

An Annual Training Plan for the sport of Brazilian Jiu-Jitsu

Kiyoshi Perkins, 300199345

SPSC 4199 – 001 Physical Education & Coaching Methods

Dr. Gord Sturrock

October 15 2017, 23:59, Blackboard

## BRAZILIAN JIU-JITSU: THE GRAND SLAM PREPARATION



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## **Contextual Analysis of Brazilian Jiu-Jitsu**

### **Introduction to the Sport**

The sport of Brazilian Jiu-Jitsu (BJJ) has grown in popularity at a fast rate, gaining initial traction from the early days of the Ultimate Fighting Championship (UFC) in the mid-1990's.

As the decade of 2010 looks to close, a Jiu-Jiteiro – a practitioner or competitor of Brazilian Jiu-Jitsu – can compete across the world in amateur and professional contests.

Despite the numerous tournaments, there is no unified rule-set that a Jiu-Jiteiro can train for. BJJ also allows competition in a gi or in no-gi attire, however there is no crossover between the two categories – it is gi versus gi, and no-gi versus no-gi. Competing in a gi means there are rank categories to adhere to, and every Jiu-Jiteiro must compete within their rank; no-gi may similarly utilize the gi ranking system, or it may simply use beginner, intermediate, and advanced categories. There are multiple age categories to consider as well, the most common being Adult and Master's 1. Finally, BJJ has weight classes, defined in imperial pounds and named; matches are restricted within age, rank, and weight categories to create that specific division with specific match lengths.

Because of the potential differences between one rule-set and the next, knowledge of the varying rules is key; this includes aspects such as uniform legality, technique legality. All of the matches are one-on-one, as BJJ is an individual sport. For the purposes of this training plan, all of the selected tournaments operate under the International Brazilian Jiu-Jitsu Federation (IBJJF) rules and regulations, and in the gi. The IBJJF has provided a downloadable rule book which details the technical aspects they expect on their mats (IBJJF, 2015).

BJJ is sport that can have no off-season depending on how many tournaments a Jiu-Jiteiro wishes to compete in. The four tournaments chosen – the IBJJF European Open Championships, the IBJJF Pan-American Championships, the IBJJF Brazilian National Championships, and the IBJJF World Jiu-Jitsu Championships (also known as the Mundials) – create the prestigious Grand Slam series; a gold medal in each of the four tournaments is a difficult but worthwhile challenge for all Jiu-Jiteiros.

BJJ makes use of all three energy systems in the human body, but may draw upon the anaerobic lactic system more than the aerobic energy system depending on the style and the opponent. A high lactic acid threshold is required as well as mental fortitude to carry on when lactate cannot be cleared fast enough. Despite the moniker as "the gentle art", BJJ is considered by many to be a full-body workout. Each Jiu-Jiteiro is responsible for the outcome of their matches and must train accordingly in physical skills and mental skills.

**Introduction to the Athletes**

This annual plan was designed for a Master's 1 division Jiu-Jiteiro, for a male practitioner with at least four years of experience competing and training locally. The Master's 1 division is for adults in the age range of 30 to 35 years old. Each Jiu-Jiteiro develops a style that compliments their body type and prior learning – this is often referred to as their game; this plan was devised for someone who has previous experience in wrestling and has the confidence to execute takedowns.

Beyond the specialization with takedowns, the plan does not go over specific moves; this affords each Jiu-Jiteiro the chance to tailor the annual plan to meet their specific needs. Because of the age, most Jiu-Jiteiros do not cross-train in other sports, though most will supplement their time on the mats with weightlifting, yoga, or both.

**Introduction to the mats**

IBJJF standard regulations dictate a match area a minimum of 64 metres squared, with 36 metres squared belonging to the combat area and the remaining 28 metres squared for the outer safety area (IBJJF, 2015). Each individual mat will be 2 metres by 1 metre by 40 millimetres; due to the contractual agreement between the IBJJF and Zebra Athletics, the mats will be Zebra brand, with yellow for the safety area and blue for the combat area.

