



**Scottish
Swimming**

SQA / UKCC Level 3 Certificate for Coaching Swimming

Course Syllabus



Overview

This qualification is aimed at those interested in delivering a coaching programme in a competitive swimming environment

Scottish Credit and Qualifications Framework (SCQF) and United Kingdom Coaching Certificate (UKCC)

This qualification is also recognised as a UKCC Level 3 and is on the SCQF at Level 7. In order to achieve the qualification Candidates must achieve Units 1-11.

Pre-requisites

- Candidates must be at least 18 years of age at the commencement of the course
- Hold the SQA/UKCC Level 2 Certificate for Coaching Swimming, or
- Hold the ASA/UKCC Level 2 Certificate for Coaching Swimming, or
- Hold the ASA Club Coach Certificated, or
- Hold the ASA Level 2 Certificate for Teaching (units 1-4), plus submit a CV outlining coaching experience and references, or
- Hold the SQA/UKCC Level 2 Certificate for Teaching Aquatics, plus submit a CV outlining coaching experience and references, or
- Gain exemption prior to the course from Scottish Swimming.

Introduction

The Level 2 Certificate for Coaching Swimming sits as the third formally assessed qualification on the coaching qualifications pathway. Units 1-6 are common units to all of the aquatic coaching strands (Swimming, Diving, Synchronised Swimming and Water Polo) and have a focus on the core coaching skills and knowledge. It is envisaged that units 1-6 can be delivered to all coaches who wish to work in the aquatic environment. Units 7-11 have their focus on Swimming Coaching technical knowledge and practical skills that will allow the coach to fulfil the following Role Descriptor.

Role Descriptor

Once qualified the holder of the Level 3 Certificate for Coaching Swimming is able to plan, deliver and evaluate a macro cycle of work. The Level 3 coach will be able to manage and lead appropriate resources (physical and human) to support all areas of the club programme.

A qualified Level 3 Coach (Diving, Swimming Coaching, Synchronised Swimming and Water Polo) can directly train at any one time up to 36 swimmers.

Format

The qualification is designed to be delivered as a rolling programme of stand-alone units and will be assessed using task booklets throughout Units 1-10. Unit 11 is a practical unit in the appropriate/home environment. Responsibility for the assessment of Unit 11 lies with the assessor appointed by the programme co-ordinator in the appropriate/home environment.

Units 1-10 have to be passed before the candidate is allowed to progress onto Unit 11.

Total length of course

- 100 hours of theory
- Practical 12 weeks of home-based coaching for either of the following or 24 weeks for both
- Development Coach (Swim Skills/Training to Train) between 6 - 12 hours per week OR
- Performance Coach (Training to Compete/Training to Win) between 12 – 24 hours per week

Assessment and Verification

Assessment of Units 1-10 is by an independent assessors appointed by the programme co-ordinator and will be assessed through task booklets.

Assessment of Unit 11 is by assessors appointed by the programme co-ordinator and will cover the following:

- Practical coaching through an evidence based portfolio, oral questioning and observation.

(N.B. Courses leading to a SQA qualification are subject to internal and external verification on a sampling basis.

Progression

Achievement of this qualification may enable the candidate to secure employment (paid or voluntary) as a coach normally operating in the context of a swimming club, a local authority swimming programme, or a private swimming programme. The qualification is the third stage in a four level coaching structure. Units 1-6 are transferable across all disciplines and therefore candidates wishing to take a Level 3 qualification in another discipline are only required to complete Units 7-11 within the discipline; providing they already hold Units 4-6 of the relevant SQA/UKCC or ASA/UKCC Level 2 qualifications or have gained exemption. The next stage for qualified UKCC Level 3 Coaches will be to progress to UKCC Level 4.

Recommended Reading and Resources

All recommended reading resources for Level 1 and Level 2 plus the following:

- The Swim Coach Bible Hannula, D

Guided teaching Hours away from the course

Candidates will be expected to prepare aspects of sessions, complete additional tasks as determined by the supporting candidate resources, including general worksheets and additional reading in addition to the syllabus content. The exact time required will vary from candidate to candidate.

