

### SPORT - FITNESS TRAINING AND PROGRAMMING



## STARTER

# List factors which you believe contribute to successful performance development.

# **LEARNING OUTCOMES**

- Identify and describe an individuals training goals; short, medium and long-term.
- <u>Describe</u> the principles of training and how they can be applied to an individual training programme.
- <u>Apply</u> principles to a training programme, <u>evaluating</u> strengths and areas for improvement.
- <u>Reflect</u> on progress and <u>provide recommendations</u> for future improvement.

# SUCCESSFUL PERFORMANCE DEVELOPMENT

"You have to focus on one match at a time, it can be easy to look ahead and look at other results, but the main thing is to just focus on your own game".

For performance to develop you must;

- Set goals
- Monitor progress
- Evaluate effectiveness



# PERIODISATION

The manipulation of training to achieve goals and coincide with competition.

Split into cycles

Microcycle – Typically 1 week Mesocycle – 2-6 weeks Macrocycle – Day 0 to goal

# **PERIODISATION TABLE**



General Training

Specific Training

# PERIODISATION

| 6 WEEKS  |        |        |              |          |        |  |
|----------|--------|--------|--------------|----------|--------|--|
| Week 1-2 |        | Weel   | <b>« 3-4</b> | Week 5-6 |        |  |
| Week 1   | Week 2 | Week 3 | Week 4       | Week 5   | Week 6 |  |
|          |        |        |              |          |        |  |

Volume High - Intensity Low General Training Volume Low - Intensity High Specific Training

### **PRESEASON TRAINING - MACROCYCLE**



What is the aim of preseason and how long do you have to achieve it?

### **PRESEASON TRAINING - MESOCYCLE**

What phases is preseason split in to and how long does each one last for? What is the aim of each phase?



### **PRESEASON TRAINING - MICROCYCLE**

What would a typical week of preseason look like?



### PRESEASON TRAINING - INDIVIDUAL SESSION



What does a typical session in preseason involve?

### **PERIODISATION TABLE**

#### On the follow slide is a periodisation table for Rochdale FC Youth Team preseason training.

It last 6 weeks and is broken down into specific phases.

|                    |        | MACRO                     | OCYCLE |                        |                        |  |
|--------------------|--------|---------------------------|--------|------------------------|------------------------|--|
| AEROBIC ENDURANCE  |        | STREM                     | NGTH   | POWER AND<br>TECHNICAL |                        |  |
| WEEK 1             | WEEK 2 | WEEK 3                    | WEEK 4 | WEEK 5                 | WEEK 6                 |  |
|                    |        |                           |        |                        |                        |  |
| MONDAY<br>WORKSHOP |        | T<br>WEDNESDAY<br>COLLEGE |        |                        | T<br>SATURDAY<br>GAMES |  |

# TASK 1.1

You will be given a profile of 1 of 4 athletes (attached worksheet).

Based on the information provided, plot the information on the periodisation table.

Extension – complete additional periodisation table for a different athlete containing alternate information.

# **USAIN BOLT**



# **CONNOR MCGREGOR**

|                       | Macrocycle<br>(long-term goal)<br>FIGHT |         |        |           |           |        |         |      |        |           |        |       |
|-----------------------|---|---------|--------|-----------|-----------|--------|---------|------|--------|-----------|--------|-------|
| Mesocycle<br>(medium) |   | ENDUI   | RANCE  |           |           | STRE   | NGTH    |      | PO     | WER AND   |        | QUE   |
| Microcycle<br>(short) | JUDO                                    | JUJITSU | BOXING | WRESTLING | TAEKWONDO | BOXING | JUJITSU | JUDO | BOXING | WRESTLING | BOXING | FIGHT |