Most BJJ academies make use of Zebra mats, or mats of a similar build from a competitor such as Tatami. The square footage available will likely differ from the IBJJF regulations, however the similar style of mats will help with creating a competition-style atmosphere.

## **Organizational Network**

Most academies encourage Jiu-Jiteiros to attend competitions as a means of testing themselves. A group of Jiu-Jiteiros may look to book flights and accommodations for international tournaments; doing so can help foster a sense of unity in an individual sport. The selected tournaments do not require a Jiu-Jiteiro to qualify to compete; the sole exception is the Mundials at the black belt level, however the three other tournaments serve as qualifiers.

Training at other academies before competition will help with last-minute acclimations to mats that have undergone different patterns of wear and tear. Suggestions for a home-base academy and other academies to cross-train at include, but are not limited to:

- Kaboom Brazilian Jiu-Jitsu, Surrey, BC.
- North Burnaby Brazilian Jiu-Jitsu, Burnaby, BC.
- On Guard Brazilian Jiu-Jitsu, Pitt Meadows, BC.

While travelling to California for tournaments, it is highly recommended to train at an academy with an instructor who's game is similar to the individual Jiu-Jiteiro's game. These extra training camps should be about a week in length. Suggestions include, but are not limited to:

- Cobrinha Brazilian Jiu-Jitsu & Fitness, Los Angeles, CA, USA.
- Ribeiro Jiu-Jitsu, Los Angeles, CA, USA.
- Art of Jiu-Jitsu Academy, Costa Mesa, CA, USA.

## **Sport Form Analysis**

### **Motor Abilities**

The National Coaching Certification Program (NCCP) created guidelines to assist the training of an athlete's athletic abilities by their age. According to this Long-Term Athlete Development (LTAD) model, a Jiu-Jiteiro will train their athletic abilities – i.e., aerobic endurance, anaerobic power, flexibility, basic or advanced techniques, maximum strength, and speed – as needed by the sport (CAC, 2013).

It is important to use the two-week transition period after the end of the competition season to assess the athletic abilities. With the exception of flexibility, the physical abilities begin with a two-week maintenance period. This is to allow the Jiu-Jiteiro to finish the rest period and make a steady return to form to reduce the risk of injury. Over the course of the training plan, the physical abilities will increase in volume and intensity at a pace that does not create an interference effect and negatively impact the Jiu-Jiteiro's training, health, or performance.

The primary energy system for a Jiu-Jiteiro should be the aerobic system; proper training and adept skills or tactics should only utilize the anaerobic alactic and anaerobic lactic systems whenever a short but very powerful move is required. An example of a powerful move would be a takedown, transitioning from top turtle to a back-take or from side control to mount, or setting up and securing a submission but prior to the finish.

## **Tactics & Skills**

Much of BJJ is action-reaction; a Jiu-Jiteiro should be able to make his opponent react in a way that is beneficial to advancing a position or securing a submission. A match should never come down to capitalizing on a mistake; however a Jiu-Jiteiro should never give up the opportunity to capitalize on his opponent's mistake if it will lead to a positional advancement or a submission.

A mind-map or a flow chart from the basic positions – standing, guard, side control, mount, and rear mount – is a useful tool for seeing the paths available based on the Jiu-Jiteiro's particular knowledge and favoured techniques. By seeing the high-percentage options available, the Jiu-Jiteiro can chain them together to achieve the desired outcome of positional advancement or submission attempts.

Offensive movements can come from the top or the bottom, especially when it comes to the variety of guard-styles. A transition from bottom guard does not necessarily require a sweep, a Jiu-Jiteiro may possess the skills and confidence to perform a back-take from their closed guard, bypassing the sweep and positional advancements completely.

Defensive movements may be more difficult to execute as it is not enough to simply escape from a submission attempt or prevent a guard-pass through a quarter-guard. A Jiu-Jiteiro must be able to think clearly about the next several moves from a defensive position; these moves should allow a reversal and put the opponent on the defensive.

