6 MONTHS TO BLACK BELT GRADING SUCCESS

BLACK BELT GRADING TRAINING PROGRAM

BY MASTER PAUL MCPHAIL VIII DAN

6 Months to Black Belt Grading Success

Table of Contents

Introduction	4
What's Required	5
Training Plan Overview	6
Strength & Conditioning	8
The Energy Systems	
Fuel	
The Three Systems	
Training the Energy Systems	
Threshold Training	
How to calculate your aerobic threshold	
Training at Anaerobic Threshold Alactic Power Intervals	
Lactic Capacity Intervals	
Sprint Intervals	
Strength & Power Training	
Grease the Groove (Synaptic Facilitation)	
Plyometrics	14
Technical and Skill Development	15
Patterns	
Sparring and Self Defence	
Destruction	
Mental Preparation	
Taekwon-Do Theory	
Mental Strategies	
Nutrition	
Over-Training	20
Training Program	
BLOCK 1 – 6 months out	
BLOCK 2 – 4 months out	
BLOCK 3 – 2 months out	
Sample Program	
Sample of Training Block 1	
Sample of Training Block 2	
Sample of Training Block 3	
Weekly Training Schedule - Blank Template	
References	29

Introduction

To achieve a black belt in any martial art is a great achievement. And the day of the grading itself is something you will remember for your entire life.

You have already put in years of dedicated practice toward obtaining the required standard, but the last six months leading up to the grading are the most critical.

I have seen many people come from nowhere to amazing in 6 months, through systematic, organised training. This e-book will show you how to do it.

Regardless of what the particular testing requirements for your grading will be, this program will get you ready. More than ready. I believe in doing the hard work up front so you can enjoy the benefits later. Do that and your grading will be an enjoyable and positive experience.

For a black belt grading, you take on the unique challenge of having to perform at a high level **over many hours or even days**.

On a physical level, the endurance required to be able to sustain energy output over many hours is not dissimilar to that of an endurance athlete, with the addition of many periods of extreme explosive power and speed.

So we have a problem!

The energy systems and conditioning regime required to train for sustained energy for hours and hours is completely different from that required to train for explosive power and speed. This is the unique challenge and one that requires very specific and properly timed training.

Not many sports have this problem to such an extent. Most sporting events are over within an hour or two, or those that aren't tend to require lower more steady levels of exertion. The black belt grading, however, demands high levels of power output over many hours or days.

With this in mind, training must begin early and the energy systems must be trained separately. Trying to train for everything 2 or 3 months before the grading will not maximise your results.

This e-book will step you through the process of preparation starting 6 months out with a program that will help you to meet the challenge.

What's Required

At the most basic level, to be able to perform well for your grading you need an excellent level of physical and mental preparation. These areas can be further broken down as follows:



There is a strong emphasis in this program on not only how to prepare these aspects but also WHEN. Many make the mistake of leaving some aspects too late, starting other training too early, and sometimes missing things out altogether.

By the use of **training blocks**, you will work on the various parts of your physical preparation in stages, to best prepare you for the grading. The plan assumes you have a good basic level of technical ability and physical fitness to begin with and are fully recovered, rested, and injury free. Six months is a long build up that requires a lot of physical and mental perseverance, so you don't want to be entering into it in an over-trained or injured state – make sure you look after and treat any injuries first.

By planning well in advance and taking 6 months to steadily build up, you will give yourself plenty of time to progress through the training blocks, making the necessary adjustments as you go while remaining injury free.

Training Plan Overview

This training plan begins 6 months out and organises your preparation into three training BLOCKS. Blocks are a form of "periodisation" that allows for your body to adapt to the training and improve in carefully timed progressive stages, and in this plan each block is two months.

For this program, I have combined the PHYSICAL (Strength & Conditioning and Technical) and MENTAL (Theory Study and Mental Strategies) into blocks together as shown below:

BLOCK 1	BLOCK 2	BLOCK 3
6 months out Low Intensity	4 months out Medium intensity	2 months out High Intensity
S	TRENGTH & CONDITIONING	
General Strength & Endurance Block	Explosive Speed & Power Block	Power-Endurance Block
TEC	HNICAL / SKILL DEVELOPMENT	-
Technical Groundwork	Technical Refinement	Technical Rehearsal
	MENTAL CONDITIONING	
Technical Knowledge	Theory Background	Theory Learning, Testing & Mental Strategies

You can see in the above graphic that training begins **6 months out** with two months of groundwork (Block 1). This is the period when you build an aerobic base, overhaul your technical and skill level and start to improve your technical knowledge.

