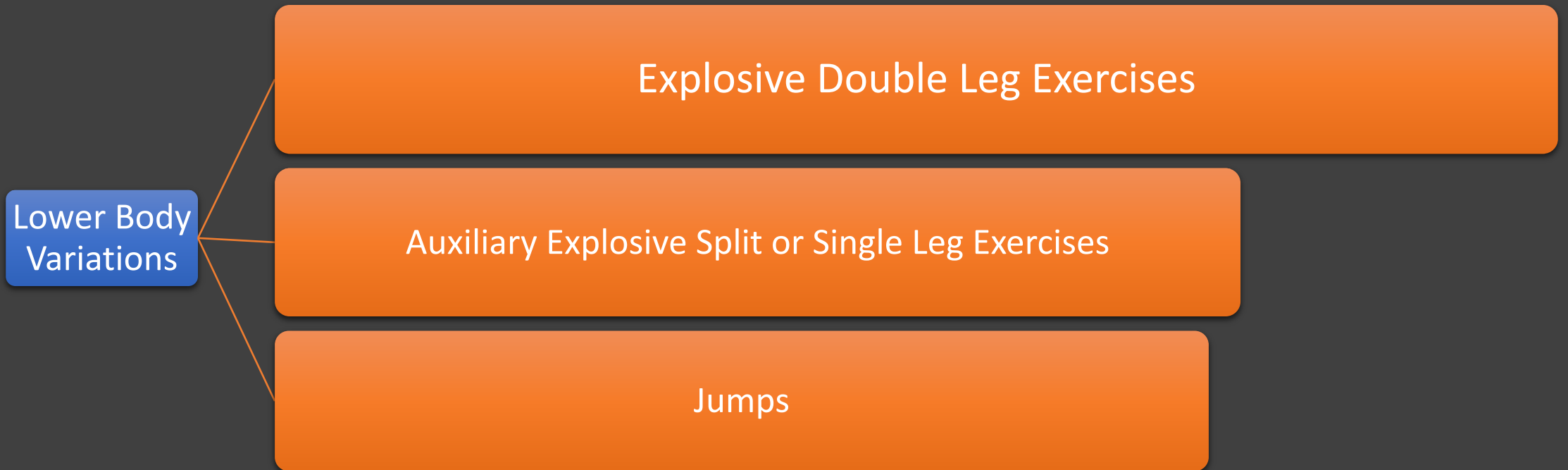


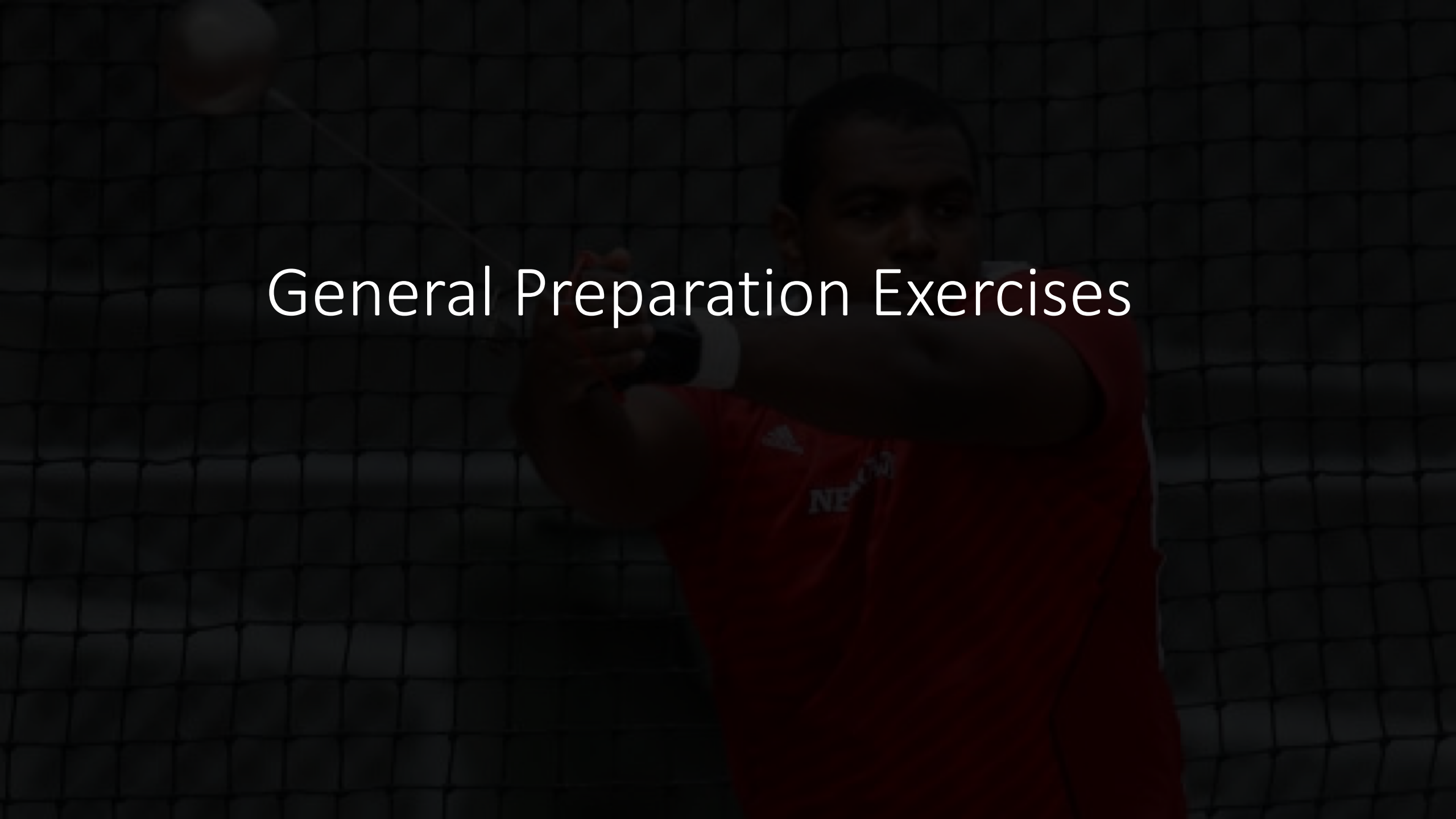


# Exercise Inventory – Explosive (SPE)



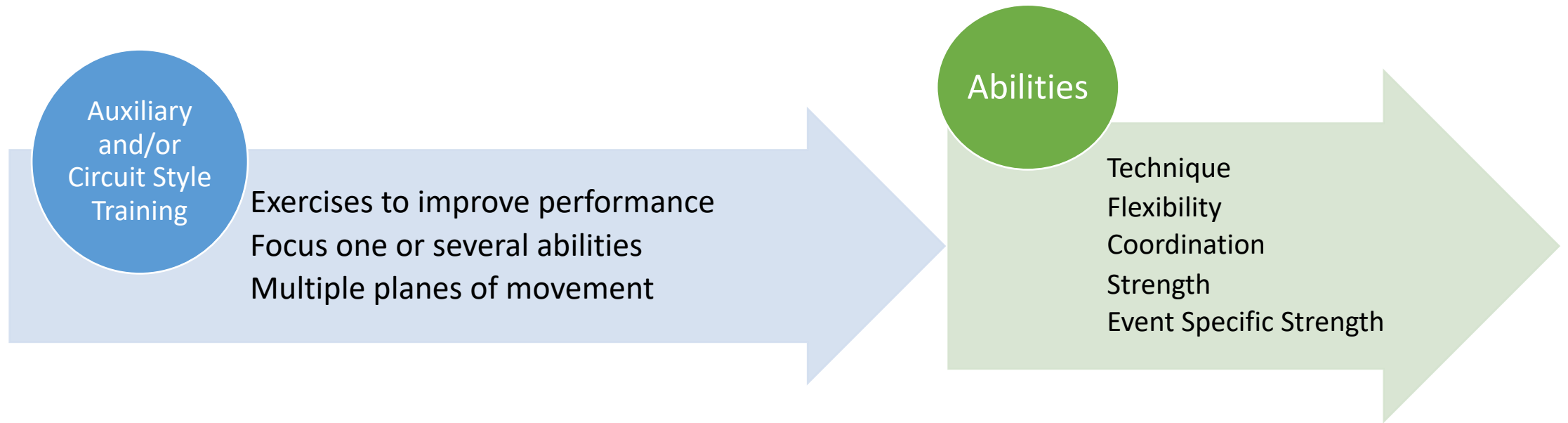
# Exercise Inventory – Explosive (SPE)



A person wearing a red shirt is practicing a martial arts technique, possibly a kick or a strike, in front of a black net. The person's right arm is extended forward, and their left arm is bent. The background is a black net with a white grid pattern. The text "General Preparation Exercises" is overlaid in white.