## **Mental Skills**

As mentioned in the Tactics & Skills section above, a Jiu-Jiteiro must be able to maintain a clear and calm mind in the worst and best of positions in order to prevail. This includes the time off of the mats, whether in a tournament or in training. As such, the Jiu-Jiteiro will train and refine several mental skills in order to create his Individual Zone of Optimal Function (IZOF) and stay within before, during, and after tournaments.

Through mental skills training, the Jiu-Jiteiro will be able to push his limits mentally and physically – this can help with anaerobic lactic endurance – and therefore allow him the ability to regulate his performances. Regulation works in concert with self-awareness and handling pressure. Motivation is a key skill, especially if a desired outcome goal is not achieved. Motivation goes hand in hand with handling success or failure.

There is no mat-side position for the coaches to be to help their Jiu-Jiteiros. Because BJJ is an individual sport, only three people are on the mats at a single time: the two Jiu-Jiteiros and a referee. Gold medal matches may feature an additional two referees. While the referee may verbalize commands to either or both Jiu-Jiteiros, the Jiu-Jiteiros are not to verbally communicate with each other or the referee until after the match as concluded or unless there is a break in the action. Because of this setup, a broad external focus may be required in order to hear a coach's voice from the sidelines, or to pay attention to the referee. The focus should not be broad enough that the crowd is heard as well; a well-trained Jiu-Jiteiro will not be able to remember the noise of the crowd during a match.

## Objectives

There are two types of goals used in goal-setting. Outcome goals are based off of extrinsic factors such as tangible results from competition (i.e., medaling at a tournament), or social comparison. Process goals are based on more intrinsic factors such as improving on technique or successfully achieving a technique in competition (i.e., a lower-percentage or newer submission).

The outcome goal of a Grand Slam is to earn a gold medal finish at all four tournaments, however achieving a podium finish is still a very respectable and noteworthy goal. If this is the Jiu-Jiteiro's first international tournament, or if he has yet to stand on the podium internationally, then setting a podium finish in all four tournaments may be an excellent compromise in the world of Grand Slams.

The process goal may be achieving at least one submission finish in each tournament, or allow no more than two points scored against in each match. Such goals would showcase the improvement in the Jiu-Jiteiro's technique and tactics from local tournaments where he was unable to secure a submission finish or where multiple points scored against him had made the match a very close affair that relied on the closing seconds to decide the victor.

**Goal Setting.**

My process goal for the 2017-2018 Grand Slam season is:

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I want to reach this goal because:

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The three main steps I will take towards reaching this goal are:

- 1)
- 2)
- 3)

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Things that might come in the way of my goal are:

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Ways I can overcome these obstacles:

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**SuPeR SMART Goal Form.**

Self-Controllable (i.e., Is my goal reliant on myself, or on actions outside of my control?)

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Public (i.e., Where will I put my goal so I can see it every day? Who will know about my goal?)

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Reward(s) (i.e., Have I selected a reward that will motivate me to continue?)

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Specific (i.e., I want to increase my sprint time by 25%)

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Measurable (i.e., Can I keep track of my sprint times on a regular basis?)

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Adjustable (i.e., Can I adjust my goal if I sustain an injury?)

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Realistic (i.e., Is this goal too easy or too hard to achieve?)

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Time-based (i.e., Have I identified a point in time to achieve my goal by?)

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## **Phases of the Season**

The four chosen tournaments occur historically from mid-January to late-May – approximately four and a half months – in a calendar year, therefore from June to early-January – approximately seven and a half months – is the time for preparation. The preparation time is split into General, Specific, and Pre-Competition; each phase places an emphasis on different aspects in training.

There are also short periods – generally a week in length – dedicated to such things such as tapering down before a tournament, resting after a tournament, and training in between tournaments. The difficulty in BJJ lies in most well-known tournaments being international, requiring travelling and potential time-zone adjustment; and in the busy competition calendar a Jiu-Jiteiro can set for himself, creating the need for a multi-cycle plan.