In this Block 1, you will be working on your conditioning at mainly low intensities to increase your aerobic energy system, as well as improve your general strength.

You will work on your techniques and skills, also at low intensities. The idea is that when you are trying to achieve technical improvements, this should be done when you are fresh and free from high levels of physical stress. The learning needed to improve technically is largely neuromuscular, and this is best achieved with concentrated, deliberate repetition of movements done with correct form, so don't try and do this while training at high intensity.

Also use this block to gain a better understanding of the basic principles that relate to your techniques such as applications of movements, measurements of stances, breathing and so on.

At **4 months out** while continuing with Threshold Training (*covered in page 10*) you will also begin work on your explosive speed and power at higher intensities, while making additional fine-tuning to your techniques in separate sessions (Block 2).

Explosive speed and power requires the muscles to relax and contract quickly – which is largely based on your nervous system. This is developed through high intensity, highly focused efforts, with as much rest as necessary to allow your nervous system to recover. You would include this high intensity training (with

full recovery) into your sessions to develop your Anaerobic Alactic System (more on that later).

During Block 2 you should begin to do more reading of Taekwon-Do literature to give you a good basic understanding about Taekwon-Do.

At **2 months out** you are working on your Power-Endurance, as well as physically and mentally rehearsing under grading type conditions (Block 3). This is NOT the time to be making technical changes. It is now time to learn theory off by heart and test yourself on it.

In this last block, you add in very specific Taekwon-Do training at the highest levels, for longer bursts (e.g. rounds of pad work, sparring). This is the ability to maintain your explosive power over a long period of time. This block focuses on your anaerobic lactic energy system – where your body is learning to cope with hard training in the presence of lactic acid.

Halfway through each of the three blocks, you should also slightly change your strength and conditioning program. You can do this by increasing the volume, intensity or changing the exercises. This is because your body adapts to your program, so after about 4 weeks is a good time to change things up so that you continue to progress. Also, it will be necessary to change the program to include all the technical aspects you need to cover.

All this training needs to happen for the most part OUTSIDE of your normal club training! Some of it may be able to be done there, but careful planning is required to make sure you cover all the elements in this plan, and it is simply not possible to do it all at your club. Obviously the technical side may well happen under the guidance of your instructors at a normal club session, and even some of the conditioning. If you can make it work in with your club sessions then great, but be prepared to do at least three sessions per week in your own time.

I find that many people spend too much time visiting and training at other clubs. Although normally this is great and I encourage it, for the grading build up the trainings may be too general, and you may be better served working alone or with a training partner on the specific areas that you need to improve.

Make sure you have a way to record everything your instructor tells you such as a training notebook or folder and attempt to make the changes required. Having a written plan is important – it is the map that helps you get to where you need to be and keeps you on track to work on the things you need to be working on. Create your own version of this program and pin it to your wall. Most importantly - stick to it!

Strength & Conditioning

Strength and conditioning plays an important part of preparing for a black belt grading for many reasons.

The obvious one is that some gradings include a fitness test, and to be able to score well at the test it is necessary to do strength and conditioning training.

The less obvious reason is that by improving your strength and conditioning, this will naturally lead to improved performance in Taekwon-Do. This is especially true the longer you have been training. This is because your body has become very well adapted to the physical demands that Taekwon-Do places on it, and you may have stopped getting any significant physical gains. By introducing strength and conditioning in addition to your normal Taekwon-Do training, your body will respond and adapt, resulting in improved performance.

Different sports require different combinations of power (producing energy rapidly) and endurance (producing energy for a long period of time). Some require a great deal of power and low to moderate endurance, while others require the opposite. As mentioned in the introduction, the Taekwon-Do black Belt Grading demands a combination of both at the same time.

So the role of strength and conditioning is to develop your physical preparation necessary for you to utilise your skills as fast and long as possible. To understand how this can be achieved you need to have a basic knowledge of **energy systems**.

The Energy Systems

One of the big mistakes I see people make in training for the black belt grading is training without any understanding of **what** they are training. A typical approach may be to start running or doing pad work, but largely without any real plan or way to measure progress.

To understand what you are doing and how to train, you first need a basic understanding of how energy is produced in our bodies.