Course Administration

Candidates:

- Candidates need to enrol onto the programme, through Scottish Swimming, with the SQA prior to starting the Level 3 Certificate for Coaching Swimming and pay the appropriate registration fee.
- Units 1–10 can be taken as either a course or as individual units in any order. SQA/UKCC Level 3 Certificate for Coaching Swimming (v1 1/2/08) 3
- Units 1-10 need to be completed prior to progressing onto Unit 11.
- Candidates registering onto the Level 3 learning programme will be give 36 months (3 years) from the date of registration in which to complete successfully the qualification (i.e., Units 1-10 plus Unit 11 practical assessment in the

appropriate/home environment). However, the expectation is that it should be completed within 24 months (2 years)

Learning Programme:

- All practical aspects of the programme, which leads to any aquatic qualification at UKCC level 3 must be delivered in a physical location that meets the minimum criteria laid out by the Awarding Body.
- Courses must be registered with the SQA a minimum of 4 weeks prior to the commencement date (NB: A course can comprise of Units 1 – 10 or individual units or a combination of units).
- Practical assessment needs to be undertaken with competitive swimmers in an appropriate training environment i.e. Scottish Swimming affiliated club.
- All assessment should be undertaken in accordance within the guidance laid out by the Awarding Body.
- The maximum number of candidates per tutor for unit 1 is 12.
- Each unit of the programme could be delivered by different Tutors or invited experts with the experience and relevant knowledge in that area of the curriculum.

Human Resources needed for delivery and assessment

All tutors delivering level 3 qualifications are expected to have completed the Scottish Swimming upskilling or Scottish Swimming tutor training (or equivalent Tutor qualification). If there are invited experts, they will have provided the appropriate evidence related to both competency as a tutor and level of subject knowledge.

Responsibility for the assessment of Unit 11 lies with the assessor appointed by the programme coordinator.

UNIT 1 – DUTIES OF THE LEVEL 3 TEACHER/COACH

Description of the Unit

This is a mandatory unit

This is a core unit and links across all strands of UKCC (Aquatic Teaching, Diving, Swimming Coaching, Synchronised Swimming, Water Polo). This is a core unit that explores referral pathways, support services, teaching/coaching systems and benchmark data as tools for the teacher/coach to utilise within the aquatic environment.

Notes

Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Preparation for Teaching/ Coaching Activities

To achieve this element the candidate must be able to:

- U1.1.1 Define the roles and responsibilities of a level 3 coach.
- U1.1.2 Describe the leadership skills needed for the level 3 coach and explain how you would apply this in a vocational setting.
- U1.1.3 Describe the management task of the level 3 coach and explain how you would apply this in a vocational setting.
- U1.1.4 Identify the various methods of coaching self-analysis and how these could improve their coaching: • Coaching diary • Video self-analysis • Mentoring • Athlete feedback • Athlete improvement / results • Demonstrate the ability to undertake a coaching S.C.O.R.E. analysis.

- U1.1.5 Develop a personal development plan that will assist you to effectively fulfil the role of the level 3 coach.
- U1.1.6 Identify the potential specialist support services that are appropriate to your programme and their functions.
- U1.1.7 Demonstrate the ability to do a needs analysis of their coaching programme reflecting the human resource requirements.

Syllabus

- Roles: Supervision of other staff; creating and maintaining an effective workforce; organising, prioritising and controlling work schedules; reporting, day to day management..
- Responsibilities: Span of control, managing teams e.g. athletes, committee other coaches etc.; manage resources e.g. equipment, budgets; health and safety e.g. Health and Safety at Work Act 1974; welfare of self and others e.g. illnesses and injuries.
- Leadership Skills: Generating good working relationships e.g., motivation, delegation, mentoring, training; effective communication e.g. team meetings / briefings, reports, memos, presentations.
- Management Skills: Planning e.g. budgets, staffing, resources, facilities, time management, administrative systems, evaluating programme infrastructure; disciplinary and grievance; inducting new staff; development of relevant policy and procedures; appraisal / evaluation and development e.g. of staff, self, programme, athlete (non-performance related), reviewing and developing coaching practice of others.
- Specialist and Medical Support Services: e.g. Physiologists, bio-mechanists, psychologists, strength and conditioning coaches, nutritionists, medical support for injury

Assessment

This unit will be assessed through written coursework and assessment tasks.

UNIT 2 – LONG TERM ATHLETE DEVELOPMENT – (LTAD)

Description of the Unit

This is a mandatory unit

This is a core unit and links across all strands of UKCC (Aquatic Teaching, Diving, Swimming Coaching, Synchronised Swimming, Water Polo). This unit explores the issues of Long Term Athlete Development (LTAD) relating to a Level 3 Teacher/Coach.

Notes

Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Roles and Responsibilities

To achieve this element the candidate must be able to:

- U2.1.1 Identify and explain the physical, cognitive and emotional adaptations that occur at the FUNdamental stage of Long Term Athlete Development.
- U2.1.2 Identify and explain the physical, cognitive and emotional adaptations that occur at the Learning to Train stage of Long Term Athlete Development.

