# Planning & Periodisation

Performance Pathway Coaches
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Coach Education Manager





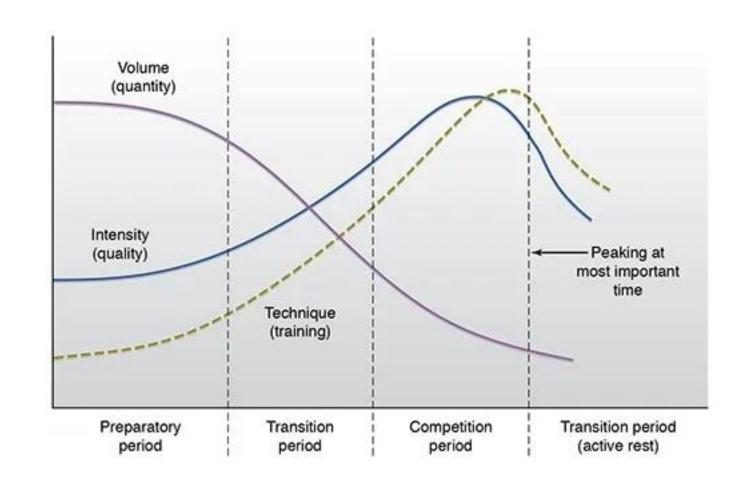
#### Periodisation



This is the time of year when coaches are now planning for the year ahead.

Planning is a vital part of the training of an athlete.

Remember the old adage: "Fail to plan, plan to fail"



#### Definitions



- Periodisation -
- 4Planning -
- Managing –
- Peaking -

#### Definitions



The 'Training Load' is the combination of the Volume and Intensity of any training

- Volume
  - The quantity of any training
- Intensity
  - The quality of any training.

GPP

**General Preparation Phase** 

SPP

**Special Preparation Phase** 

CP Competition Phase

#### Periodisation



The coach needs to know the following before proceeding:

- 1. What is the talent of the athlete is the athlete Olympic material or national class or provincial level?
- 2. What is the age of the athlete in terms of chronological age and training age?

#### Periodisation

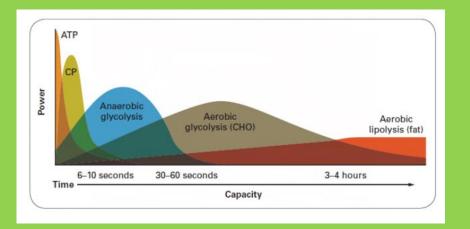


The coach must then set out the objectives of the programme:

- 1. The athlete must be made ready for an improvement in performance.
- 2. Be made ready for a competition peak.
- 3. Be prepared for a major competition within that peak.



# **Energy Systems**



There are 3 main energy systems and it is important to know what they are and what they do in relation to sprint running events.

- Anaerobic Alactic System (ATP-CP) used for high intensity short duration events lasting between 10 and 15 seconds for example 60m and 100m sprints.
- Anaerobic Lactic System (Glycolytic) used for high to medium intensity events lasting between 30 and 60 seconds for example 200m and 400m sprints.
- Aerobic Energy System used for low intensity long duration events lasting over 60 seconds for example 400m sprints and above.

Each of the three systems work in tandem and their contribution varies based on events.



# **Energy Systems**



100				200 metres				400 metres			
metres								%	Phosphagen	Glycolitic	Aerobic
%	Phosphagen	Glycolitic	Aerobic	%	Phosphagen	Glycolitic	Aerobic	100			
100				100				90			
90				90				80			
80				80				70			
70				70				60			
60				60		52%				400/	
50	50%			50				50		48%	
40		40%		40				40			38%
30				30	26%		22%	30			
20				20				20	14%		
10			10%	10				10			

### Training Blocks

Microcycle – 7 to 14 day block

Mesocycle – 2 to 7 microcycles

Macrocycle – Overall yearly plan





The training year can be divided into 'periods' of training

This gives structure, progression and variety to the training

There are three main periods of training:

- General
- Special Preparation
- Competition

Periodisation helps in the long term development of the athlete



For most athletes it is best to plan for a Double Periodised Year. This assumes two competitive seasons. This means an Indoor\* Competitive Phase in February/March and an Outdoor Competitive Phase.