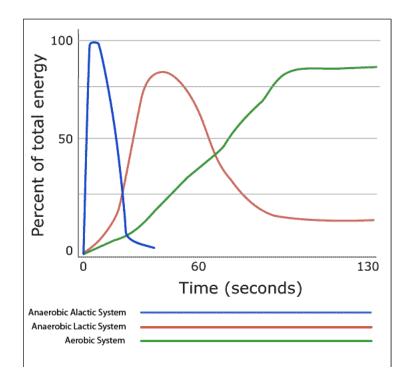
Fuel

The fuel your muscles run on is called Adenosine Triphosphate or ATP. This is the energy currency of your body. It is your own source of "Rocket Fuel". The food you eat breaks down into ATP directly, or into sugars, fats and proteins that are stored so they can be later turned into ATP.

The Three Systems

There are three independent yet overlapping energy systems, each with differing abilities to produce ATP:

- Anaerobic Alactic System
- Anaerobic Lactic System
- Aerobic System



The first two **anaerobic** systems are capable of tremendously powerful energy production because they don't rely on oxygen (hence the name anaerobic, meaning without oxygen) and use relatively few chemical reactions to make ATP.

The **aerobic** system on the other hand, relies on oxygen for ATP generation and is not capable of nearly the same energy production, however it is able to produce energy for longer periods of time. As long as the working muscles don't require ATP any faster, or in greater amounts than your aerobic system is capable of supplying, and there is adequate oxygen supply, then it will be able to do its job of providing the vast majority of fuel your muscles need.

If you ask your muscles to generate a very high rate of power, however, there's a good chance they'll need ATP to be generated faster than the Aerobic system is capable of, and they'll have to turn to your anaerobic systems to make up the difference: the Anaerobic Lactic System and Anaerobic Alactic System.

Your Anaerobic Alactic System can only produce ATP for about 10 seconds. Your Anaerobic Lactic System can produce ATP for about a minute or two.

Training for each of these systems differs, so it's important to know the difference if you are serious about improving your conditioning.

Recent research has shown that these three systems are essentially "turned on" from the very beginning of exercise. They are not activated in sequence as physiology textbooks often depict, but rather overlap to some degree, and all three contribute to energy production.

The higher intensity goes, the greater the relative anaerobic systems contribute, but the mistake people make is thinking that at this point the aerobic system stops contributing altogether. Nothing could be further from the truth. The aerobic system is contributing the highest levels of power even at the peak of anaerobic activities! In a 400m sprint for example, almost 50% of the total energy production comes from the aerobic system.

So it is very important to have a highly trained aerobic system, since it is that system that will keep you going for long periods, and the more developed it is, the less your body will need to call on the anaerobic systems for backup. So how do you train to improve these energy systems independently? Let's find out.

Training the Energy Systems

Let's start with the type of fitness training you will need to do first. You need to start by improving your aerobic fitness and an excellent way to do this is by monitoring what is called your **anaerobic threshold**.

Threshold Training

Your anaerobic threshold represents the outer limits of your capacity for aerobic energy production – the point where you experience fatigue because anaerobic processes start to come increasingly into play.

Endurance athletes typically have anaerobic thresholds that are a very high percentage of their maximum heart rate. This gives them the ability to produce high **aerobic power** and rarely have to tap into their anaerobic system to generate the energy they need.

Part of raising your aerobic power means raising this threshold, which will mean a higher percentage of your total energy throughout the grading will come from your aerobic system – which is what we want. Threshold Training involves working steadily at your threshold heart rate for 30 minutes, 3 times per week, which is what you will be doing in the first training block. This can be done by running, cycling, doing patterns, or any activity where you can keep your heart rate steady.

How to calculate your aerobic threshold

Aside from a laboratory test, it is tricky to get an accurate gauge of exactly where your anaerobic threshold is. For our purposes this simple formula will be sufficient:

180 – your age. Train within a heart rate of +/-5 beats of that figure.

For example, if you are 30 years old: 180 - 30 = 150. Train in the 145-155 range.

Obviously you will need a heart rate monitor to be able to do this. There are many reasonably priced monitors available on-line or more professional ones available from sports/cycle shops. You could also consider purchasing a chest strap only then using smartphone apps such as **ithlete** or one of the many free apps such as **Runkeeper** or **MiCoach**.

Training at Anaerobic Threshold

During Block 1 you will be training 3 times per week for 30 minutes. After a 5-10 minute warm up, monitor your heart rate and stay within your anaerobic threshold for a further 30 minutes. This may seem slow and easy, but it's important you don't go above that heart rate.

If you are running or cycling, work for 30 minutes and make a note of exactly how far you travelled. This can be by recording the actual distance (e.g. 5km) or just note where you got to at the 30 minute mark. Make sure every session is on the same route and preferably under the same conditions and time of day.