- U2.1.3 Identify and explain the physical, cognitive and emotional adaptations that occur at the Training to Train stage of Long Term Athlete Development.
- U2.1.4 Identify and explain apply the physical, cognitive and emotional adaptations that occur at the Training to Compete stage of Long Term Athlete Development.
- U2.1.5 Identify and explain the physical, cognitive and emotional adaptations that occur during the Training to Win stage of Long Term Athlete Development.
- U2.1.6 Explain and justify how you would incorporate LTAD pathway knowledge into your coaching cycle.
- U2.1.7 Explain how the principles of LTAD are applied to the SwiMark club development pathway structures.
- U2.1.8 Explain the process for participants whose LTAD needs cannot be met within an existing programme.
- U2.1.9 Explain common physiological issues specifically affecting female athletes and their participation in sport in relation to their LTAD stage.

Syllabus

Roles & Responsibilities

- The Growth, Maturation and Development Pathway: e.g. Physical (Sensitive Periods of Trainability and accelerated adaptations, adolescence/puberty) e.g. Cognitive (Mental development) and e.g. Emotional Development (school/peer pressure/ adolescence/puberty/family).
- Gender differences and issues: Male And female growth, Peak Height Velocity (PHV), maturation and development factors, puberty, the onset of menarche, training implications.
- FUNDamental: Chronological age, movement literacy, FUN and participation, ABC's, RJT, KGB's, CPK's, Peak Speed Velocity window 1 (PSPV1) through FUN and games.
- Learning to Train: Following on from FUNDamentals, chronological/biological age, gender differences, skill development phase, peak motor/coordination velocity (PMCV), complimentary sports, core stability, ancillary capacities, competition ratio.
- Training to Train: Biological age, gender differences, identifying Peak Height Velocity (PHV), skill/aerobic development, introducing Peak Speed Velocity 2 (PSPV2), core stability, refinement of technique, competition ratio, mental and tactical preparation.
- Training to Compete: Biological age, gender differences (post PHV and onset of menarche), competitive and physical development, Peak Weight Velocity (PWV), Peak Strength Velocity (PSV), mental and tactical preparation, competition ratio, ancillary capacities.
- Training to Win: Chronological age, specialisation and performance development, work: rest ratio's, advanced tactical and mental preparation, competition ratio, ancillary capacities.
- The Coaching Cycle: Planning, delivery, evaluation and referrals: the effects of LTAD on these factors.
- The Processes of Matching Athletes with the Appropriate Training Environment: How to refer e.g.. AIS Performance Manager or Sports Partnership Swimming Development Manager, why refer? e.g.- sufficient pool time, appropriately qualified coach, when to refer e.g. stage of maturation, where to refer to? e.g.- SwiMark talent pathways:

Assessment

This unit will be assessed through written course work and assessment tasks.

UNIT 3 – EXERCISE PHYSIOLOGY

Description of the Unit

This is a mandatory unit

This is a core unit and links across all four coaching strands of UKCC (Diving, Swimming Coaching, Synchronised Swimming, Water Polo). This unit explores the issues of Exercise Physiology relating to the Level 3 Coach

Note Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Exercise Physiology

To achieve this element the candidate must be able to:

- U3.1.1 Identify the major components that make up the Central, Peripheral and Autonomic Nervous Systems and describe the functions of each.
- U3.1.2 Outline the process of muscle contraction from initiation to completion.
- U3.1.3 Identify and explain muscle contraction types giving specific examples of each.
- U3.1.4 Outline why muscles hypertrophy or atrophy.
- U3.1.5 Explain the role of calcium, protein, vitamins and hormones in relation to optimum bone development.
- U3.1.6 Investigate and determine the components of the cardio-respiratory system and its role in relation to oxygen uptake, ventilatory anaerobic threshold and blood lactate levels.
- U3.1.7 Explain the roles and functions of the main energy systems.

Syllabus

- Central, Peripheral and Autonomic Nervous Systems: Neuromuscular responses of the brain, spinal cord, sensory/motor and intermediate neurones (nerve cells), structure and function, nerve impulses, all or nothing response, dendrites, axons, born and learnt reflexes, voluntary actions, nerve synapses, role of the autonomic nervous system (sympathetic and parasympathetic system).
- The Muscular System: Responses to activity/inactivity (muscle atrophy / hypertrophy), muscle contraction types. Sliding Filament Theory, actin, myosin.
- The Skeletal System: Bone ossification (length/width) and development in relation to LTAD, requirements for bone growth (calcium, protein, vitamins, hormones, response and adaptations to exercise).
- The Cardio-respiratory System: alveolar function in gaseous exchange, oxygen transport to cells, Elimination of carbon dioxide, energy release, response and adaptations to exercise, (VO₂max oxygen uptake, anaerobic threshold, training development).
- Energy Systems: anaerobic (alactic system), anaerobic (lactic acid/glycolytic system), aerobic (Krebs Cycle, Electron Transport Chain).