**General Preparation.**

The general preparation phase of the season will run from July until early- to mid-October. This phase concentrates on the physical aspects of the sport, such as speed, aerobic stamina, strength, and flexibility. Anaerobic endurance becomes a high priority halfway through the general preparation phase. Technical skills of the sport are also highly emphasized. Physical workouts have a low intensity but a high volume. Much of this phase is spent acquiring – or re-acquiring – cardiovascular endurance and offensive skills; defensive and takedown skills are acquired in August or later.

Below is an example of a weekly schedule for the Jiu-Jiteiro. The week will utilize 26 hours maximum across 13 sessions. The 14th session is a rest period in which the Jiu-Jiteiro will not engage in physical activity, but rather relax and decompress to allow the body and mind to heal and recharge. Each day will consist of a morning workout – typically in the morning to allow for proper nutrition before and after, and to allow for the body to heal overnight before the next workout – and an afternoon or evening workout – typically time on the mats for drilling, or a workout that is not as high-intensity as the morning is.

*General Preparation Weekly Workout Schedule*

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
A.M.	Full Body, Lifts	Technique Drilling	Long Slow Distance Run	Upper Body, Explosive	Flexibility	Core Stability	Open Mat
P.M.	Technique Drilling	Flexibility	Technique Drilling	Technique Drilling	Long Slow Distance Run	Technique Drilling	Rest

Below is an example of what a session on the mats might look like during this phase. The Jiu-Jiteiro will be familiar with the warm-up and cool-down routine, and at this point in their

grappling career will have seen the techniques to be drilled or a close variation. This allows for more time to be spent on making the moves smooth and applying pressure to control movements from the opponent.

<u>Time</u>	<b>Warm-Up</b>
15 min	Exercises: Shrimps (forwards and backwards), shoulder rolls (left and right), inverted rolls (left and right), inverted to half-sit, spider-mans, broad jumps, rest-position small jumps, sprawl-shots, partner pass & shrimp, partner shoulder-walk, ab-walker (left and right).
	<b>Main Drilling</b>
55 min	Double-underhook stack pass. Transition from pass to kesa gatame/scarf hold. Near-side keylock/Americana attack from kesa gatame/scarf hold. Full sequence from closed guard to submission.
	<b>Mental Training</b>
5 min	Visualization of the full sequence against an opponent.
	<b>Cool-down</b>
15 min	Light jog (2 laps), walking money sweeps (1 lap), static stretching for entire body.

A physical full-body workout may include exercises such as: power cleans, snatches, Romanian deadlifts, squats, Turkish getups, or similar exercises. The work-to-rest ratio should be 1:1 in order to take advantage of working anaerobic endurance. This will help the Jiu-Jiteiro increase their anaerobic threshold through improved lactate buffering (Plowman & Smith, 2014) – among other adaptations – which increases the amount of time that can be spent using the aerobic energy system. It will also decrease the amount of time to return to the aerobic energy system from the anaerobic lactic system.

**Specific Preparation.**

The specific preparation phase will run directly after the general preparation phase; this will be from mid-October to late-December. At this point the tactical skills and decision-making abilities become a high priority, and the focus of time on the mats moves from mainly drilling to live sparring. Physical workouts become lighter as both volume and intensity shift into a happy medium.

Below is an example of a weekly workout during the Specific Preparation phase for the Jiu-Jiteiro. The technique drilling shifts into sparring, mainly from specific positions or to achieve specific goals. The general layout is very similar to the general preparation, wherein the morning workouts are typically physical and the afternoon or evening workouts consist mostly of mat time. The 14th session, or Sunday afternoon, continues to constitute the time to rest in order to unwind and rest. A wrestling session is added to the schedule for consolidation of takedowns; these practices can be done with the Pacific Rim Wrestling Club in Burnaby, or with the New Westminster Secondary School Hyacks' team.