The conventional wisdom is that for older juveniles and adults the double periodised year affords a greater improvement in performance over the single periodised year.





**The General Preparation Phase I – GPP I** – will last 10-12 weeks from Oct to Dec. It will be monitored and may be curtailed early depending on progress. The monitoring will be done through a regular testing programme. Maybe 12 weeks will be too long for an elite athlete.

- Work on Strength, Conditioning, Special Endurance,
- Specific Endurance, Speed, Mobility, Technique.

**The Special Preparation Phase I – SPP I** – will last 4-6 weeks from Dec to Jan. There could be an element of warm weather training in this.

- Work on Strength, Special Endurance, Specific Endurance,
- Speed Endurance, Speed, Conditioning, Technique.



**The Competition Phase – CP I** – will last 5 weeks. The main emphasis here could be to perform well at the National Indoors.

• Compete successfully during the Indoor Season.

It will be followed by a return to **General Preparation training – GPP II**.

This can last 3-4 weeks, again depending on many factors which will have

to be monitored.

- Work on Strength, Conditioning, Special Endurance,
- Specific Endurance, Speed, Mobility, Technique.





**The Special Preparation Phase – SPP II** – will begin in April and continue through to the end of May. There could be an element of warm weather training in this.



- Work on Strength, Special Endurance, Specific Endurance,
- Speed Endurance, Speed, Conditioning, Technique.

It will lead in to the most important part of the year, namely, the

**Competition Phase II** – CP II. This will last up to 12 weeks.

Compete successfully during the Outdoor Season.

## The Planning Journey



Where is the athlete now?

Athlete Profile

Where do they need to get to?

Goals

What does the athlete need to do?

**Focussed Training** 

What do I need to do?

Plan, Do, Review

Monitor progress



How will we know if we have got there?

# Profiling Athletes

#### **Essential Information**



#### Ages of the runner:

Chronological, training

#### Development stage:

 Based on a visual assessment of their capabilities of ABC's and running skills

Physical activity in their lives

Physical status – health, illnesses, injuries

Disability information (if relevant)

Motivations for running

Limiting factors in their lifestyle

Goals and ambitions.



#### Factors that Influence Performance



Movement Skills

Lifestyle & Support Physical Preparation

Technical & Tactical

Psycho-Behavioural

#### SMARTER Goals



What is the SPECIFIC goal you want to achieve? The more detail, the better.

How will you MEASURE the goal? How will you track progress and know once you have achieved it?

Can you ACHIEVE the goal? What skills do you have and which ones will you need to obtain?

How important is the goal to you? Is it RELEVANT to your values and get you towards your purpose?

When does this need to happen? What is the end-date? Why does it need to be TIMEBOUND?

How did you perform? What can you learn? EVALUATE you progress to get better results.

When and how will you celebrate? REWARDS help to build sustainable habits.

## Types of Goals



#### **Outcome Goals**

(usually what the athlete brings)

- Performance related
- Very measurable but not always in control of athlete and coach
- Motivational can be a double edged sword

#### **Process Goals**

- Are steps on a journey towards an outcome goal
- Focus on the "doing" not the result
- Always athlete centred
- Main focus of the coach