If you are doing patterns just note how many patterns you completed without stopping. For example in 30 minutes you may have started at Chon-Ji and got up to Choong-Moo and back down to Dan-Gun.

You will know your aerobic threshold is increasing if you manage to run a little further each time, or do more patterns, while keeping to the same heart rate. It

takes a bit of practice, but can be a fun way to train and an easy way to gauge your improvement.

Alactic Power Intervals

This training begins in Block 2, about 4 months out from the grading. It is designed to increase how fast your alactic system can produce ATP. For this training you need to perform the exercise of your choosing at 100% intensity for no longer than 10 seconds. The focus is on maximum acceleration and power for the entire time.

The other key component of this method is rest between reps to allow full recovery. If you don't rest enough, you will quickly accumulate fatigue and this will impair your ability to go 100%. So you need to monitor your heart rate and wait about 2-5 minutes, until your pulse is back under, say, 120. While you are waiting do "active rest" such as light jogging or easy patterns.

Perform reps of an exercise, then change to another exercise for your next set. The exercises you choose for each set can be anything that you can perform at 100% intensity such as:

- Fast continuous side kicking a pad
- Continuous flying kicks
- Squat Jumps
- Sprints
- Burpees
- Explosive push-ups

Continue until you have been training for around 30 minutes.

Lactic Capacity Intervals

Lactic Power Intervals and Sprint Intervals are the training you will do in the last two months before your grading (Block 3). TKD Lactic Capacity Intervals are basically rounds of continuous pad kicking up to 3-4 rounds at high intensity.

By shortening the rest intervals and forcing the system to produce energy for longer, we are shifting the training emphasis from Power to Capacity.

Begin by performing full power pad kicking for 1 minute rounds and start with 2 minutes rest between. Gradually increase the rounds up to 2 minutes and the rest periods down to 1 minute over the block.

Sprint Intervals

Sprint Intervals are used if you are using running as a training method. If a run is a part of the black belt fitness test then this is essential. A common test for running is a 2.4km run. This is used in the military, police and some martial arts organisations. For the chart below a 2.4km run is given as an example.

For this method you'll first perform a 10 minute warm-up run at a very easy pace until you start to sweat—at this point you're ready to go. Once you're warmed up, it's time to complete your intervals.

Using your watch to time yourself, simply run "all-out" for 20 seconds, and then back off to half speed for 40 seconds. Repeat again until you have completed for the indicated number of intervals on the chart below. Once you have done that, complete the session with a 10 minute slow run home.

Test and record your 2.4km time once each week.

Sprint Interval Schedule

	MON	WED	FRI	SAT
Week 1	Run 10 mins 5 intervals Run 10 mins	Run 10 mins 6 intervals Run 10 mins	Run 10 mins 7 intervals Run 10 mins	2.4 km test
Week 2	Run 10 mins 6 intervals Run 10 mins	Run 10 mins 7 intervals Run 10 mins	Run 10 mins 8 intervals Run 10 mins	2.4 km test
Week 3	Run 10 mins 7 intervals Run 10 mins	Run 10 mins 8 intervals Run 10 mins	Run 10 mins 9 intervals Run 10 mins	2.4 km test
Week 4	Run 10 mins 8 intervals Run 10 mins	Run 10 mins 9 intervals Run 10 mins	Run 10 mins 10 intervals Run 10 mins	2.4 km test
Week 5	Run 10 mins 9 intervals Run 10 mins	Run 10 mins 10 intervals Run 10 mins	Run 10 mins 11 intervals Run 10 mins	2.4 km test
Week 6	Run 10 mins 10 intervals Run 10 mins	Run 10 mins 11 intervals Run 10 mins	Run 10 mins 12 intervals Run 10 mins	2.4 km test
Week 7	Run 10 mins 11 intervals Run 10 mins	Run 10 mins 12 intervals Run 10 mins	Run 10 mins 13 intervals Run 10 mins	2.4 km test
Week 8	Run 10 mins 12 intervals Run 10 mins	Run 10 mins 13 intervals Run 10 mins	Run 10 mins 14 intervals Run 10 mins	2.4 km test

Strength & Power Training

Ideally, if finances allow, I recommend utilising gym facilities and the guidance of a good strength and conditioning Coach to assist with work on strength and power training. If you have not worked with weights before, the first two months would involve learning the movements and your body learning to adapt.

Depending on your progress and previous experience, you may in a few months be able to progress to compound type movements that work on power development. There are gyms that provide classes in General Physical Preparedness (GPP) or Cross-Fit style work-outs which I also highly recommend.