*Specific Preparation Weekly Workout Schedule*

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
A.M.	Flexibility	Full Body, Lifts	Long Slow Distance Run	Full Body, Explosive	Flexibility	Core Stability	Open Mat
P.M.	Sparring	Sparring	Technique Drilling	Wrestling	Sparring	Sparring	Rest

Below is an example of a mat session created for specific sparring. The specificity of the sparring allows for the Jiu-Jiteiro to work continuously from positions that may be weak or require live training to fully grasp. The warm-up now includes movements carried over from wrestling to facilitate sport-specific movements.

<u>Time</u>	<b>Warm-Up</b>
20 min	Exercises: Shrimps (forwards and backwards), shoulder rolls (left and right), inverted rolls (left and right), inverted to half-sit, spider-mans, broad jumps, rest-position small jumps, sprawl-shots, partner pass & shrimp, partner shoulder-walk, ab-walker (left and right), headstand pass with partner, standing flow movements (duck-under, arm-drag, single leg, etc.).
	<b>Mental Training</b>
5 min	Finding and achieving the Individual Zone of Optimal Function (IZOF). Breathing exercises (body-to-mind and/or mind-to-body techniques) are taught to assist the Jiu-Jiteiro in staying at the appropriate arousal level.
	<b>Sparring</b>
50 min	3x1 min Knee-tap. 3x2 min Takedown-only sparring. 10 min Shark tank/King of the Hill to first-point. 10 min Shark tank/King of the Hill to submission. 3x7 min Sparring rounds.
	<b>Cool-down</b>
15 min	Light jog (2 laps), walking money sweeps (1 lap), static stretching for entire body.

A long slow distance run during the specific preparation phase should be no more than 10 kilometres in distance and take no longer than 60 minutes to complete. By now the Jiu-Jiteiro should have found a good speed in which a steady cadence can be maintained; it is important to the aerobic training that legs not feel "heavy" or "dead" after a run. Breathing should be controllable within minutes of completing the run.

**Pre-Competition Preparation.**

The pre-competition preparation phase is three weeks long, concentrating on refining existing technical and tactical skills while simulating the competition atmosphere and environment as much as possible. Cross-training with other academies once a week may prove useful. Mental preparation takes priority, concentrating primarily on motivation and being able to find the individual's zone of optimal function at will. Physical workouts drop to low volume and raise to high intensity.

Below is an example of a weekly routine during the short pre-competition phase. A second rest period has been added in favour of a physical workout; the remaining physical workouts are to maintain current strength and endurance. The long slow distance runs may taper from the 10 kilometres in the specific preparation phase to five kilometres.

*Pre-Competition Preparation Weekly Workout Schedule*

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
A.M.	Technique Drilling	Full Body, Lifts	Rest	Core Stability	Sparring	Long Slow Distance Run	Open Mat
P.M.	Sparring	Flexibility	Sparring	Sparring	Flexibility	Sparring	Rest

Below is an example of session on the mats. It has been tailored to simulate a full eight-man bracket at a tournament. The overall time spent on the mats is lessened to allow for more rest between workouts. Mental skills training increases exponentially to help create strategies the Jiu-Jiteiro might use during a competition. The progressive relaxation (PR) at the end of the session is to assist the cool-down and recovery while allowing the mind to clear from all thoughts. It can also be used to help with mind-to-body breathing techniques such as the 4:4:4; four seconds inhale, four seconds hold, and four seconds exhale.

<u>Time</u>	<b>Warm-Up</b>
10 min	Exercises: Shrimps (forwards and backwards), shoulder rolls (left and right), inverted rolls (left and right), inverted to half-sit, spider-mans, broad jumps, rest-position small jumps, ab-walker (left and right).
	<b>Sparring</b>
45 min	7-min round 5-min rest, utilizing mental skills (pushing the limits, handling pressure, handling success or failure). 7-min round 5-min rest, utilizing mental skills (pushing the limits, handling pressure, handling success or failure). 7-min round 5-min rest, utilizing mental skills (pushing the limits, handling pressure, handling success or failure). 7-min round
	<b>Cool-down</b>
10 min	Light jog (2 laps), walking money sweeps (1 lap), static stretching for entire body.
	<b>Mental Skills: Progressive Relaxation</b>
5 min	Lying flat on the mats, in a restful position (i.e., anatomical rest position), keeping breathing steady and constant. Contract and relax muscles/body parts from head down to toes or toes to head; feeling the tension drain out as each part relaxes.

