



Team Boxing Science Training Manual June 2017

**Phases for
Conditioning, Nutrition,
Mental/Emotional, Basic Boxing Skills**

Introduction

The [Boxing Science Academy](#) Training Manual and website are designed to give the at home boxer the best chance to learn boxing if they cannot get to a gym with a real coach. You are given an annual plan similar to the kind used by the national team of your country. The difference is, this one focuses on what is necessary for entry level athletes, and not for seasoned international competitors.

Whether you are young or old, masters or pee-wee (adult supervision is suggested for all youth), you are encouraged to grab a friend or family member, and go to the garage, basement or back yard, to learn the pugilistic art the way it was intended; person on person.

Even though the website does have a [Members](#) area, there is plenty of valuable and free information at the [Boxing Science Academy](#), beginning with [The Critical Frist Day](#) page. Here you will find free books and videos focused on day one of boxing. From there you will move onto the [Lessons](#), [Preparation](#) and [Trouble Shooting](#) pages, browsing to find the puzzle pieces needed to create your picture. There are approximately 150+ videos to choose from. If you cannot find what you are looking for, try using the search tool at the top of every page. Simply type in a topic or key word, and strike *enter* on your keyboard. When you are ready to get serious you will begin with [Phase 1 – The 1st 4 Weeks](#).

[Members](#) will appreciate the intermediate and advanced video lessons, as well as the progressive [Phases](#) for skill development. There are also [Mental/Emotional](#) phases and [Nutrition](#) phases for [Members](#). Going to the individual [Boxers](#) pages will show you examples of how real people just like you travelled through their journey of drills from first day technical sparring, to open sparring, to outside sparring, to possibly competition.

History

A few years ago, I led the team of writers that created the USA Boxing Grassroots Training Manual, which is now the main resource for the USA Boxing Level 1 on-line coach certification exam. Our intention was to provide a tool for new coaches to become better boxing trainers at the community and club level. After completing that assignment, I was inspired to move forward in rejuvenating the sport of boxing. I believe the best place for this to happen is at the entry level. With a significant decrease in boxing participation over the past few decades, disappearing gyms have left less and less opportunity for the kid who wants to learn.

I have been fortunate to learn boxing through old fashioned mentorship, from the old guys in rec centers that used to tell stories about watching Joe Louis train, and how good Floyd Sr, James Toney, and Boom-Boom Johnson were when they were coming up.

My plan was to find Small Town, USA (which turned out to be Bowling Green KY, USA), open a gym where there was no boxing, teach what I have learned, and film it as the team grew organically. The result is the [Boxing Science Academy](#) website. The truth is, a big ring, dozens of bags and tons of expensive equipment are not necessary to learn real boxing. It's a person on person sport. All you need is another human being in front of you. Everything else is valuable, but secondary. I filmed nearly 200 training days, for over a year, at the BGKY Boxing Club. I've organized the website in a way that you can either search for specific lessons, or go through the suggested "[phases](#)".

WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

How to Use This Resource

The foundation of your first-year plan is the progression of strength and conditioning. Everyone will have their own journey as they move through the [Skill](#), [Nutritional](#), and [Mental/Emotional](#) phases, but the conditioning durations are strongly suggested. It won't matter how much you understand, or are aware of the concepts of strength and conditioning, it will not help you get stronger or faster. You actually have to put the work in and do it. All the other themed phases are *go at your own pace*.

This document is filled with hyperlinks (ex. [Boxing Science Academy](#)). When you hover your cursor over [blue](#) text with an underline, and click it, you will either be taken to a page on the website, or another place in this document.

You are provided with more tools than most beginners have available to them. Be patient and disciplined. Read the training manual and explore the [Lessons](#), [Preparation](#) and [Trouble Shooting](#) pages inside the [Boxing Science Academy](#). Give an enthusiastic friend or family member a copy of the training manual to download, and begin your pugilistic journey as a team. I cannot reiterate this enough. The best way to learn real boxing is with another person.

You can also consider asking one of your buddies (or family members) to be your coach, if you cannot find anyone to box with. Your *coach* can learn basic [Focus Mitts](#) (free and members) and support you in getting precise and accurate.

When you are ready, begin in this order:

Step 1 – Download and read this Manual (it may not all make sense now but a once over preview will be beneficial)

Step 2 – Hang the [basic boxing workout poster](#) (free) in your gym area

Step 3 – Read and practice the [Critical First Few Days](#) (free) book and videos

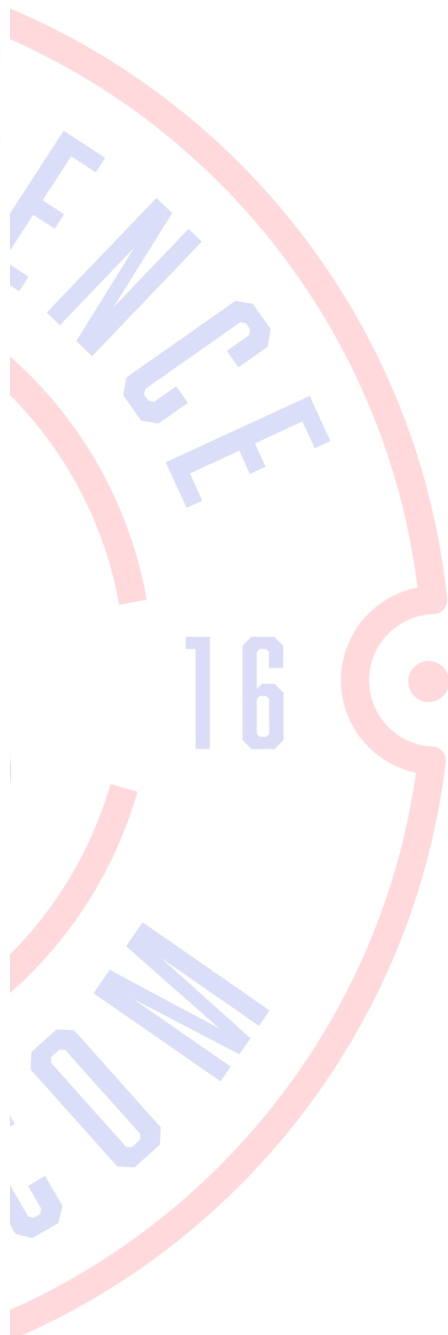
Step 4 - Begin with [Phase 1](#) (member's area) and the 1st 4 weeks of Training

Step 5 – Come back to this manual and study how the other phases intertwine

Lastly, some of the information in this manual may seem a bit outdated and less romantic than the latest fads you see on TV or the internet. Counting calories and using the Principle of Progression may seem less enticing than the neighborhood box gym using their Principle of Confusion, or the midnight infomercial's suggestion for rapid weight loss. Most everything here (with conditioning and nutrition) will be found from many different resources. What was introduced in the 1980's is now widespread practice for most athletic and fitness professionals. As a beginner, if you would like to learn more about periodization, my recommendation is to pick up a book by Tudor Bompa, and Nancy Clark for nutrition.