To a large extent, though, it will come down to cost and time. It is possible to train for your black belt without belonging to a gym or doing a weight training program, but it will certainly help.

If you don't have access to a gym, I recommend doing body work exercises such as push-ups, pull-ups, squats, (if possible, pistol squats), lunges and planks. A useful method of achieving improvement with these body weight exercises is a method called **Grease the Groove**.

Grease the Groove (Synaptic Facilitation)

Greasing the Groove originates in Russia, specifically from a Russian named Pavel Tsatsouline. Pavel was a former trainer for the Soviet Special Forces, and came up with a simple equation: Specificity + Frequent Practice = Success.

Frequent practice of correct technique is necessary for success; you can practice an incorrect movement frequently and strengthen the wrong neural pathways. This simple equation means one thing: to get better at a specific exercise you have practice it over and over and over again.

The key with Greasing the Groove is to **not** train to failure. Let's use pull-ups as an example. If you can do a max set of 10 pull-ups, then don't do sets of 10 pull-ups. Instead, do sets of 5-8 pull-ups, 4-5 times a day. You can do this with any bodyweight exercise throughout the day. For instance: when your computer is booting up, when the shower water is heating, or when you walk past a certain area of your house.

Remember the five "F's" when training using this method:

- 1. **Focused** (work on only 1-2 exercises at a time)
- 2. **Flawless** (practice must be perfect train using correct technique)
- 3. Frequent (do several sets throughout the day, take one day off per week)

4. **Fresh** (do no more than half your maximum reps each time - you should feel stronger after the training)

5. **Fluctuating** (keeping changing things up slightly by doing variations of the same exercise)

How can we apply this training method?

- Push-up training (half max per set x 10 sets per day)
- Pull-up training (great overall strength exercise). Do half or more of your max every time you walk past your pull-up bar.
- Plank (one method is to hold the plank through TV ads. Mr Mathew Breen from New Zealand did this and achieved a 9min 30sec plank in his grading fitness test:

"I'd do about three sets. When I started out, it was getting as far through the ad break as I could, and I'd do it every second ad break - more time to recover! Later on, it was going start-to-finish (which is around 3.5-4 minutes, usually), and I'd do three breaks in a row (depending on the TV show, there might be ten or fifteen minutes between breaks."

Everyone is different and responds in slightly different ways to training. I suggest you try this method and test yourself weekly by doing your maximum number of push-ups and plank time, recording the result in your notebook.

Plyometrics

Plyometrics is considered a valuable training method in achieving conversion of maximal strength into power, and has been specifically demonstrated to improve jumping ability. If you need to improve your jumping, I recommend a course of plyometrics during Block 1.

For more information and a sample program you can download this free article from the iTKD Essay Library.

http://itkd.co.nz/reference/essays/15-Plyometrics.pdf

Technical and Skill Development

Patterns

Patterns are probably the most important aspect of the black belt grading. General Choi indicated in his books that patterns were the most important indicator of a person's standard, so it has remained a large part of the Taekwon-Do grading syllabus.

You already know your patterns – but **how well** do you know them? It is essential to have either a Pattern Workout Book (minimum requirement) or Gen. Choi's encyclopaedia. Read every movement of every pattern and make sure you know all the heights, stances and names of each movement. This doubles as theory study at the same time as helping you technically.

I am often really surprised at the number of people that have never seen themselves perform a pattern. I highly recommend that you video your patterns on a regular basis and analyse your movements. With today's technology it is easy to do that on your phone, and upload to a private YouTube account, then send the link to your instructor or training partner for their comments. Don't be shy... this will help you immensely.

Most of us are visual learners to a great extent, so don't underestimate the value of carefully watching good practitioners do patterns, analysing what makes them look good and trying to copy them. Use YouTube to track down some great performances, or just keep your eyes open at your own club.

In Block 1, practice slowly and deliberately and ask anyone that will watch for their feedback. Fix errors and try and be fairly happy with your own patterns standard by the end of the first block.

In Block 2, practice patterns at normal speed and power each week. Keep using video to gauge your improvement. In the final block, patterns practice should be at 100% effort with several patterns done in a row without a break. If you are training alone use a "lucky dip" to randomly select 3 or 4 patterns to do without a break.

Over the course of the three training blocks you should have performed each pattern hundreds of times. Make sure each of these times is **quality** performance. Aim for the best you can be.

Sparring and Self Defence

These aspects are also important from the point of view that we want to see a martial artist who has the ability to defend themselves and show grit and spirit. Sparring and self defence are the areas we need to see positive application of techniques in non-prearranged situations.