Assessment

This element will be assessed by completing coursework tasks in an assessment book.

Element 2 – Applied Exercise Physiology

To achieve this element the candidate must be able to:

- U3.2.1 List and describe possible methods of analysis that can be utilised in different aquatic sports.
- U3.2.2 Summarise the range of medical support that can be used to help with injury reduction, management and rehabilitation.

- U3.2.3 Demonstrate an understanding of a series of appropriate test protocols designed to assess performance in the following areas:
 - Aerobic Capacity
 - Anaerobic Capacity
 - Strength
 - Power
 - Speed
 - Muscular Endurance
 - Agility and Balance
 - Flexibility
 - Anthropometry
- U3.2.4 Based on data collected through testing; develop specific training activities aimed at developing speed, strength, power, endurance and flexibility in their athletes.

Syllabus

- Exercise Physiology; Methods of Analysis: e.g. Blood lactate measurements, heart rate, Rate of Perceived Exertion, velocity, T20 testing, body composition, hydration assessments, recovery methods
- Sports Medicine: Injury reduction (pre-habilitation), management and rehabilitation
- Physiological Test Protocols: British Sport Science protocols and test sets, Physiological assessments utilised to assist performance, exercise/energy system specific testing and monitoring
- Using the Physiologist to Improve Performance: Identification of athlete requirements, monitoring, interpretation and application of data to improve performance, energy systems and training intensity measurements, integration of findings into specific training activities

Assessment

This element will be assessed by completing coursework tasks in an assessment book.

UNIT 4 – NUTRITION AND HYDRATION FOR PERFORMANCE

Description of the Unit

This is a mandatory unit

This is a core unit and links across all four coaching strands of UKCC (Diving, Swimming Coaching, Synchronised Swimming, Water Polo). This unit explores the issues of Nutrition and Hydration relating to a Level 3 Coach.

Note Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Nutrition

To achieve this element the candidate must be able to:

- U4.1.1 Identify the three major macronutrients and explain the different energy effects on the body.
- U4.1.2 Identify components of a well-balanced athlete diet.
- U4.1.3 Provide appropriate practical nutritional advice to athletes.
- U4.1.4 Identify possible nutritional deficiencies/eating problems affecting athletes (including female, masters and disability athletes).
- U4.1.5 Identify the common signs/symptoms of eating disorders.

- U4.1.6 Summarise the range of medical support that can be used to help with nutritional concerns of athletes.
- U4.1.7 Analyse an athlete diet plan to assist in athlete preparation and recovery for training and competition.

Syllabus

- The Major Macronutrients: Energy yields, types of carbohydrates (simple and complex sugars, e.g. sucrose, glucose fructose etc), fats, proteins, vitamins and minerals, glycaemic index of foodstuffs.
- Nutrition to Improve Performance: Components of a well balanced diet, macronutrient ratio's and effects on the body.
- Nutrition Strategy and Planning: Pre, during and post competition diet, using the food pyramid with athletes, the travelling athlete, using Nutritionist's, nutritional deficiencies and eating disorders.

Assessment

This element will be assessed by completing coursework tasks in an assessment book.

Element 2 – Hydration

To achieve this element the candidate must be able to:

- U4.2.1 Identify the recognised hydration guidelines for physical performance.
- U4.2.2 Discuss the components of a suitable fluid replacement regime for athletes.
- U4.2.3 Develop a pre/during/post competition and training hydration strategy including justification of fluids used.
- U4.2.4 Analyse hydration strategy to assist in athlete preparation and recovery for training and competition.

Syllabus

- Hydration to Improve Performance: Hydration guidelines, measuring fluid replacement, types of fluid to maximise performance
- Hydration Strategy and Planning: Hydration strategy for training and competition, the travelling athlete, correct fluid intake and timing
- Hydration Analysis: Pre, during and post competition fuels, fluid characteristics and requirements

Assessment

This element will be assessed by completing coursework tasks in an assessment booklet.

UNIT 5 – COACHING PSYCHOLOGY AND SKILL ACQUISITION

Description of the Unit

This is a mandatory unit

This is a core unit and links across all strands of UKCC (Aquatic Teaching, Diving, Swimming Coaching, Synchronised Swimming, Water Polo). This unit explores the issues and applications of Sport Psychology and Skill Acquisition relative to a Level 3 Coach.