Now go get started. Good Luck, and see you in the ring,

Coach Chadrick Wigle



One Calendar Year (52 weeks)																									
	4		8		12		16		20		24		28		32		36		40		44		48		52

Stages	general prep	specific prep	pre-competition season	main season	peak/off

Skill Phases	1 st 4 wks	Jab drills	St8 Rear	Str8 Body	Lead Hk	Counters	Southpaw	Angles	Uppercut	Body shot	Review and practice as needed

Conditioning Phases	Just Box	Simple	Basic	Gen-Bar	Gen-Dum	MXS	Speed	Maint	Gen	MXS	Speed	Maint	Off

Emotional/Mental Phases	A.	B.	C.	D.	E.	F.	G.	H.	I.	J.	K.	L.	M.	N.

Nutrition Phases	Education/Observation	Implementation	Refinement	Practice	Perfection

General Stage: Over all foundation to build from in all areas, with an introduction to each, but a focus on boxing fundamentals.

Specific Preparation Stage: Drilling and sparring become more intense now that you have more tools and experience. Add "mock fight" days.

Pre-competition Stage: Development Bouts and "outside sparring" as exhibition experience in front of others to evaluate progress before actual competition

Main Season Stage: When you're ready, begin looking for more challenging sparring and possibly actual matches if you and your team think you are ready.

Peak: This is the time to climax at your one year goal, whether that's a real match, a novice tournament, or random hard spar at another gym to challenge you.

Off: Take a couple of weeks to repair injuries, recover, and allow your body and mind to get ready for next season. Use low intensity and less stressful activities, like hiking to keep your routine.

Emotional/Mental Phases: A. Goal Setting, B. Meditation/Relaxation Cues, C. Self-Observation, D. Positive Self-Talk, E. Opponent Observation, F. Focus Cues, G. Power Phrase, H. Anxious Dial, I. Pre-game Rituals, J. Visualization, K. Highlight Reel, L. In the Moment, M. Leave it at the Door, N. 4 Attributes to Outcomes

Table of contents

Introduction	1
Big Plan Chart	3
Table of Contents	4
Conditioning	5
Annual Plan (1st year boxer)	7
Conditioning Phases	8
Nutrition	10
Some Basic Stuff About What to Eat and Why	11
Basic Skills (excerpts from the Boxing Science Skills Guide)	15
Ready Position	
Jab (Straight Lead)	
Straight Rear Power Punch	
Lead Hook	
Appendix	20
Phase Checklists 1.0	
Skill Phases	
Mental/Emotional Phases	
Nutrition	
Resistance	
Chart 1.0 - Empty Annual Conditioning Plan	22
Instruction 1.0 – 1 st Month	23
Instruction 2.0 – 2 nd Month	24
Instruction 3.0 – 3 rd Month	25
Journal 1.0 – General Prep	26
Journal 2.0 – Maximum Strength	27
Journal 3.0 – Speed	28
Nutrition	
Journal 4.0 – Common Foods	29
Journal 5.0 – Daily Accounts	30
Diagram 1.0 – Food Guide Pyramid	31
Diagram 2.0 – Food Guide Plate	32



Conditioning

WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Conditioning

The Conditioning portion of the manual refers to developing the cardiovascular, and musculature systems of your body. First item, go to the Appendix and print the **Conditioning Annual Plan [Chart 1.0](#)**, and fill in your dates with the month you are starting at the top of the far-left column and the day in the far-left of the top row. My suggestion is to not do any substantial conditioning the first month. All you must do is simply box, and practice your new skills, progressing and improving. You're here to learn how to box, so make that your focus. Months 2 and 3 will give you time to be an "entry level athlete" as you begin to work with basic exercises through stations/circuits. Use the guidelines in the appendix as your starting tool and these **Video Examples** as supplementation resources.

[Basic Strength Circuit](#) (bar mechanics with \$25, build yourself, at home set)

[Basic Cinder Block Circuit](#)

[Basic Low Weight Circuit](#)

Once you are past the first couple of months consider investing into a better home gym, or monthly membership at facility with weights/resistance tools. Until then, do what I have outlined here with the journal tools found in the [Appendix](#).

To get a better understanding of what your annual conditioning plan will look like see the example directly below, along with the summaries/charts to better explain what to do.

Print the empty chart found in the Appendix [Chart 1.0](#), and enter the dates as pertains to YOUR schedule (use the above example as a reference). Remember to “black out” the dates in the months with less than 31 days. Use the matching journals for the list of exercises to use in each phase.

General Preparation Phase:

- balanced health for musculature and skeletal (bones and joints) systems
- prepares body for overall conditioning before sport specific exercise
- non-stop circuits or high rep (20+) sets working muscles on all sides of joints
 - still use failure/fatigue; add weight next day after achieving maximum reps allowed
- 10-15 exercises
- 3mi/5km roadwork (or cardio machine if you have lower body injuries, etc) for continuous aerobic

Training Parameters for <i>General Prep</i> Phase Circuit Training (CT)		
Training Parameters	Novice Athletes	Experienced Athletes
Duration of Phase	8-10 weeks	3-5 weeks
Load	30-40%	40-60%
No. of stations per circuit	9-12 (15)	6-9
No. of circuits per session	2-3	3-5
Total time of CT session	20-25 minutes	30-40 minutes
Rest interval between exercises	90 seconds	60 seconds
Rest interval between circuits	2-3 minutes	1-2 minutes
Frequency per week	2-3	3-4

Maximum Strength Phase:

- Phase to train muscles/body to fire as many motor units as possible in each movement
- Use multi-joint movements with as many muscles as possible
- Use plyometrics to train ‘start’ power
- Higher weight (68-80% 1RM [one repetition with maximum weight]) less reps (0-5) and more sets
- 30 minutes roadwork (10 minute warm-up, 10 minutes repeating 100m sprint/walk back, 10 minute 60-80% continuous jog)

Training Parameters for <i>Maximum Strength</i> Phase (MxS)	
Training Parameters	Work
Load	68-80%
Number of Exercises	3-5
Number of Repetitions per set	1-4
Number of sets per session	6-10 (12)
Rest interval	3-6 minutes
Frequency per week	2-3 (4)

WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Speed Phase:

- Fast paced repetition drills for 'reactive' power and agility
- LOW weight (possibly less than what is used for competition), moderate number of high speed reps
- 30 minutes roadwork (10 minute warm-up, 10 minutes "light posts" [run to one light post 100%, next 50%; repeat], 10 minute 60-80% continuous jog)

Training Parameters for <i>Speed</i> (ballistic) Training	
Training Parameters	Work
Load	Light (less than competition)
Number of Exercises	2-5
Number of repetitions per set	10-20
Number of sets per session	3-5
Rest interval	2-3 minutes
Speed of execution	Explosive
Frequency per week	2-4

Maintenance Phase:

- 3 off days opposite from boxing days using 1 day for general, 1 for maximum strength, 1 for speed
 - Use 60% of your workload (Ex. General phase – instead of 3 sets of bench press of 100lbs @ 20 reps ... do 3 sets of 60lbs; Speed Phase – instead of 3 sets of 10 squat jumps ... do 3 sets of 6 squat jumps; etc)

Nutrition



WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Nutrition Guidelines

(this is similar to the document I send to the BGKY Boxing Team)

Here are some general nutrition tips regarding weight loss and maintenance.

Step 1

Keep a journal for a week (see below *Observe-Evaluate-Implement a New Plan*)

Step 2

Pick a desired weight (class). If you want to lose a lot of weight consider that a healthy drop is about 1-2lbs per week, or 8-10lbs per month. Pick from *column A* of the weight class table. (*Editor's Note:* As of this document posting on the Boxing Academy website, June 2017, AIBA just announced two new weight categories for females, and the plans to reduce the amount of men's categories for the 2020 Olympics. We have not been told what the new weights for the men will be, therefore some of the weights in the charts will not be accurate or relevant by the time you read this. As a beginner "at-home" boxer simply concern yourself with getting to a healthy, manageable and effective weight [you can still use the below chart for a base level guideline], getting used to boxing and the rest will fall together when it needs to.)

Step 3

What does your average daily activity/expenditure look like (remember that your exercise/training is separate)? Sitting at a desk might be *Low*, a mechanic or active mother *Moderate*, and a lumberjack or construction worker *High*. Note: often when a person has high activities they have a low lifestyle.

Step 4

Plan your day accordingly whether it's a light day, a regular day without exercise, a conditioning day or a boxing day. Schedule your meals to handle your base calorie needs, and if you plan to exercise, consider having either a pre or post training snack that accounts for the calories you burn during the activity.

Observe – Evaluate – Implement a New Plan

Let's say you know there's something wrong with your car and take it to the mechanic. First thing they'll have to do is diagnose the problem. No different here. First, before any kind of diet, look at what is really going in and out of your body. Keep a journal for at least a week, making notes of everything going in (foods, calories, water, carbs/proteins/fats, etc.) and going out (waste, calories burned during exercise, water). The trick is to not judge your actions and keep going as you normally would. Notice your deficiency in whole foods, and patterns like survival eating at night because you've been busy most of the day and gone without food. Also begin to quantify the foods you regularly eat (example: how many calories, g protein, g carbs, g fats in a piece of bread) so you have a quick reference and more accurately knowledgeable understanding of what you are ingesting.

When to Eat

- **King - Prince - Pauper**
 - Eat your largest number of calories in the morning (bigger breakfast, medium lunch, and less at night).
- **Snacks**
 - Add snacks accordingly to your day. For example, if you are a boxer striving towards a weight class of 165lb then plan for a snack after your boxing workout taking in the same number of calories you just burned at practice. If you don't train or practice on a particular day, then all of your calories come from your basic daily allowance.

WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Calorie Intake by Weight Class

Note: a healthy diet for a weight class athlete is 60%/20%/20% : carbs/protein/fats

Example: how to read the table below; find your goal weight class

112 (f)	1120 cal	1456=218/73/32	1680=252/84/38	1904=286/95/42
---------	----------	----------------	----------------	----------------

Meaning a 112lb female needs 1120cal to simply exist. If she has low activity outside of purposeful exercise add 336cal, for a total of 1456 calories. Using 4cal per gram of both protein and carbs, and 9cal per gram of fats; 218g of carbs, 73g of protein, 32g of fat.

A	B	C	D	E
Weight Class (lb)	Rest Met Rate	Low Activity +30% = g of Carbs/Pro/Fats	Mod Activity +50% = g of Carbs/Pro/Fats	High Activity +70% = g of Carbs/Pro/Fats
112 (f)	1120 cal	1456=218/73/32	1680=252/84/38	1904=286/95/42
132 (f)	1320	1716=282/86/38	1980=297/99/44	2244=337/112/50
165 (f)	1650	2145=322/107/48	2475=371/124/55	2805=421/140/62
108 (m)	1080	1404=210/70/31	1620=243/81/36	1836=275/92/41
114 (m)	1140	1482=222/74/33	1710=256/86/38	1938=291/97/43
123 (m)	1230	1599=240/80/36	1845=277/92/41	2091=314/105/46
132 (f)	1320	1716=282/86/38	1980=297/99/44	2244=337/112/50
140 (m)	1400	1820=273/91/40	2100=315/105/47	1380=357/119/53
152 (m)	1520	1976=297/99/44	2280=342/114/51	2584=388/130/57
165 (m)	1650	2145=322/107/48	2475=371/124/55	2805=421/140/62
178 (m)	1780	2314=347/116/51	2670=400/134/59	3026=454/151/67
200 (m)	2000	2600=390/130/58	3000=450/150/67	3400=510/170/76
225 (200+)	2250	2925=439/146/65	3375=506/169/75	3825=574/191/85

5 Nutrients

- Water (0cal/g)
- Vitamins/Minerals (0cal/g)
- Carbohydrates (4cal/g) – initial fuel for muscles, quickest to process
 - Carbs are basically Simple (quick) or Complex (slow). Simple sugars will enter the blood stream quickly (spike), and complex carbohydrates take longer (gradual). We need carbohydrates for fuel, but an excess will turn to fat, for storage when our bodies might need it.
 - Food sources are fruits, vegetables, grains and starches
- Proteins (4cal/g) – builds/repairs muscle structure, medium time to process, last fuel source
 - Found in meats, poultry, fish
- Fats (9cal/g) – quickly stored in body reserves, takes longer to process, fuel for longer activities
 - Trans Fats – eliminate completely; commercial prepackaged baked goods/snacks, fried foods, pre-mixed products (cakes, etc), anything “partially hydrogenated”
 - Saturated Fats – moderate intake; preferred from high quality sources of meats/dairies
 - Monounsaturated Fats – “good” fats including avocados, olives, most nuts, natural peanut butter
 - Polyunsaturated Fats – “good fats including walnuts, flaxseed, fish, soymilk/tofu, Omega-3’s
- Alcohol (7cal/g) – Note: NOT a nutrient but does contain calories

WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Energy Systems

(NOTE: this energy section is not important for you to understand about “nutrition”. It may be a bit confusing. You don’t need to KNOW it. I believe it has value to explain why we need certain foods over another, and how those energy sources (food) are used for fuel. Ex. “The Atkins diet says not to eat carbs, but you suggest 60% from carbs. Why?” This energy section is the answer to why, because most of our activities use carbs for fuel.)