# General Preparation Exercises

# Outline GPE/SPE/SDE Power





# Outline– GPE/SPE/SDE Explosive

## Auxiliary and/or Circuit Style Training

Exercises to improve performance  
Focus on one technical point or phase of the throw  
Multiple planes of movement specific to the throw  
Include abilities directly related to event

Speed  
Flexibility  
Coordination  
Event Specific Speed  
Technique

## Training Design

### Power Compatible Exercises and Planning

- Standard and heavy throws
- Olympic lifts (non-dynamic)
- Heavier lifting movements
  - Upper
  - Lower
- GPE/SPE exercises (circuit)
  - General MB throws (heavy)
  - Multiple plane exercises
  - Select biomotor abilities
  - Core
- Power Daily Plan
  - General Warm Up (GPE)
  - Specific Warm Up (SDE)
  - Throwing Session (SDE/CE)
  - Training Session (SPE)
    - GPE/SPE Auxiliary/Circuit

## Training Design

### Explosive Compatible Exercises

- Standard and light throws
- Olympic lifts
- Explosive lifting movements
- GPE/SDE exercises (circuit)
  - Multiple jumps/throws
  - General MB throws (light)
  - Plyometrics
  - Event specific exercises
  - Select biomotor abilities
  - Core
- Explosive Daily Plan
  - General Warm Up (GPE)
  - Specific Warm Up (SDE)
  - Throwing Session (SDE/CE)
  - Training Session (SPE)
    - GPE/SDE Auxiliary/Circuit

A male athlete is shown in a dynamic pose, holding a shot put in his right hand. He is wearing a white tank top with a large red letter 'N' on the front and dark shorts with a white 'N' on the left leg. He is standing on a reddish-brown track. The background is blurred, showing a fence and some spectators. The overall image has a dark, moody tone.

# Periodization of Training



# Fall Training in College System

- Preparation  
(September to mid-October)
  - Medium volume
  - Medium intensity
  - Movement patterns (SDE/CE)
    - Parts (75%) – Whole (25%)
  - General strength development and technique
- Start with low intensity throws and build up quickly
- Use teaching progressions in throws and lifting
- Build up both intensity and volume in all areas

# Fall Training in College System

- Preparation II  
(mid-October to mid-November)
  - Medium to high volume
  - Medium to high intensity
  - Movement patterns (SDE/CE)
    - Parts (50%) – Whole (50%)
  - Power development
- Build up intensity throws and heavier implements
- High volume and high intensity
- Train power and explosive elements together (over train)
- Event specific biomotor abilities

# Fall Training in College System

- Preparation III  
(mid-November to mid-December)
  - Medium to high volume
  - High intensity
  - Movement patterns (SDE/CE)
    - Parts (30%) – Whole (70%)
  - Power and specific strength development
  - Specific power focused on release velocity
- High intensity throws and heavier implements
- Medium volume and high intensity
- Separate power and explosive elements
- Event specific biomotor abilities

# Winter Break in College System

- Transition I
  - (mid-December to early January)
  - Medium volume
  - Low to medium intensity
  - Movement patterns (SDE/CE)
    - Parts (50%) – Whole (50%)
  - Strength development
  - Secondary biomotor abilities
- Limit high intensity throws
- Focus of specific needs and weaknesses



# Spring Training in College System

## Indoor Season

(mid January to mid-February)

- Medium volume
- Medium to high intensity
- Movement patterns (SDE/CE)
  - Parts (25%) – Whole (75%)
- Power and specific strength development

## Outdoor Preparation I

(mid January to mid-February)

- Medium to high volume
- Medium to high intensity
- Movement patterns (SDE/CE)
  - Parts (50%) – Whole (50%)
- Power development
- Event specific biomotor abilities

# Spring Training in College System

## Indoor Season Peak

(mid-February to early March)

- Low to medium volume
- Medium intensity
- Movement patterns (SDE/CE)
  - Parts (25%) – Whole (75%)
- Maintenance of strength
- Specific speed focused on release velocity

## Outdoor Preparation II

(mid-February to early March)

- Medium to high volume
- High intensity
- Movement patterns (SDE/CE)
  - Parts (50%) – Whole (50%)
- Power and specific strength development

# Spring Training in College System

## Outdoor Pre-Season

(early March to late March)

- Medium to high volume
- Medium to high intensity
- Movement patterns (SDE/CE)
  - Parts (30%) – Whole (70%)
- Strength development
- Secondary biomotor abilities

# Spring Training in College System

## Outdoor Season

(late March to late April)


- Medium volume
- Medium to high intensity
- Movement patterns (SDE/CE)
  - Parts (30%) – Whole (70%)
- Specific strength development
- Specific speed focused on release velocity

# Spring Training in College System

Outdoor Season Peak  
(late April to mid June)

- Medium volume
- Medium intensity
  - Two week cycles
  - Drastic changes or small changes (individualized)
- Movement patterns
  - Parts (20%) – Whole (80%)
- Maintenance of strength
- Event specific speed



The background of the slide is a dark, semi-transparent image. It shows a man, presumably Scott Cappos, in a dark jacket with a white 'U' logo, standing in front of a chain-link fence. To his right, a person in a red shirt is visible, with a name tag that reads 'Percy'.

# Exercise Inventory and Program Design For Throwing Events

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