Work on free sparring drills and spar as often as you can at club. The more you do the more you will improve. Self defence techniques also require many hundreds of repetitions before the movements become automatic. Begin by practicing slowly and just keep working at it.

Destruction

The first step with destructions is to begin the conditioning of your attacking tools (for adults). I suggest lightly tapping the attacking tool (eg forefist, knifehand, backheal) on a paperback book placed on the floor. Do this 100 times each night. The idea is not to build calluses, but rather to strengthen and condition the muscles and joints of the attacking tool, gradually preparing them for the impact of the breaks.

Next is to perfect the techniques of the breaks. This should involve focus work using pads to make sure your technique and targeting is spot on. It's important

to know exactly what you can do – how many boards you can break, how far or high you can jump, based on the grading requirements. Start early and record these details.

Attend breaking seminars if they are available in your area. It is a specialist field and these seminars can really give you a lot of assistance.

Early in the last training block make sure you attempt all your breaks on actual boards and tiles. I find it hard to believe that there are people that do their black belt grading having never attempted some of the breaks. Get yourself some boards and tiles and take them to club so your instructor can guide you. I recommend not doing any actual breaks within a month of the grading, in case of injury.

The main aim is to be well-prepared for the grading. Know exactly where you are going to stand, the angle to attack the target and the heights you know you can achieve. We see too many people totally unprepared for this aspect of the grading and when you are under pressure it really shows.

Mental Preparation

Taekwon-Do Theory

Theory preparation in Block 1 should involve increasing your technical knowledge. Ask yourself questions about each of your pattern movements, such as "what is this technique called?", "what height is it?", and "what is the intermediate position?"

In Block 2 I suggest doing a lot of reading of the theory handbooks, Gen. Choi's books and Taekwon-Do websites. Become familiar with who's who in the ITF, your own organisational structure and other general knowledge.

In the final training block it is time to write stuff out, test yourself and write it out again. Use your training partner or family member to test you, plus you can use on-line resources such as the excellent theory test at:

http://www.hamiltontkd.co.nz/blog/theory-tests/quiz/

Theory, like the physical parts of the test, requires actual practice under close to grading conditions. Don't neglect this part of the program, as painful as it may be. Once you make the effort to learn the theory you will be proud you have made the effort. Most of the theory exam is taken from your own organisation's theory handbook so use that as your main source of material to study.

If you find Korean terminology hard, start with just a few words. Write them down and try and come up with a word association that is humorous – that will help you to remember. For example, a good one from the South Island is a word association for remembering Bituro Chagi (twisting kick). It's such a hard kick to do it has been nicknamed "bitch of a kick" – which sounds a bit like "Bituro chagi".

Spend some time doing this and you will never forget the Korean.

Mental Strategies

Having a mental routine can help you organise a consistent and systematic psych-up period before the grading.

Having mental routines can help you to:

- Get 'in the zone' the main purpose of a mental routine is to get you into the right mindset.
- Increase your confidence when you are able to see and feel past and future successes as part of your mental preparation, you feel more in control and confident.
- Control your mental energy it is important to manage your mental energy so that you are not too flat or too energised. During preparation, you can listen to certain songs on your iPod to get energised about the grading.
- Narrow your focus technical cues ('explode my kicks', 'be sharp') can be integrated into your routine to direct your attention towards the things you can control.

How do mental routines work?

The first step is to determine what mindset you want. That is, what mindset gives you the best performance. You can work this out by reflecting on your best and worst performances in the past.

The second step is to decide on what strategies will help you to create your ideal mindset on grading day.

The third step is to design a grading routine that incorporates your physical and mental strategies. This routine may start the night before the grading and continue until the end of the second day.

Other strategies for managing

- Be aware of expectations (yours and others) and your emotional responses to these expectations.
- Set challenging but realistic goals for yourself in order to maintain optimal motivation and performance.
- Talk with your parents/family, friends, partner, etc., about how they can best support you leading into and during the grading.
- Draw on the experiences of other athletes and talk to individuals who have negotiated similar competitions and preparations in the past.
- Use visualisation to help you focus. Mentally rehearse every aspect of the grading.
- Stay positive, block negative thoughts and believe that you have the ability to meet the challenge of the grading.

Nutrition

Nutrition is a huge topic, far beyond the capabilities of this e-book. However I would like to provide a few basic recommendations based on my own research and experience over the last few years.

In General

My general recommendation is minimise processed foods. There is a saying: "If man made it, don't eat it". So try to eat real food – food that is as close to its original form as possible.