Energy is needed to perform work/create force for muscular contraction. Foodstuff is converted into a high-energy compound known as adenosine triphosphate (ATP) which is stored in muscle cells

- **Anaerobic Alactic**
 - AN (without) AEROBIC (oxygen) + A (without) LACTIC acid
 - Also known as: ATP-CP system
 - ATP is used from small amount in muscle stores and with creatine phosphate (CP)
 - Approximately 0-10 seconds of intense work
- **Anaerobic Lactic**
 - AN (without) AEROBIC (oxygen) + (with) LACTIC acid
 - Also known as Lactic Acid system
 - Glycogen (sugars stored in muscles) is used to create ATP, with lactic acid being a by-product
 - Approximately up to 40-70 seconds of intense activity
- **Aerobic**
 - (with) AEROBIC (oxygen)
 - Sometimes referred to as “cardio” because the cardiorespiratory system is used to provide oxygen to breakdown glycogen, fats, proteins, with byproducts of carbon dioxide and water through sweat and exhalation
 - Fuel duration
 - 40sec-25min is glycogen (sugars)
 - 25min-2hr is fat
 - 2hr+ is protein
- **System Overlap**
 - It is not a clean line with time. Two systems will overlap as fuel sources transition from one to another depending on duration and intensity
- **Anaerobic Threshold**
 - The point where the anaerobic and aerobic systems meet
 - Some studies suggest this occurs at 60-70 seconds (Keul, Doll, Keppler 1969)
 - A good indicator can also be heart rate with higher levels being anaerobic (>170bpm) and aerobic lower (<168bpm)
- **System Training**

ENERGY SYSTEMS AND TRAINING-PROGRAM VARIABLES				
TRAINING PROGRAM VARIABLES	ENERGY SYSTEM			
	ANAEROBIC ALACTIC	ANAEROBIC LACTIC	AEROBIC	
			BASE	POWER
Method	Intervals	Intervals	Continuous	Intervals
Activity	Sport related	Sport related	Alternatives	Sport related
Intensity	Max speed/effort	Near max	60-70% VO2 max	85-95% VO2 max
Work time	<10 sec	15sec-2min	20-60 minutes	10sec-3min
Work/Pause ratio	1:5 or 1:6	1:5 to 1:6	-	1:2
Sets/set volume	<60 sec	<3 min	-	3-5 min
Rest between sets	3-10 min	10-15 min	-	10-15 min
Total work volume	2-3 min max	<12 min	15-60 min	15-60 min
Training period	8-12 weeks	8-12 weeks	8-12 weeks	8-12 weeks
Frequency	Hard-easy (48hr)	Hard-easy (48hr)	Daily	Hard-easy (48hr)

WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Calories Expenditure for Common Boxer Activities

(values were calculated based on a chart from the [Nutri Strategy](#) website)

Activity	cal/lb/hr
BGKY Boxing Drills Class, rope & spar	4.16
BGKY Boxing Conditioning Class	2.95
BGKY Boxing Fitness Class	3.3
Boxing, in ring	5.45
Boxing, punching bag, light	2.72
Boxing, punching bag, vigorous	3.18
Boxing, Sparring	4.08
Jumping rope, fast	5.45
Jumping rope, moderate	4.54
Jumping rope, slow	3.63
Running, general	3.63
Calisthenics, vigorous	3.63
Calisthenics, light	1.59
Circuit training, minimal rest	3.63
Health Club exercise	2.49
Stretching-mild	1.14
Swimming, fast	4.54
Swimming, slow	3.18

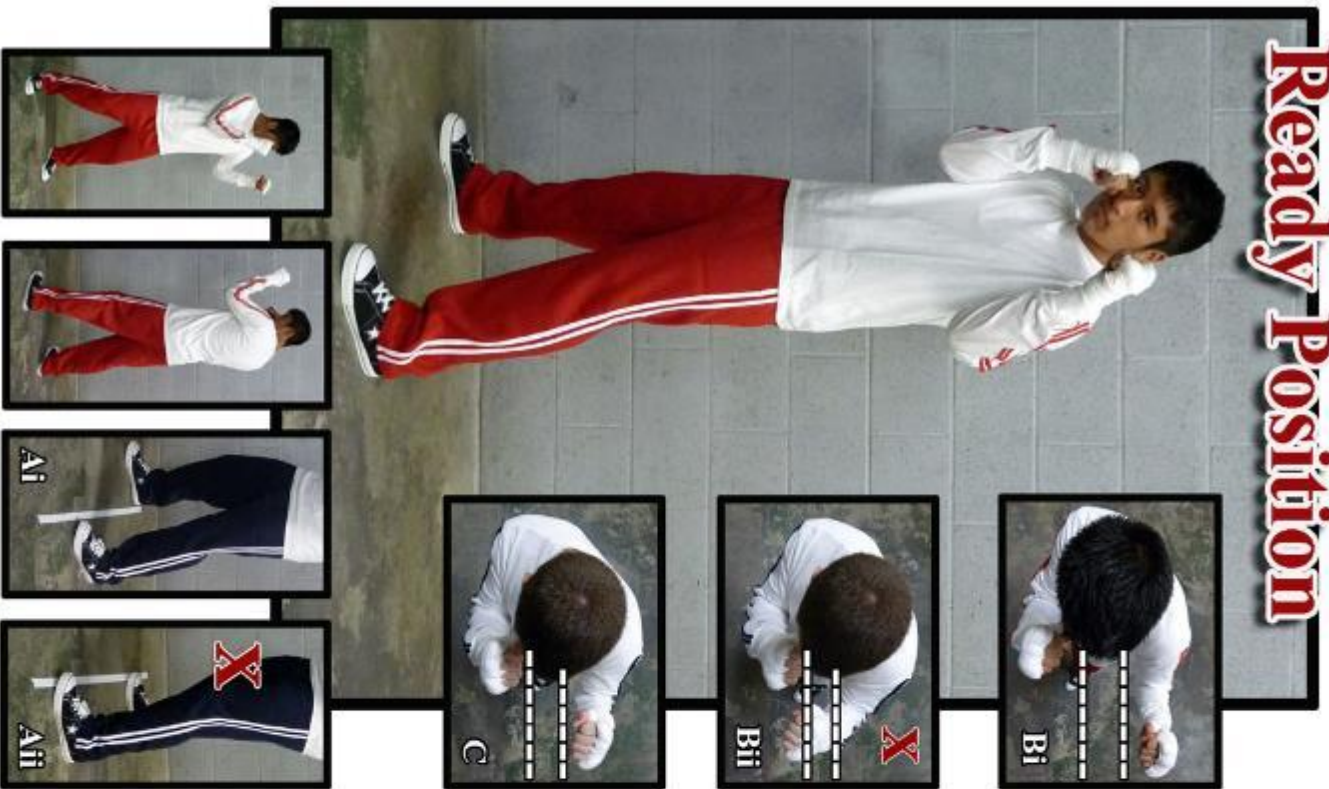
WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Basic Skills