Note Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Sports Psychology and the Coach

To achieve this element the candidate must be able to:

- U5.1.1 Identify and explain specific psychological techniques in order to reduce stress.

- U5.1.2 Identify and explain specific psychological techniques in order to develop self-confidence and self-belief.
- U5.1.3 Identify and explain specific psychological techniques in order to apply Goal Setting techniques.
- U5.1.4 Identify and explain specific psychological techniques in order to motivate your athletes.
- U5.1.5 Identify the importance of the coach developing and maintaining a positive coaching environment for self, athletes and support staff.
- U5.1.6 Discuss the importance of realistic goal setting for athlete and coach performance.
- U5.1.7 Develop relevant short and long term process and outcome goals.
- U5.1.8 Explain the importance of athlete involvement and ownership in the goal setting process.
- U5.1.9 Identify the benefits of key imagery skills and techniques for athletes to use.
- U5.1.10 Develop intrinsic and extrinsic motivational strategies to assist athlete and others performance.
- U5.1.11 Identify and explain the use of effective and individually relevant intrinsic and extrinsic motivational techniques with athletes.
- U5.1.12 Identify and understand the stages of skill learning.
- U5.1.13 Identify when an athlete is in each learning stage.
- U5.1.14 Identify and explain feedback methods relevant for each stage of skill.

Syllabus

- Using Sport Psychology to Improve Performance: The role of the human mind in individual and team performance, applying psychological techniques in order to improve performance.
- Advanced Communication Skills: e.g. Neuro-Lingustic Programming (NLP): 'Neurologically' visualise all aspects of optimum performance, using cue's to enhance confidence and reduce anxiety, imagery: body language, rapport, conflict resolution.
- Stress and Anxiety: Stressors: e.g. competition, athlete frustration, conflict, Identifying stress symptoms: e.g. physical: sweating, heart rate, adrenaline, psychological: e.g. competitive state anxiety, personality, trait and environmental anxiety, arousal, coping strategies, relaxation, maintaining skill under pressure, maintenance of skill under pressure.
- Developing a Personal Coaching Philosophy: Coaching styles: autocratic, democratic continuum, adaptation to specific situations.
- Management Process of Self and Others:
- Leadership theory: Introduction to Leadership theory, types of leaders, styles of leadership.
- Stages of Skill Learning and Associated Theories: Cognitive, Associative and Autonomous, learning methods and theories, Individual learning methods and styles – Visual, Auditory, Kinaesthetic, Identifying skill learning stages, Long Term Athlete Development Term Athlete Development Implications.
- Feedback Mechanisms to Improve Performance: – Intrinsic and Extrinsic feedback, knowledge of results and knowledge of performance, Practice methods; observation of practice, ranges of explanation and demonstration techniques - facilitative, participant centred, show and tell, chalk and talk, improving learning to meet participants' needs

Assessment

This element will be assessed by completing coursework tasks in an assessment book.

UNIT 6 – LAND BASED TRAINING

Description of the Unit

This is a mandatory unit

This is a core unit and links across all four coaching strands of UKCC (Diving, Swimming Coaching, Synchronised Swimming, Water Polo). This unit explores the issues and applications of Land Based Training relative to the Level 3 Coach.

Note Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Land Training

To achieve this element the candidate must be able to:

- U6.1.1 Identify the various types of land based training and their role in athlete preparation and performance.
- U6.1.2 Explain the different physiological effects related to the different types of land training.
- U6.1.3 Identify the need for sufficient neural and muscular recovery during and after land based strength and power activities / sessions.
- U6.1.4 Identify common injuries that occur as a result of ineffective land based training and how to avoid these.
- U6.1.5 Outline basic training considerations for planning and implementing land based training activities with athletes.
- U6.1.6 Source information to further develop knowledge related to the provision of land based training.

Syllabus

- Movement Patterns: adduction, abduction, extension, flexion, elevation, rotation and their relationship to joints, cartilage and tendons
- Types of Land Based Training: Core stability, body weight training, weight training, plyometrics, circuit training, cross training
- Physiological Effects: LTAD factors, different types of muscle contractions relating to equipment, muscle damage and repair for different types of activity, Delayed Onset of Muscle Soreness (DOMS), reduced power output; reduced range of motion, neural stress
- Factors affecting adaptations: e.g. - age, gender, training history, genetics, injury history / status; training factors that influence recovery times, other factors that influence recovery, overtraining and injuries
- Factors to consider for Including land training into aquatic training programmes: overall frequency, volume and intensity, record keeping, benefits of land training, designing land training programmes for different outcomes, other factors to consider for Integration and periodisation of dry land training
- Health and Safety Factors: Can the programme be effective, quality controlled (correct technique used), safely delivered, sourcing further information to develop knowledge

Assessment

This element will be assessed by completing coursework tasks in an assessment booklet.