# ANDY MURRAY

|                       |                      | Macrocycle<br>(long-term goal)<br>FRENCH OPEN |                        | Macrocycle<br>(long-term goal)<br>WIMBLEDON |          |                        |  |
|-----------------------|----------------------|---|------------------------|---|----------|------------------------|--|
|                       | AEROBIC<br>ENDURANCE | STRENGTH                                      | TECHNIQUE<br>AND POWER | AEROBIC<br>ENDURANCE                        | STRENGTH | TECHNIQUE<br>AND POWER |  |
| (medium)              |                      |   | C                      |   |          | C                      |  |
| Microcycle<br>(short) |                      |   | O<br>M<br>P            |   |          | O<br>M<br>P            |  |
|                       | fitness              | gym based foreha                              | nd, backhand, serves   |   | REC      | COVERY WEEK            |  |

# DAVID SILVA

|                       | MACROCYCLE<br>(LONG TERM)<br>FIT FOR UPCOMING SEASON |        |          |           |                               |       |  |  |
|-----------------------|--|--------|----------|-----------|-------------------------------|-------|--|--|
| Mesocycle<br>(medium) | AEROBIC ENDURANCE                                    |        | STRENGTH | AND SPEED | POWER AND TECHNICAL<br>SKILLS |       |  |  |
| Microcycle<br>(short) | Testing  | Cardio | Gym      | Speed     | Set play                      | Games |  |  |

# LINKING PERIODISATION TO PERFORMANCE DEVELOPMENT



# **PRINCIPLES OF TRAINING**

In order to get the most out of your training, you must follow some basic simple training principles.



**Progressive Overload Specificity** Individual Differences Variation **Reversibility Rest and Recovery** Frequency Intensity Time Type

### PRINCIPLES OF TRAINING

Task – On the next slide, match up the principles of training to their descriptions

| The number of times you train per week/month   |
|--|
| How hard you train during each training session. This can be measured by Maximum Heart Rate.   |
| How long you train for during each session. E.g. 60 minutes  |
| The type of training you perform. E.g. strength training, aerobic endurance training, and flexibility training.  |
| Fitness can only be improved by training more than you normally do. You must work hard. Start slowly and gradually increase the amount of exercise and keep overloading.       |
| Training must be matched to the needs of the sporting activity. Training must be specific to what you want to improve.   |
| A successful training programme will meet individual differences which are personal fitness needs based on age, gender, fitness level and the sport for which we are training. |
| Any adaptation that takes place as a result of training will be reversed when you stop training. If you take a break or don't train often enough you will lose fitness.        |
| Variations in intensity, duration, volume, and training prevents boredom.  |
| It is important to have rest in your programme to allow your body to recover. This could include rest between sets or complete rest days.                                      |

| Frequency     | The number of times you train per week/month  |
|---------------|---|
| Intensity     | How hard you train during each training session. This can be measured by Maximum Heart Rate.                    |
| Time          | How long you train for during each session. E.g. 60 minutes   |
| Туре          | The type of training you perform. E.g. strength training, aerobic endurance training, and flexibility training. |
| Progressive   | Fitness can only be improved by training more than you normally do. You must work hard. Start                   |
| Overload      | slowly and gradually increase the amount of exercise and keep overloading.                                      |
| Specificity   | Training must be matched to the needs of the sporting activity. Training must be specific to what               |
|               | you want to improve.  |
| Individual    | A successful training programme will meet individual differences which are personal fitness needs               |
| Differences   | based on age, gender, fitness level and the sport for which we are training.                                    |
| Reversibility | Any adaptation that takes place as a result of training will be reversed when you stop training. If             |
|               | you take a break or don't train often enough you will lose fitness.   |
| Variation     | Variations in intensity, duration, volume, and training prevents boredom.                                       |
| Rest and      | It is important to have rest in your programme to allow your body to recover. This could include                |
| Recovery      | rest between sets or complete rest days.  |

### TASK 1.2

# Analyse the case study and identify each training principle.

Extension – Evaluate strengths and areas for improvement, suggest ways the athletes training could be improved using each of the training principles.

# **REVIEW AND CONSOLIDATE**

- Identify and describe an individuals training goals; short, medium and long-term.
- <u>Describe</u> the principles of training and how they can be applied to an individual training programme.
- <u>Apply</u> principles to a training programme, <u>evaluating</u> strengths and areas for improvement.
- <u>Reflect</u> on progress and <u>provide recommendations</u> for future improvement.