excerpts from

**Boxing Science Skills Book:
A Reference Guide for Boxing Beginners**

Ready Position



Ready Position

-The Ready Position is the **Set-Up** for potentially all other movements in boxing. The first rule of boxing is to protect yourself at all times, with your hands up and your chin down

Checklist

- ___ Base - Feet are at least shoulder width apart or slightly greater, with the heel of the right foot on one side of an imaginary line and the left toes on the other side of the line (**pic. Ai**). You will have a weak base and be easily knocked off balance if your feet are in line, like standing on a tight rope (**pic. Aii**)
- ___ front/left foot is flat to act as the "anchor" and the back/right foot is on ball with the heel off the ground like a gated sprinter (optional- not shown)
- ___ knees are slightly bent, acting as shock absorbers to allow fluid movement (if the legs are straight in a locked out position, all your weight will be through the heel instead of across entire foot. This will diminish the quality of your base of support
- ___ hips are loose
- ___ the right elbow is pulled tight to the ribs, sitting on an imaginary shelf at the navel, which is the foul-line for the sport of boxing
- ___ the left elbow is at 90degrees and sits behind the fist(when the fist sits behind the elbow, the punch will come from a hammering motion instead of a drive
- ___ the right shoulder is pulled back with the left shoulder forward, creating a narrow target with the body
- ___ the right hand (thumb) touches your nose/right cheekbone
- ___ the left hand is at cheekbone/eye level, 6-10" in front of your face, just to the left of your eye(**pic. Bi**) (placing it directly in front of your eye will create a blind spot and interfere with your vision) (**pic. Bii**)
- ___ head down/chin in your chest

Coaching Tips

- look between the gloves with hands on either side of your eyes (**pic. C**). If you are looking over top of your glove, your hand is too low and must return back to position
- raise your hips for **MOBILITY** and lower your hips for **STABILITY**

Left Jab (1)



Left Jab (1)

- Use the Ready Position (**pic A**) to **Set-Up** the Left Jab (1)
- Initiate** the Jab's movement by driving the left elbow up, through the target; depending on the strategy, **Impact** can be anywhere on the scoring target; jaw, eyes, eyebrows, nose, forehead, throat, collarbone, shoulders, arms, wrists, hands, elbows, chest, ribs, belly, etc.
- the Jab is very versatile, and the **Follow-Through** could be minimal, to create speed, or full on like a battering ram knocking the head up and back, setting up for another punch
- the **Purpose** of the Jab is to set your range (both offensively and defensively), set up other point scoring power punches, and to keep you in balance

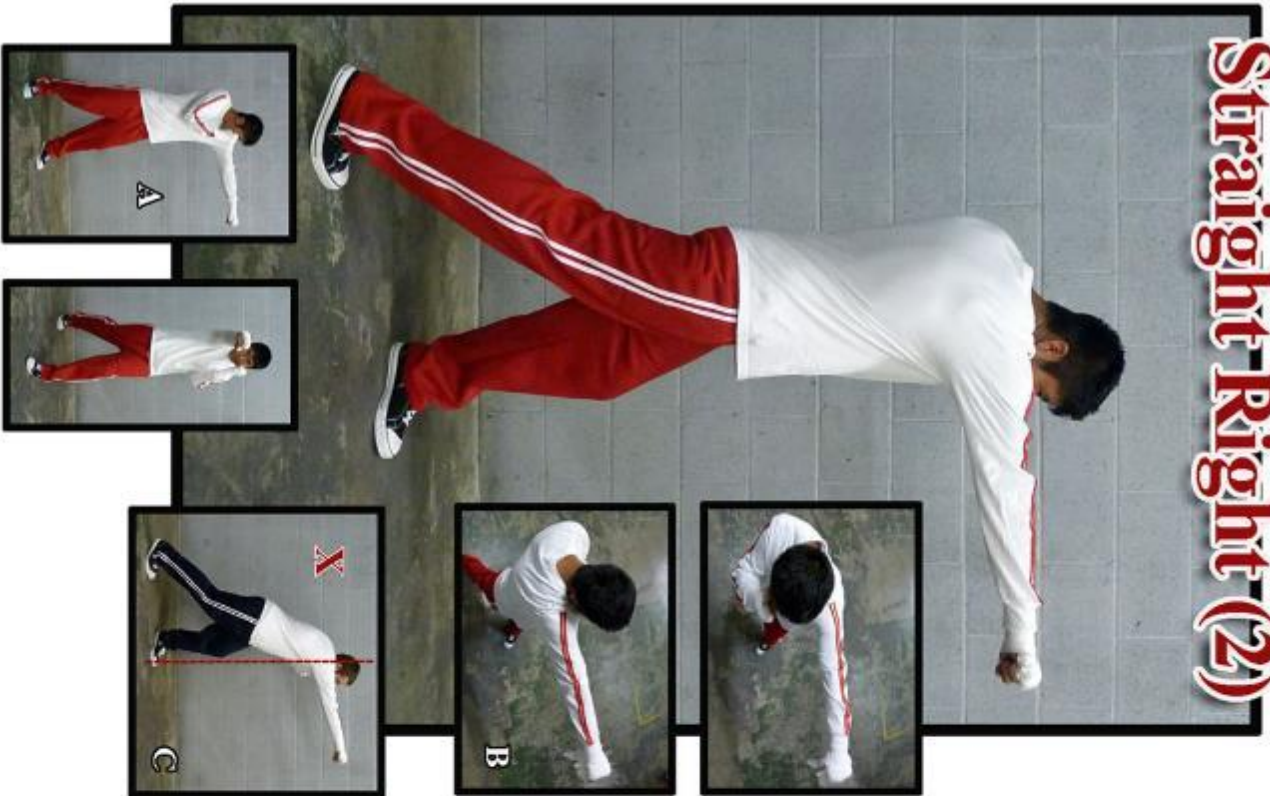
Checklist

- ___ Base - Feet are at least shoulder width apart or slightly greater
- ___ back/right foot maintains position on the ball of the foot
- ___ both knees are slightly bent
- ___ maintain weight distribution evenly down the center, 50/50
- ___ the right elbow stays tight to the ribs, resting on an imaginary shelf at the foul line
- ___ create a narrow torso target by pulling the right shoulder back with the left shoulder forward protecting the jaw
- ___ left arm is straight with palm down, striking with the knuckles
- ___ right hand is touching right cheekbone/nose
- ___ head down/chin in your chest, nose and eyes are "looking down the pipe", focused on the target
- Do NOT** look over the punch watching where punch is going, but instead **Do NOT** allow your right elbow to "fly away"