UNIT 7 – SWIMMING COACHING: DATA INTERPRETATION

Description of the Unit

This is a mandatory unit

This is a sports specific unit and explores the issues of interpreting and analysing information from training and competition for use in planning future sessions and cycles relating to a Level 3 Swimming Coach.

Note Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Recording and Interpreting Poolside Data

To achieve this element the candidate must be able to:

- U7.1.1 Identify methods for collecting data and understand the roles these methods play in analysing swimmer performance.
- U7.1.2 Identify relevant situations for collecting data.
- U7.1.3 Interpret and explain test set data.
- U7.1.4 Interpret and explain competition data.
- U7.1.5 Prioritise participants' performance needs using analysed information

Syllabus

- Methods for Collecting Data: Video, stopwatches, stroke rates, stroke counts, stroke lengths, heart rate measurement, lactate testing, Rate of perceived exertion charts (RPE)
- Situations for Collecting Data: Warm ups; swim downs; competition; training; starts; turns; land-based training
- Test Set Data: 7 x 200m Step Test, maximum heart rate, stroke efficiency, double distance, 15m time, vertical jump, critical speed (VCrit), V4; statistics and other data for performance analysis e.g. world record data; specific use of current and future technical analysis equipment e.g. flume, lactate machines, RPE; use of relevant and available technologies e.g. video
- Competition Data: Race pace, Critical speed, critical stroke rates, start times, turn times, stroke counts, finish times, heart rates, RPE, blood lactate levels, distance

Assessment

This unit will be assessed through Coursework and assessment tasks

UNIT 8 – SWIMMING COACHING: TECHNIQUE AND SKILL ADAPTATION

Description of the Unit

This is a mandatory unit

This unit is sports specific and explores how the Level 3 Swimming Coach can maximise swimmer efficiency by adapting technique.

Note Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Adaptations to Improve Technique

To achieve this element the candidate must be able to:

- U8.1.1 Discuss the importance of gathering accurate information and using this to analyse the skills of an athlete.

- U8.1.2 Outline relevant methods of skill analysis (video, observation, biomechanical analysis, athlete performance, athlete injury occurrence, digital cameras, others).
- U8.1.3 Apply and justify adaptation to Front Crawl technique relating to physical and event factors in order to improve performance efficiency.
- U8.1.4 Apply and justify adaptation to Back Crawl technique relating to physical factors and event in order to improve performance efficiency.
- U8.1.5 Apply and justify adaptation to Breast Stroke technique relating to physical factors and event in order to improve performance efficiency.
- U8.1.6 Apply and justify adaptation to Butterfly technique relating to physical and event factors in order to improve performance efficiency.
- U8.1.7 Apply and justify adaptation to Individual Medley technique relating to physical and event factors in order to improve performance efficiency.
- U8.1.8 Apply and justify adaptation to starts, turns and finishes for all four events relating to physical and event factors in order to improve performance efficiency.