A core stability workout will make use of such exercises as: long-lever posterior-tilt plank (progressed from the traditional prone plank), back extensions with a weight plate, leg raises holding a dumbbell between the ankles, Cobra-style guard retention via ab-walker motion (holding a large medicine ball in the closed guard and a weight plate in the hands), trunk rotation via medicine ball tosses to a partner, and medicine ball wall-tosses with a partner in sit-up position. The work-to-rest ratio in the pre-competition phase should be at a 1:2 or 1:3 ratio to allow for more rest between explosive-style movements.

## **Nutrition**

One the most important and most easily controlled aspects is nutrition. Eating a balanced diet that is sufficient for the training in this annual plan will take some work to fine-tune. Many factors – such as age and training intensity – are involved in the decision of how much a Jiu-Jiteiro should eat. In general, the macronutrients should be: 55 to 60 percent carbohydrates (CHO), 20 to 30 percent lipids or fats, and 10 to 25 percent protein.

The exact foods chosen should encompass the vitamins and minerals required by the body. Dark leafy greens, legumes, dark coloured grains, and colourful fruits and vegetables should be at the forefront of the Jiu-Jiteiro's shopping list. Dairy such as Greek yogurt, nuts, and lean meats are next.

Supplementation with protein powder is acceptable as a supplementation, not as a replacement. The convenience of powders cannot be overstated, it is far easier to transport a small tub or bag of powder than it is to carry cooked food that requires refrigeration. It is recommended that powders and other supplements be restricted to immediately post-workout, and meals be consumed before and after workouts.

## **Sponsors**

Having one or more sponsors can make the logistics of travelling and competing easier. A sponsor may provide the Jiu-Jiteiro with free gear, reducing costs, or they may pay for registration fees or part of the flight or accommodation. Such agreements are up to each individual sponsor and Jiu-Jiteiro. Representing the sponsors with dedication and a proper attitude is key to retaining the current sponsors and gaining more. Social media is a large tool not to be overlooked; it may be worth the cost of a roaming or international data plan in order to provide updates as they happen, and thank sponsors at each turn.

The momentum gained off of success at a tournament is easily capitalized on through pictures posted online, and can generate additional revenue for the sponsor(s) in question. Seeing success from the Jiu-Jiteiro's success may see more money or gear sent out. Finally, word-of-mouth advertising is not to be underestimated for spreading brand awareness, especially if the sponsor has provided a discount code to show appreciate to new customers.

## **Resource Analysis**

Proper execution of this annual plan will take dedication to training and competing, along with logistical support. Booking flights, hotels, training camps, and eating abroad can weigh heavily on a Jiu-Jiteiro. Assistance is advised from other international competition veterans or from third-party services.

Further logistical support includes proper nutrition to support the growth and development of the body as it undergoes the rigors of training. Services are available if the Jiu-Jiteiro finds the price feasible, otherwise seeking assistance from other competition veterans or experiences chefs or cooks is highly recommended.

Finally, when travelling to a tournament, a checked bag is recommended. This allows for the Jiu-Jiteiro to pack a number of items necessary for competition day; two gis and belts for the day of competition in case one fails inspection, easily removable footwear to facilitate a quick entry and exit when mat-side, a change of clothes, and anything else a Jiu-Jiteiro may require.

Many Jiu-Jiteiros travel from their home countries to compete in the biggest tournaments; the feasibility comes from the balance of training and work. Without sufficient income, there is little chance that this plan will succeed; a Jiu-Jiteiro may need to spend time saving in order to achieve his objectives.

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