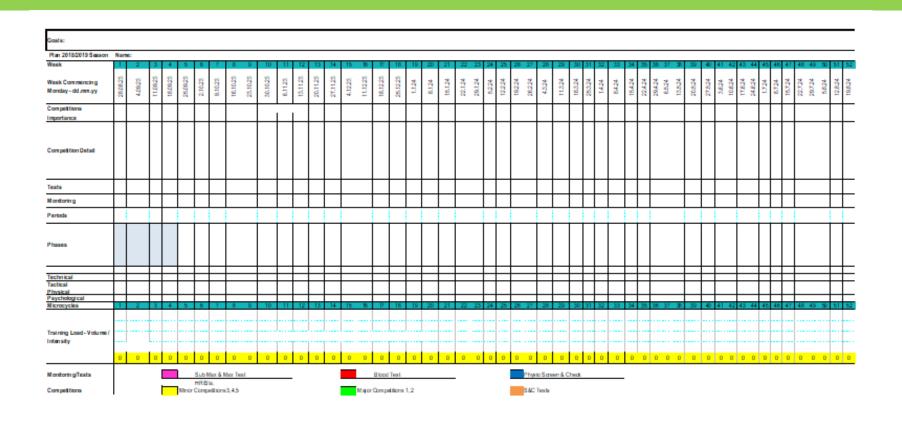
## Designing the Annual Plan



- Step 1 Evaluation Feedback and Feedforward
- Step 2 Decide the structure of the annual plan whether a single, double or multi-periodised year is optimum
- Step 3 Decide the objectives and duration of the Periods and Phases
- Step 4 Decide the objectives and duration for Mesocycles and Microcycles
- Step 5 Quantify the Training Loads within mesocycles: volume, intensity and recovery
- Step 6 Plan for monitoring and ongoing evaluation.

#### Annual Plan





NAME: EVENT GROUP.

# The basic elements of the training program model to improve Performance will include the following concepts:



- 1. Development of a Yearly Periodized Plan
- 2. Development of a Dynamic Stereotype (Basic and Advanced Technical Models of Sprinting) rehearsed at high velocity
- 3. Development of Maximum Speed
- 4. Development of Maximum Strength
- 5. Development of Maximum, Functional Power
- 6. Development of Core Strength (specific to sprint/hurdle posture demands)
- 7. Development of Specific Strength for tendons and muscles of the lower Leg and ankle
- 8. Development of Energy Systems Specific to Event
- 9. Development of Specific Testing Protocols and Testing Intervals
- 10. Development of Specific Warm-up Patterns for items 2-7 above



# The Weekly Design



- 1. Establish the athlete profile
- 2. Determine the Period and Phase of training
- 3. Design the training load distribution level of loading and balance
- 4. Establish the training load identify volumes / intensities / density
- 5. Identify the components of fitness training units to be included
- 6. Determine the number of sessions and units for the microcycle
- 7. Construct the daily session(s)
- 8. Evaluate the microcycle by using the 'check list'

## The Weekly Design – Notes



Quality before quantity

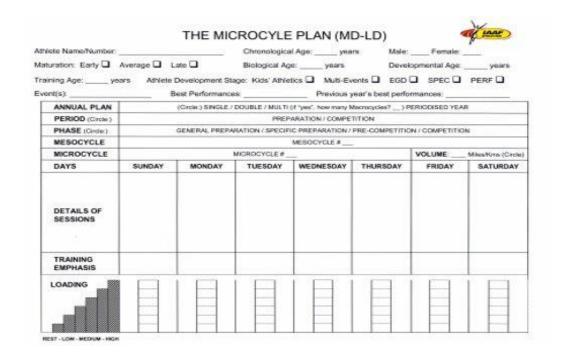
Training focus is on sprint performance not work capacity

Neural development requires recovery

Organise days into high and low neural demand

Taper into competition

Strength & Speed (CNS) – early in the week



# Sample Microcycle Plan

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PHASE (Circle:)	- 0	GENERAL PREPA	RATION / SPECIF	IC PREPARATION /	PRE-COMPETITION	ON / COMPETITIO	N.
MESOCYCLE				MESOCYCLE #			
MICROCYCLE	97		MICROCYCLE#_			VOLUME	Mikes/Kiros (Ciro
DAYS	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDA
DETAILS OF SESSIONS							
TRAINING EMPHASIS							
LOADING				IBI			IE

**COACHING & DEVELOPMENT** 

# Managing the Training



- The athlete's ability level training intensity
- The athlete's training age
- Higher level athlete's require more recovery
- Assess the state of readiness of the athlete
- During competition phase add all the intensities



# Managing the Training



- Is the content and structure appropriate for the stage of athlete development?
- Is the content appropriate for the Period?
- Is the content appropriate for the Phase?
- Is the loading level appropriate?
- Is there a balance of loading/recovery time for adaptation?
- Are loadings appropriately specific to achieve the objectives?
- Is there variety within and between sessions?
- Are the various components of fitness integrated?