Syllabus

- Skill Analysis: Data Collection and interpretation, working with the athlete, methods of skill analysis e.g. DVD, video, still photography, performance observations, injury occurrences, specific periodised development of skills.
- Measuring Efficiency: Establishing areas for potential development / refinement, model analysis, biomechanical analysis, evaluation and application of outcomes
- Physical and Event Factors: distance; physical ability e.g. upper body strength, joint flexibility, range of movement, strength at range of movement; gender; disability category; lever length; lung capacity; pacing; stroke length; stroke rate e.g. head position, body position, streamlining, rotation along the long axis, rotation along the short axis, effective arm pull, effective recovery, effective leg kick, timing, efficiency
- Adaptations to Front Crawl Technique: Arm recovery e.g. straight-arms, bent arms, round arms; Underwater Pull e.g. straight arm, straight back, 'S' shape, wide, narrow; Leg action e.g. two beat, four beat cross, six beat, efficiency, degree of ankle adduction, dolphin action; breathing e.g. bi-lateral, single side, patterns, head position; body position; timing e.g. stroke rate, stroke length, equal arm pulls, semi catch up, asymmetrical catch up.
- Adaptations to Back Crawl Technique: Arm recovery e.g. straight-arms, shoulder rotation, shoulder abduction; Arm propulsion e.g. hand entry, catch phase, straight arm, bent arm, hand position, hand finish position, hand exit; Leg action e.g. two beat, four beat cross, six beat, fly legs underwater, distance underwater; breathing e.g. rhythm, inhale, exhale; body position e.g. angle, high head position, low head position, rotation about the long axis; Timing e.g. stroke rate, stroke length, equal arm pulls, semi catch up, asymmetrical catch up.
- Adaptations to Breast Stroke Technique: Arm action e.g. propulsion, recovery, width of pull, glide length, dipped shoulder; Leg action e.g. propulsion, recovery, width, dolphin action; breathing e.g. height out of water, trickle, power; body position e.g. rotation about short axis, angle of body, hip angle; Timing e.g. stroke rate, stroke length, equal arm pulls, glide phase, arm pull/leg kick.
- Adaptations to Butterfly Technique: Arm recovery e.g. straight-arms, bent arm, height above water; Arm propulsive phase e.g. hand entry width, thumbs pointing down on entry, finger first entry, catch phase, key hole stroke pattern, elbow height, power pattern, hand finish towards leg, hand finish towards feet, hand exit position; Leg action e.g. two beat, one beat, underwater phase; breathing e.g. every stroke, every two strokes, stroke patterns, breathing to the side; body position e.g. depth of undulation, head height above water, depth of kick; Timing e.g. stroke rate, stroke length, number of kicks to pulls, position of kick during pull.

- Adaptations to Starts: Dive e.g. angle of take off, flight time, angle of entry, depth of underwater phase, distance and depth of underwater phase, type of kick, angle of exit, transfer to stroke; feet placement on wall (Backstroke).
- Adaptations to Turns: Turns e.g. speed into the wall, centre of rotation, distance from wall, moments of inertia, centre of gravity, momentum initiator, feet placement on wall, angle of push off, angle of legs at push off, streamline, glide phase, kick phase, type of kick, distance travelled underwater, angle of breakthrough, transfer to stroke.
- Adaptations to Finishes: Finishes e.g. breath control, spotting the wall, speed into wall, arm extension on wall, turn onto side.

Assessment

This unit will be assessed through coursework and assessment tasks.

UNIT 9 – THE SWIMMING COACH AND COMPETITION

Description of the Unit

This is a sports specific unit and explores the Level 3 Swimming coaches' role relating to competition and the factors that may affect it.

Note Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Competition

To achieve this element the candidate must be able to:

- U11.1.1 Identify the factors that effect an individual athlete's preparation needed for a swimming competition.
- U11.1.2 Explain the physiological response to tapers.
- U11.1.3 Identify the factors that effect performance of individuals and teams at competition.
- U11.1.4 Identify areas for monitoring during performance at competition.
- U11.1.5 Identify and explain methods of dealing with stressful situations at competitions.
- U11.1.6 Identify and explain methods of post competition evaluation of athletes, coaches, support staff and self.

Syllabus

- Factors that affect individual athletes e.g. Length of competition, events, number of events, age, competition format.
- Physiological responses to tapering: Musculo-skeletal responses, individualisation/specificity, timing, volume, carbohydrate intake, aerobic/lactate/anaerobic/ATP-CP work.
- Factors affecting individual and team performance: e.g. nutrition, hydration, team spirit, environmental issues, length of competition, competition format, Drug testing procedures, awareness of banned substances lists.
- Monitoring of competition performance e.g. timings, tactics, skills Stroke rate, Stoke count, splits, pacing. Timing, environment.
- Competition stress, e.g. rest periods, performance anxiety, psychological rest, overcoming boredom, psychology of tapering.
- Coping strategies; competition readiness, GB warm up and swim down protocols e.g. distance, heart rate, lactate levels.
- Post competition evaluation.

- Competition relationships e.g. coach and performer, coach and coach, coach and support services.
- Use of competition within periodised cycles e.g. training block, race speed, skill practice, recovery, enjoyment, building blocks, positive reinforcement, physiological response to training.

Assessment

This unit will be assessed through coursework and assessment tasks.

UNIT 10 – PLANNING FOR SWIMMING PERFORMANCE

Description of the Unit

This is a mandatory unit.

This is a sports specific unit and explores the issue of periodised planning to maximise swimming performance relating to the Level 3 Swimming Coach.

