

BASES

Supervised Experience

Physiology Competencies

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BASES Physiology Accreditation

Expectations for supervised experience working towards accreditation

General competencies

In a research and/or Sport & Exercise Science support context an accredited physiologist would be expected to:

- 1 Possess the required knowledge of exercise physiology to underpin research and support activities, e.g. to select or design appropriate testing procedures which are appropriate to the subject group. Included within this would be an applied knowledge of the physiological demands of the sport or exercise and/or specific issues related to subject group, such as age or disability.
- 2 Correctly perform the procedures and techniques for the collection of data. Included within this would be:
 - Calibration procedures
 - Awareness of maintenance requirements
 - Knowledge of reliability measures and coefficients of variation
 - Safe use of the equipment and protocols used
- 3 Correctly interpret physiological information gained from tests in laboratory, field or related situations.
- 4 Appreciate the limitations of procedures being used.
- 5 Communicate information to the appropriate scientific, sporting or lay audience.

For support accreditation the communication of information in an understandable and meaningful manner (written and orally) is essential. This may also include articles in appropriate sports magazines.

For research accreditation this would include articles in refereed journals, where the author has not only made a substantial contribution to the data collection and analysis, but has also contributed to the submitted manuscript. It would also include presentations at scientific conferences.

- 6 Show an awareness of ethical issues associated with their work.
- 7 Perform all their work in accordance with the BASES code of conduct.

Physiology section

List of identified requirements for supervised experience in physiology

Process for assessment of supervisee

All identified areas should be rated on a scale of 0 - 5 (0 = no experience, 5 = autonomous competency). Specific comments should also be made for each area commenting on the strengths of the supervisee, identifying which aspects need further development and how this will be achieved (i.e. attendance at specific workshops, laboratory experience etc.)

For each identified requirement the following should be included as appropriate: Knowledge, Procedures and techniques, Safety, Interpretation of information, Communication of information, Limitations of procedures; along with information and consent procedures and calibration methods. Furthermore when conducting the assessment the generic expectations and desirable characteristics of all accredited sport & exercise scientists should be considered, including Ethics and Code of conduct.

List of identified requirements (Physiology)

Anthropometry and body composition

Strength including isokinetic dynamometry

Flexibility

Lung function

Resting blood samples (HCr, Hb,)

Blood pressure

ECG and heart rate (resting and exercise)

Maximal oxygen uptake

Predictions of aerobic fitness and maximal oxygen uptake

Blood lactate assessment (exercise)

Maximal intensity exercise testing (anaerobic)

Field-testing

Data analysis

Specific issues associated with working with special groups

Presentation and communications skills

Application form
Physiology section

Application form

Physiology section

Applicant name:

Applicant qualifications:

Name of proposed supervisor:

Location of proposed supervisor:

Are you seeking remission for any part of the 3 year supervised experience process?
YES/NO

If yes please state the length of requested remission and provide support for this in the following section

Evidence to support application for remission

Assessment of requirements for year 1 of supervised experience

Process for assessment of supervisee

You should rate yourself on a scale of 0 - 5 (0 = no experience, 5 = autonomous competency). Specific comments should also be made for each area commenting on the strengths of the supervisee, identifying which aspects need further development and how this will be achieved (i.e. attendance at specific workshops, laboratory experience etc.). If you consider any of the listed areas not to be relevant to yourself, please indicate on the form by writing N/A next to the item and indicate why it should not apply to your situation.

For each identified requirement the following should be included as appropriate: Knowledge, Procedures and techniques, Safety, Interpretation of information, Communication of information, Limitations of procedures; along with information and consent procedures and calibration methods. Furthermore when conducting the assessment the generic expectations and desirable characteristics of all accredited sport scientists should be considered, including Ethics and Code of conduct.