Make sure you are eating enough. You will be burning a lot of calories and you will need plenty of healthy nutrients to fuel this kind of activity. Make sure you are drinking plenty of water.

At the Grading

- When it comes to grading day, don't try anything new in terms of diet. Eat what you normally eat, or you risk an upset stomach or worse.
- Make sure you have a supply of easy to digest food available during the day of the grading. When you get the chance have a small portion of food to keep you going. Half of a lightly salted sweet potato is ideal or half a banana.
- Drink to thirst, and just water is okay, as long as you have good levels of minerals from a good diet leading up to the grading.

After the Grading

- If it is a two-day grading, on the first evening have an ice bath. Fill a bath up to around waste level with cold water then sit it in for 20 minutes. Lie back if you feel brave enough, but the effect to the lower extremities is the main thing.
- Again, if it is a two-day grading, that first night I recommend having several small meals a few hours apart, beginning as soon as you can. This will effectively replenish your glycogen stores in your liver and muscles ready for the next day. You may not feel hungry, so you may have to make yourself eat.
- Rest. Get an early night.

Over-Training

Over-training syndrome frequently occurs in athletes who are training for a specific event and train beyond the body's ability to recover. Athletes often exercise longer and harder so they can improve. But without adequate rest and recovery, these training regimes can backfire, and actually decrease performance.

Conditioning requires a balance between overload and recovery. Too much overload and/or too little recovery may result in both physical and psychological symptoms of over-training syndrome.

Make sure you are getting one complete day of rest each week. If you don't this can lead to over-training syndrome so be careful. Common warning signs and symptoms of over-training syndrome are:

- Washed-out feeling, tired, drained, lack of energy
- Mild leg soreness, general aches and pains
- Pain in muscles and joints
- Sudden drop in performance
- Insomnia
- Headaches
- Decreased immunity (increased number of colds, and sore throats)
- Decrease in training capacity / intensity
- Moodiness and irritability
- Depression
- Loss of enthusiasm for the sport
- Decreased appetite
- Increased incidence of injuries.
- A compulsive need to exercise

Keep these in mind as you progress through the training blocks and listen to your body. If you start to suffer some of these symptoms it may be necessary to take a week off. Don't worry about this, as it will revitalise you.

Training Program

So here is what we have been getting to - the Training Program.

Below I have firstly given the elements that are to be included in your program, in blocks as I have explained.

I have then given a sample schedule for each block. Your schedule will have to be created by you, based on the time you have, when your club sessions are and so on. The sample programs are to give you the idea, but you will need to create your own using the template provided or using your own software. Make sure you print it out and put it somewhere you can see it each day, and tick off the sessions and days as you go.

Good luck and I wish you all the best in achieving your black belt grading.

BLOCK 1 – 6 months out

STRENGTH & CONDITIONING General Strength & Conditioning Block

- Recording of resting heart rate each morning. Aim is for under 60 bpm.
- **Threshold Training** for 30 minutes at least 3 times per week (running, cycling, swimming or continuous TKD movements).
- Begin Plyometric program to improve jumping ability twice per week (optional depending on jumping ability).
- General strength / power training / GPP, 2 or 3 times per week (optional).

TECHNICAL / SKILL DEVELOPMENT Technical Groundwork

• Patterns.

Have all patterns checked by your instructor. Write down areas to improve and work on these in your own technical sessions. Make sure each movement has the correct intermediate and final position, sinewave and execution.

- Use video to analyse your movements.
- Step Sparring

Decide on kicking techniques that you like, write them in your notebook and start practising them in your step sparring. Practice kicks on pads working on correct technique, focus and power.

Free Sparring

Work through the Sparring Drills you have been taught. Spar as often as possible at club and attempt to utilise skills learnt from the drills.

Self Defence

Revise the Self Defence syllabus with assistance from your instructor. Work with a regular partner to develop skills.

• Destructions

Use board holder to start working on power breaks. Use shoes for safety to build power and confidence. Begin attacking tool conditioning.

MENTAL CONDITIONING Technical Knowledge

Technical

Learn the name, application and measurements of each movement in all your patterns.

BLOCK 2 – 4 months out

STRENGTH & CONDITIONING Explosive Speed & Power Block

- Threshold Training (continued) 3 times per week.
- Alactic Power Intervals 2 times per week.
- Begin Grease the Groove training. Press ups and planks several times each day, 6 days per week.
- Continue strength / power training / GPP (optional).