Variation

- a common variation is to step with the Jab. In reality you will step with the Jab 90% of the time, generating force by pushing off the back leg and reaching with your front/left toe (do not heel strike). The key is to know YOUR range stepping 3inches, 6inches, 12inches, or at a standstill not stepping at all

Straight Right (2)



Straight Right (2)

- Use the jab (1) (pic.A) to Set-Up the Straight Right (2)
- Initiate the Straight Right's movement by pulling left elbow hard to the body and shifting 60% of your weight from the back leg to the front leg
- Impact is at any point on the front of the scoring target (when the Straight Right comes across the target it is a Right Cross. If the elbow is locked at an acute angle less than 180 AND rotates from the shoulder, this is an Overhand Right. Both the Right Cross and Overhand Right are often confused with the Straight Right. They are both advanced offensive skills that will not be covered in this text)
- For a full Follow-Through, point the right toe to 12 o'clock, penetrating wrist deep through the target, palm down, striking with the knuckles

Checklist

- Base - Feet are at least shoulder width apart or slightly greater
- front/left foot remains flat to act as the "anchor" and the back/right foot pivots on ball so toes point to 12 o'clock like squashing a bug
- knees are slightly bent, even the front knee with the posting leg (if the front "posting" leg is locked out, all of the weight will be through the heel instead of across entire foot, and the leg will act as a pole and may "vault" yourself off balance
- weight shifts slightly from center to 60% in left hip/leg. The left hip acts as the rotational axis, where the body will pivot
- the left elbow is pulled tight to the ribs
- the left shoulder is pulled back with the right shoulder forward,
- the right arm is straight with the palm down, follow through is wrist deep, striking with the knuckles (pic.B)
- the left hand is touching left cheekbone
- head down/chin in your chest, nose and eyes are "looking down the pipe", focused on the target. Keep your "nose behind your toes" to assist with balance (pic.C)
- Do NOT** allow your left elbow to "fly away"

Variation

- the Straight is a *linear punch*, using the body's joints to have the fist travel in a straight line. A *rotational punch* is when at least one joint is locked. That's the difference between a straight punches and hooks. With that in mind practice your *linear* Straight Right at short, medium, and long ranges. With all ranges, generate force from the body and allow the arm to extend as needed

Coaching Point

- think with "3 points for power"; shoulder, hip and toe. Pull the left shoulder, point the right toe and the hip will carry the weight

Left Hook (3)



Left Hook (3)

- Use the Straight Right (2) (**pic.A**) to **Set-Up** the Left Hook (3)
- Initiate** the Hook's movement by pulling right elbow hard to the body and shifting 60% of your weight from the front leg to the back leg
- Impact** is at any point from the temple to the ear and/or the jaw line
- For a full **Follow-Through**, point the left toe to 3 o'clock, penetrating elbow deep through the target, Amateur Style; elbow up and palm down

Checklist

- ___ Base - Feet are at least shoulder width apart or slightly greater
- ___ back/right foot goes flat to act as the "anchor" and the front/left foot pivots on ball so toes point to 3 o'clock
- ___ knees are slightly bent, even the back knee with the posting leg (if the back "posting" leg is locked, out all of the weight will be through the heel instead of across entire foot, and the leg will act as a pole and "vault" yourself off balance
- ___ weight shifts from front to 60% in right hip/leg. The right hip acts as the rotational axis, where the body will pivot
- ___ the right elbow is pulled tight to the ribs
- ___ the right shoulder is pulled back with the left shoulder forward, creating a narrow torso target
- ___ left elbow is up with palm down, follow through is wrist deep (for medium follow-through) or elbow deep (for full follow-through). Elbow is at a 90 degree angle (**pic. D1**)
- ___ right hand is touching right cheekbone
- ___ nose and eyes are pointing/looking at target (NOT watching where punch is going)
- Do NOT** allow your right elbow to "fly away" (**pic. B**)

Knuckles

- Amateur- elbow up and palm down so knuckles are parallel to floor (**pic. C1**).
- Occasionally referee will call "slapping" if using a pro style with palm facing you (**pic. C1i**) (Pro style protects thumb better)

Variation

- Long Hook (135 degrees at elbow) (**pic. D1i**) is designed to set up the straight right by creating an opening with the jab (**pic. E1**) then the long hook (**pic. E1i**). This is not a power shot because your palm will be facing away from you (**pic. C1ii**). When you notice your opponent reaching to "catch" the jab, use this as an opportunity to come around the opponent's defensive hand with the long hook. Start practicing by hitting the heavy bag or mitts at 50% intensity.



Appendix

WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Checklist 1.0

Skill Phases

- Phase 1 – [1st 4 Weeks](#)
- Phase 2 – [Jab Drills](#)
- Phase 3 – [Straight Rear Drills](#)
- Phase 4 – [Straight Body Shots](#)
- Phase 5 – [Lead Hook](#)
- Phase 6 – [Counters](#)
- Phase 7 – [Southpaw & Opposites](#)
- Phase 8 – [Angles](#)
- Phase 9 – [Uppercuts & Short Shots](#)
- Phase 10 – [Short Body Shots](#)

Mental/Emotional Phases

- Phase A. Goal Setting
- Phase B. Meditation/Relaxation Cues
- Phase C. Self-Observation
- Phase D. Positive Self-Talk
- Phase E. Opponent Observation
- Phase F. Focus Cues
- Phase G. Power Phrase
- Phase H. Anxious Dial
- Phase I. Pre-Game Rituals
- Phase J. Visualization
- Phase K. Highlight Reel
- Phase L. Live in the moment
- Phase M. Leave it at the Door
- Phase N. 4 Attributes to Outcomes

Nutrition Phases

- Phase 1. Education/Observation
- Phase 2. Implementation
- Phase 3. Refinement
- Phase 4. Practice
- Phase 5. Perfection