Needs Analysis

(0 = No experience, 5 = Autonomous competency)

List of identified requirements (Physiology)

Topic	Current Rating 0 - 5	Will this be an item to be worked on in your supervised experience programme this year (YES/NO)	If YES please indicate how it will be developed	Indicate intended level to be achieved by the end of this years supervised experience 0-5
1. Anthropometry and body composition				
Knowledge Procedures and techniques Safety Interpretation of information Communication of information Understanding Limitations of procedures				
Further comments on the above				

2. *Isokinetic dynamometry*

Knowledge

Procedures and techniques

Safety

Interpretation of information

Communication of information

Understanding Limitations of
procedures

Further comments on the above

3. *Lung function*

Knowledge

Procedures and techniques

Safety

Interpretation of information

Communication of information

Understanding Limitations of
procedures

Further comments on the above

4. *Resting blood sample*

Knowledge

Procedures and techniques

Safety

Interpretation of information

Communication of information

Understanding Limitations of
procedures

Further comments on the above

**5. *Blood pressure, ECG and
heart rate***

Knowledge

Procedures and techniques

Safety

Interpretation of information

Communication of information

Understanding Limitations of
procedures

Further comments on the above

6 Maximal oxygen uptake

Knowledge

Procedures and techniques

Safety

Interpretation of information

Communication of information

Understanding Limitations of
procedures

Further comments on the above

**7. Submaximal estimations of
maximal oxygen uptake**

Knowledge

Procedures and techniques

Safety

Interpretation of information

Communication of information

Understanding Limitations of
procedures

8. Blood lactate assessments

Knowledge

Procedures and techniques

Safety

Interpretation of information

Communication of information

Understanding Limitations of
procedures

Further comments on the above

**9. Anaerobic power and
strength testing**

Knowledge

Procedures and techniques

Safety

Interpretation of information

Communication of information

Understanding Limitations of
procedures

Further comments on the above

10. Desirable characteristics

for support work

Diplomacy and tact
Flexibility when working with
groups and/or individuals
Common sense
Approachable
Appreciate the demands of the
client's lifestyle.

Further comments on the above

***11. Presentation and
communication skills.,
Publications and dissemination
of material***

12. Working with special

groups

Further comments on the above

13. Other

Annual report form

Physiology section

Annual report form

Physiology section

Name of Supervisee:

Name of supervisor:

Year of supervised experience programme to which the report refers
(1-3):

Please summarise your supervised experience related activities below including qualifications gained and work undertaken as part of, or relevant to, the programme.

Assessment of annual progress

Process for assessment of supervisee

You should re-assess yourself on a scale of 0 - 5 (0 = no experience, 5 = autonomous competency). Specific comments should also be made for each area commenting on work undertaken in the previous year to attain the level indicated and where appropriate that proposed for the forthcoming year.

Additional information such as publications and material relating to work completed may be attached.

Topic areas (Physiology)

Topic	Previous rating 0 - 5	Current Rating 0 - 5	Will this be an item to be worked on in your supervised experience programme this year (YES/NO)	Please outline the work undertaken in the previous year to attain the current rating and where appropriate the work proposed for the forthcoming year	Indicate intended level to be achieved by the end of this years supervised experience 0-5
1. Anthropometry and body composition					
Knowledge					
Procedures and techniques					
Safety					
Interpretation of information					
Communication of information					
Understanding Limitations of procedures					
Further comments on the above					

2. *Isokinetic dynamometry*

Knowledge

Procedures and techniques

Safety

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Further comments on the above

3. *Lung function*

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Further comments on the above

4. Resting blood sample

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Procedures and techniques

Safety

Interpretation of information

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Further comments on the above

**5. Blood pressure, ECG and
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Further comments on the above

6 *Maximal oxygen uptake*

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**7. *Submaximal estimations of
maximal oxygen uptake***

Knowledge

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8. Blood lactate assessments

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Further comments on the above

**9. Anaerobic power and
strength testing**

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Safety

Interpretation of information

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Further comments on the above

**10. Desirable characteristics
for support work**

Diplomacy and tact
Flexibility when working with
groups and/or individuals
Common sense
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Appreciate the demands of the
client's lifestyle.
Communication skills

Further comments on the above

**11. Presentation and
communication skills.
Publications and dissemination
of material**

**12. Working with special
groups**

Further comments on the above

13. Other