TECHNICAL / SKILL DEVELOPMENT Technical Refinement

• Patterns

- Practice all patterns up to speed, 3 times per week, checked by your instructor.
- Step Sparring
 - Continue working on kicks and other techniques, perfecting both sides.
- Free Sparring
 - Spar at club. Two onto one practice for 1st dan and above.
- Self Defence
 - Continue skill development increase speed.
- Destructions
 - Work on focus pads for accuracy.
 - Continue attacking tool conditioning.

MENTAL CONDITIONING Theory Background

- Technical
 - Get together with a training partner for regular Q&A sessions.
 - Visit Taekwon-Do websites daily to increase your knowledge of Taekwon-Do and the ITF.

BLOCK 3 – 2 months out

STRENGTH & CONDITIONING Power-Endurance Block

- Sprint Intervals 3 times per week.
- Lactic Capacity Intervals (rounds of pad work) 2 times per week.
- Continue Grease the Groove training
- Cut back strength / power training / GPP in the last month of this block.
- Last week stop conditioning completely, do light Taekwon-Do sessions only.

TECHNICAL / SKILL DEVELOPMENT Technical Rehearsal

• Patterns

- Practice all patterns up to speed under grading conditions (in front of people) as much as possible.
- Final video / instructor check of patterns. There should be no major technical changes at this point.
- Step Sparring
 - Work with different partners with random attacks to become familiar with this aspect.
- Free Sparring
 - Spar at club with longer rounds at high intensity.
- Self Defence
 - Up to speed with different partners under grading conditions.
- Destructions
 - Actual practice with wooden boards and tiles.
 - Practice of breaks on pads. Avoid actual breaking late in this block to avoid injuries.
 - Continue attacking tool conditioning.

MENTAL CONDITIONING Theory Learning, Testing & Mental Strategies

• Technical

- Learn theory including pattern histories and terminology off by heart.
- Mock exams and tests with training partner.
- Learn who's who in the ITF and your own organisation by visiting their websites.
- Devise mental strategies for your approach to the grading.

Sample Program

Sample of Training Block 1

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
		On waki	ng record Resting He	eart Rate		
am Threshold Training, 30 mins.	am Weight Training.	am Threshold Training, 30 mins.	am Weight Training.	am Threshold Training, 30 mins.		REST
pm Club training – followed by Plyometrics.	pm Technical Session – Patterns.	pm Club training – followed by Plyometrics.	pm Technical Session – Kicking and Step Sparring.	pm Theory.	pm Technical Session – Self Defence work with partner.	
Attacking Tool Conditioning – each evening (only adults)						

Sample of Training Block 2

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
		On wakii	ng record Resting He	eart Rate		
am Threshold Training, 30 mins.	am GPP Training.	am Threshold Training, 30 mins.	am GPP Training.	am Threshold Training, 30 mins.		REST
		Grease the Groove	throughout the day			
pm Club training – followed by Alactic Power Intervals.	pm Technical Session – Patterns.	pm Club training – followed by Alactic Power Intervals.	pm Technical Session – Kicking, Free Sparring drills.	pm Theory.	pm Technical Session – One step and Self Defence with partner.	
		Attacking Tool Cor	nditioning – each eve	ening (only adults)		

Sample of Training Block 3

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
		On wakii	ng record Resting He	art Rate		
am Sprint Intervals.		am Sprint Intervals.		am Sprint Intervals.	am 2.4 km Test.	REST
		Grease the Groove	throughout the day			
pm Club training.	pm Technical Session – Patterns followed by Lactic Capacity Intervals.	pm Club training.	pm Technical Session – destruction techniques followed by Lactic Capacity Intervals.	pm Theory.	pm Technical Session – 1 Step and Self Defence with partner and Destructions.	
		Attacking Tool Cor	nditioning – each eve	ening (only adults)		

Weekly Training Schedule - Blank Template

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
		On waki	ng record Resting He	eart Rate		
am	am	am	am	am		REST
pm	pm	pm	pm	pm	pm	
		Attacking Tool Cor	nditioning – each eve	ening (only adults)		

References

Australian Sports Commission, Mental Routines (2012). http://www.ausport.gov.au/ais/sssm/psychology/brainwaves/factsheets/m ental routines

Muleta, M. (1993) Plyometrics. ITKD Essay Library http://itkd.co.nz/reference/essays/index.php

Tsatsouline, P (2003) The Naked Warrior

Jamison, J. (2009), Ultimate MMA Conditioning.

http://sportsmedicine.about.com/cs/overtraining/a/aa062499a.htm