# Some Final Key Points

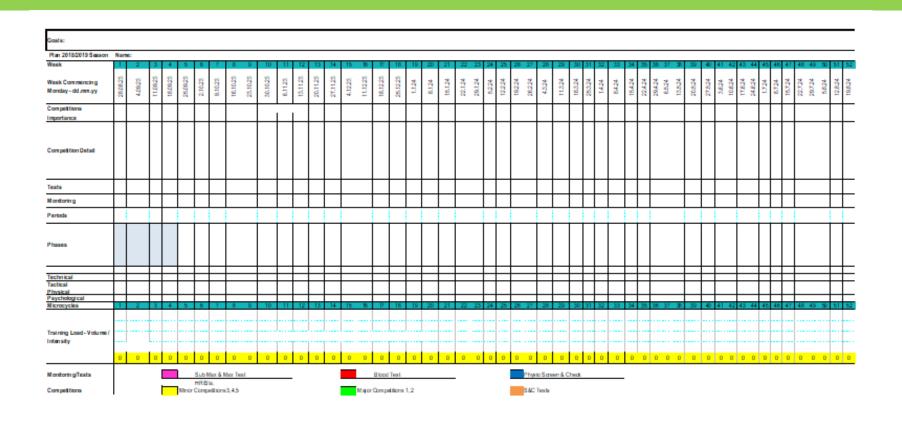


- Your annual plan is your road map but do not become a slave to it.
- It rarely works out exactly as we set it out so be willing to adjust on a daily, weekly and monthly basis along the way.
- 4 Have a plan in place on paper; you must be able to see exactly where you are trying to get to and how you are going to do this.
- Always aim for consistency in your training and staying injury/illness free

**Competition Selection** – It is most important that you start your planning backwards from your goal/key competition (s) for the year. Setting the goals is a priority and then work backwards from these and think about how many weeks training you will need and break it up into phases. Then add some key competitions along the way to gauge fitness and that complement your key competition.

#### Annual Plan





NAME: EVENT GROUP.

Goals:																																											
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# Key Performance Pathway Dates



Date	Competition	Location
31 <sup>st</sup> October	Performance Pathway Day 1	Dublin
26 <sup>th</sup> November	U20 Relays & PP Coaches Day	Athlone
<b>TBC</b> January	Pathway Camp	Portugal
13 <sup>th</sup> February	Performance Pathway & Relays Day	Dublin
2 <sup>nd</sup> – 5 <sup>th</sup> April	Easter Pathway Camp	Tullamore, Ireland
<b>TBC</b> June & July	Team Days prior to travel	



Performance Pathway- <a href="https://www.athleticsireland.ie/high-performance/performance-pathway">https://www.athleticsireland.ie/high-performance/performance-pathway</a>

## Key Competitions Dates



Date	Competition	Location
10 <sup>th</sup> December	European Cross Country	Brussels, Belgium
20 <sup>th</sup> January	National Indoor U20s & U23s	Athlone, Ireland
9 <sup>th</sup> & 10 <sup>th</sup> March	European Throwing Cup	Leiria, Portugal
18 <sup>th</sup> – 21 <sup>st</sup> July	European U18 Championships	Banksa Bystricia, Slovakia
3 <sup>rd</sup> August	National Outdoor U20s & U23s	Tullamore, Ireland
26 <sup>th</sup> – 30 <sup>th</sup> August	World U20 Championships	Lima, Peru
8 <sup>th</sup> December	European Cross Country	Antalya, Turkey



Fixtures Page - <a href="https://www.athleticsireland.ie/competition/fixtures">https://www.athleticsireland.ie/competition/fixtures</a>
High Performance Page - <a href="https://www.athleticsireland.ie/high-performance">https://www.athleticsireland.ie/high-performance</a>

#### Where to find answers



Jacqui Freyne – Performance Pathway Manager Psychology, Nutrition, Performance, Physiotherapy, Planning, Life Skills etc.

https://www.athleticsireland.ie/high-performance/performance-pathway/workshops

Roisin Lande – Athlete Services & Carding Coordinator Med Check Sport Ireland - <a href="https://medcheck.sportireland.ie/">https://medcheck.sportireland.ie/</a> Anti-Doping Elearning - <a href="https://www.irunclean.org/">https://www.irunclean.org/</a>





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Patience, Strong Foundations, Slow Build, Consistent, Plan for Future, Long-Term Goal

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