Instruction 1.0 – Conditioning Month 1

1st Month in the Gym

**Just do boxing and get
used to it.**

Instruction 2.0 – Conditioning Month 2

2nd Month

**5 sets of 10 repetitions
for each exercise**

([click here](#) for example videos)

Shoulder Press

(you can use bricks, water bottles, dumbbells, barbells, etc. just get it over your head, with your elbows to your body)

Free Body Squats

(keeping your knees in line with your laces, knees behind the toes, sitting your weight from your hips into your heels)

Push-ups or Bench press

(If you are not able to do push-ups then do bench press with a lighter but challenging weight)

Sit-ups

(do not pull on your head, get your elbows to your knees)

Reverse Flys

(back flat/parallel to the floor; shoulders and hips up, with chest down)

Jog for 10 minutes

Instruction 3.0 – Conditioning Month 3

3rd Month

**3 sets of 20 repetitions
for each exercise**

Shoulder Press

(you can use bricks, water bottles, dumbbells, barbells, etc. just get it over your head, with your elbows to your body)

Free Body Squats

(keeping your knees in line with your laces, knees behind the toes, sitting your weight from your hips into your heels)

Push-ups or Bench press

(If you are not able to do push-ups then do bench press with a lighter but challenging weight)

Sit-ups

(do not pull on your head, get your elbows to your knees)

Reverse Flys

(back flat/parallel to the floor; shoulders and hips up, with chest down)

Jog for 20 minutes

Journal 1.0 – General Prep Journal

<i>Gen Prep Journal</i>	Date:			Date:			Date:		
	Sets			Sets			Sets		
	1	2	3	1	2	3	1	2	3
EXERCISE	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps
Shoulder Press	/	/	/	/	/	/	/	/	/
Lat Pull-down	/	/	/	/	/	/	/	/	/
Squats	/	/	/	/	/	/	/	/	/
Chest Press	/	/	/	/	/	/	/	/	/
Bent Row or Seated Row	/	/	/	/	/	/	/	/	/
Good Morning or Deadlift	/	/	/	/	/	/	/	/	/
Upright Row	/	/	/	/	/	/	/	/	/
Adductors	/	/	/	/	/	/	/	/	/
	/	/	/	/	/	/	/	/	/
Bicep Curl	/	/	/	/	/	/	/	/	/
Tricep Skull Crushers	/	/	/	/	/	/	/	/	/
Calf Raises	/	/	/	/	/	/	/	/	/
Forearm – Extensors	/	/	/	/	/	/	/	/	/
Forearm – Flexors	/	/	/	/	/	/	/	/	/
Neck (1 of each 4 ways)	/	/	/	/	/	/	/	/	/
	/	/	/	/	/	/	/	/	/
Double Crunch	/	/	/	/	/	/	/	/	/
Seated Leg Raise	/	/	/	/	/	/	/	/	/
Lying Twist	/	/	/	/	/	/	/	/	/
	/	/	/	/	/	/	/	/	/
Y's T's and W's	/	/	/	/	/	/	/	/	/
	/	/	/	/	/	/	/	/	/
Roadwork	3mi/5km roadwork (or cardio machine) for continuous aerobic								
	/	/	/	/	/	/	/	/	/
Stretching – Flexibility									

WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Journal 2.0 – Maximum Strength Journal

<i>MxS Journal</i>	Date:			Date:			Date:		
	Sets			Sets			Sets		
	1	2	3	1	2	3	1	2	3
EXERCISE	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps
Warm-up Sets									
Shoulder Press	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Squats	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Medicine Ball Rotations	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Kettle Bell Swings	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Main Sets									
Thrusters (Squat to Press)	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Partial 1 Arm Push-ups	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Drop Squat Jumps	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Medicine Ball Shot Put	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Lateral Bound (set-go-land-repeat)	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Medicine Ball Side Throw (set-go-land-repeat)	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Core									
Pikes (V-sit ups)	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Grab-n-Go Medball Twist	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Y-T-W-L's	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Roadwork – 30 minutes	10 min warm-up, 10 min 100m sprint/walk back; repeat, 10 min 60-80% continuous jog								
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Stretching – Flexibility									

WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Journal 3.0 – Speed Journal

<i>Speed Journal</i>	Date:			Date:			Date:		
	Sets			Sets			Sets		
	1	2	3	1	2	3	1	2	3
EXERCISE	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps	wt/reps
Warm-up									
Squats	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Pushups	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Main									
Squat Jumps	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Cariocas	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Medball Chest Pass	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Single Leg Lateral Bounds	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Dumbbell Pyramid Punch	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Ickey Shuffle	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Core									
Sit-ups for Speed/Time	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Seated Medball Twist	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Y's T's and W's	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Roadwork 30 minutes	10 minute warm-up, 10 minutes "light posts", 10 minute 60-80% continuous jog								
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /	/ , / , /
Stretching – Flexibility									

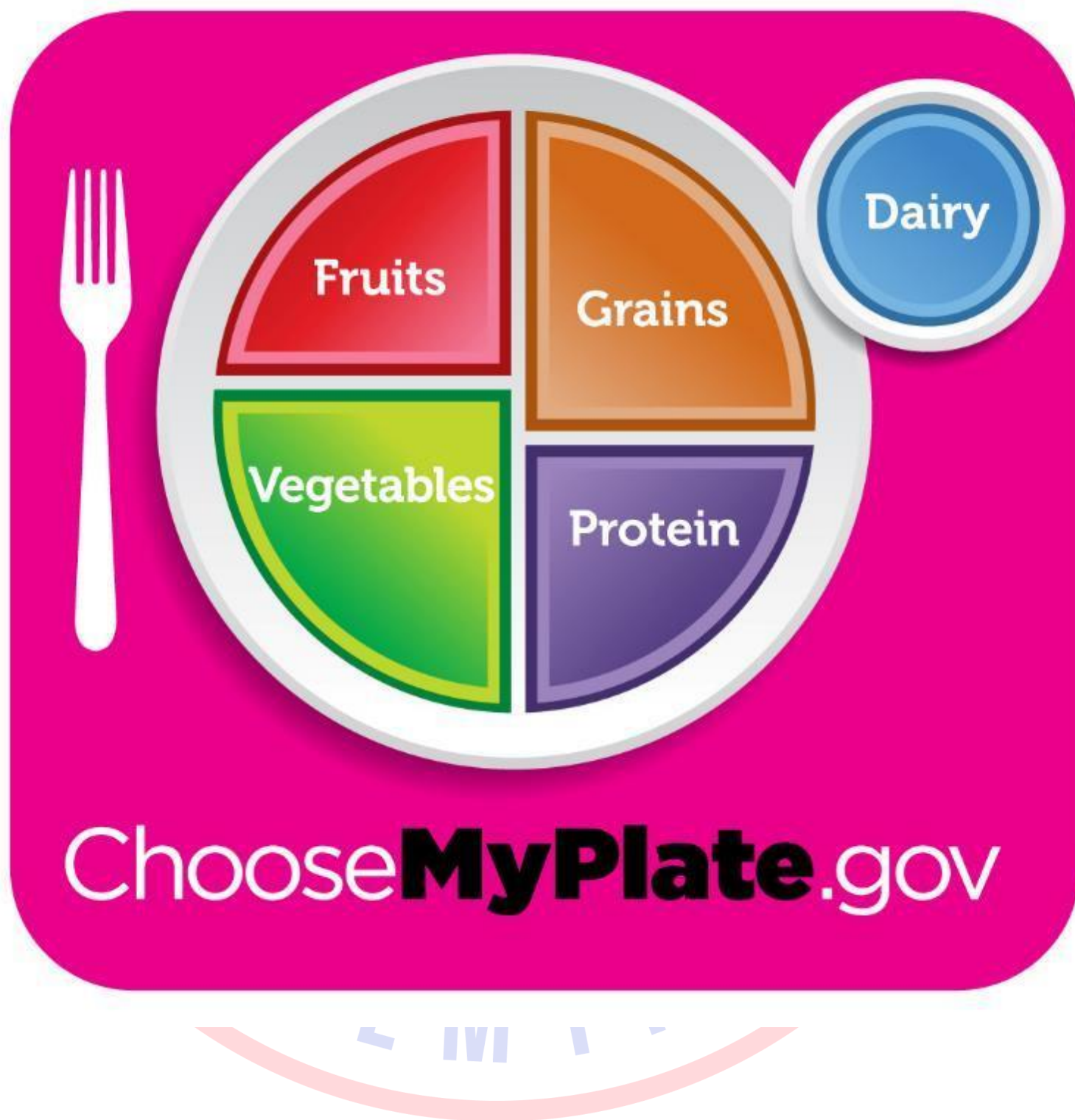
WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Diagram 1.0 – Food Guide Pyramid

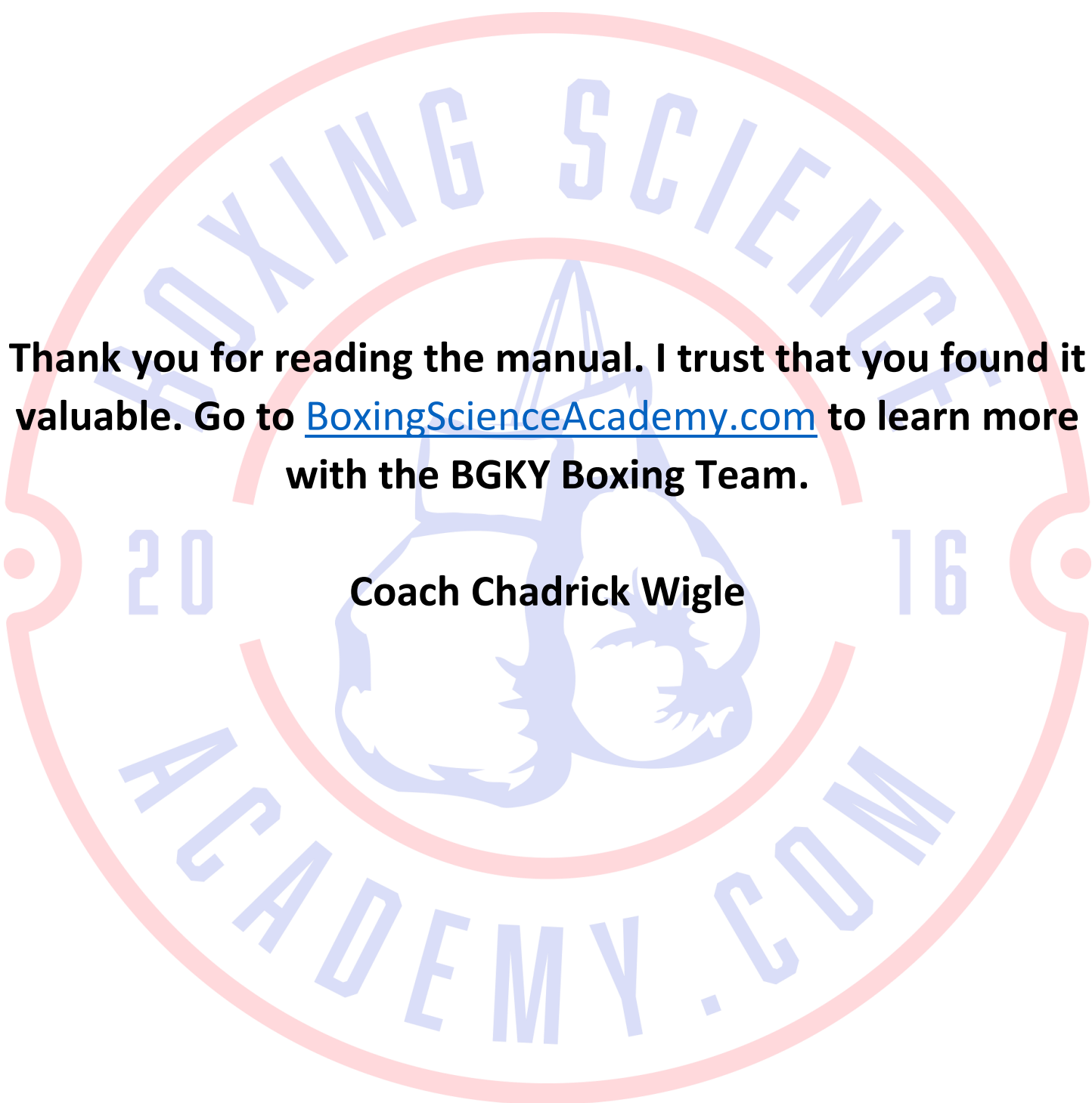


WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.

Diagram 2.0 – Food Guide Plate



WARNING: Boxing is a contact sport where injury and/or death may result. The information on BoxingScienceAcademy.com and associated materials are intended for educational and instructional purposes only. Use at your own risk. Under 18 years old please use adult supervision if attempting any of these drills. Boxing is a physically demanding activity. Please check with your doctor before you begin any new sport or fitness program.



Thank you for reading the manual. I trust that you found it valuable. Go to BoxingScienceAcademy.com to learn more with the BGKY Boxing Team.

Coach Chadrick Wigle