Note Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Planning

To achieve this element the candidate must be able to:

- U10.1.1 Discuss the importance of actively involving athletes in the development of their training plans.
- U10.1.2 Discuss the importance of considering the stages of physical, emotional and cognitive development (including consideration of any physical disabilities) that athletes are in when planning and delivering coaching activities.
- U10.1.3 Develop a periodised macrocycle programme in order to provide sessions that promote and support participants' development. The plan will incorporate:
 - The training phases of the year
 - Microcycles
 - Macrocycles
 - Physical training
 - Psychological skills training
 - Recovery training
 - Skills training (technical and tactical)
 - Competition
- U10.1.4 Plan outlines for each session of the programme that are progressive and consistent with accepted good practice.
- U10.1.5 Plan realistic timings, sequences, volume and intensity for all the sessions within the overall coaching programme.
- U10.1.6 Develop coaching activities relevant to each major stage within the LTAD framework.
- U10.1.7 Select and justify the choice of proposed delivery modes and coaching styles to promote participants' development and meet the overall programme goals.
- U10.1.8 Identify methods to retain participants throughout the coaching programme.
- U10.1.9 Explain the adaptations required for coaching programmes to meet the needs of a range of participants.
- U10.1.10 Demonstrate an understanding of how to integrate competition performance into periodised training cycles.
- U10.1.11 Develop contingency plans to effectively deal with unforeseen coaching situations.
- U10.1.12 Analyse, compare and contrast 3 coaching systems from around the world.

Syllabus

- Factors to Consider for Planning: Athlete aims / goals; types of periodisation e.g. - Macro, Meso and Micro cycles; Set construction; uses and applications of training camps; integrating land training; stage of long-term athlete development; competition structure e.g. event structure, qualification protocol; lifestyle e.g. school, exams, holidays.
- Components for Building a 12 Month Plan: Information on participants and on current performances; Prioritising needs for the plan; Establishing goals and methods to achieve them; Structure programme e.g. -- Periodisation, training camps, session types & sets; Select delivery modes and coaching styles; Adaptations & Contingency plans; Methods for retaining participants; Scheduled rest / recovery periods; Schedule regular reviews / evaluations / feedback; Evaluation of Plan / programme / 12 week – 12 month schedule.
- Stages of Development (LTAD Planning): Training adaptations; Understanding fatigue (in development / performance level athletes); Training of systems, breakdown of systems, regeneration techniques; Introduction to land training as part of injury prevention; Energy systems related to set construction; Adaptations for development / performance level athletes; Nutrition, refuelling, supplements.
- Methods and Adaptations for Supporting a Range of Participants;
- Comparison of World Leading Coaching Systems and Infrastructures: Research systems from around the World e.g. – Great Britain, Hungarian, Australian, USA; Look at specific individual coach systems for the different phases of LTAD

Assessment

This unit will be assessed through coursework and assessment tasks.

UNIT 11 – SWIMMING COACHING: THE LEVEL 3 COACH IN ACTION

Description of the Unit

This is a sport specific unit and explores the practical competencies relating to a Level 3 Coach.

Note Each unit is split into elements. Each element has its own assessment criteria, and each assessment criteria has its own reference number e.g. U1.1.1 is Unit1.Element1.Assessment Criteria1.

Element 1 – Practical Skills

To achieve this element the candidate must be able to: Collect and deal with information:

- U11.1.1 Collect and analyse information in order to identify participants' current and potential performance.
- U11.1.2 Deal with confidential information using appropriate guidelines.
- U11.1.3 Negotiate and agree with participants and others a variety of methods for collecting information on current and potential performance.
- U11.1.4 Agree with participants and others ongoing review strategies. Planning:
- U11.1.5 Negotiate, agree and design the goals of the programme to meet participants' needs, the coaching environment, technical requirements of the sport and within personal level of competence.
- U11.1.6 Identify potential risks throughout the coaching programme and methods to minimise them.
- U11.1.7 Plan for the integration of appropriate resources across the coaching programme ensuring that they are available to participants and others as required.
- U11.1.8 Manage and allocate the human and physical resources required to support the coaching programme.

Evaluation of Coaching Programme:

- U11.1.9 Explain the range of evaluation techniques that can be used to monitor and review the impact of the coaching programme.
- U11.1.10 Negotiate and agree an evaluation schedule for the programme with participants and others that takes account of changing needs and aspirations.
- U11.1.11 Explain the potential contribution of participants and others to the evaluation schedule.

Practical Duties of a Level 3 Coach:

- U11.1.12 Explain to participants and others their contribution to maintain a safe and effective coaching environment.
- U11.1.13 Implement planned procedures for managing risk during the coaching programme in line with accepted good practice.
- U11.1.14 Check the suitability of participants and others dress and equipment to ensure that they are safe and appropriate for the coaching environment.
- U11.1.15 Complete safety checks to ensure that the coaching environment meets relevant health and safety standards, reporting any problems to the appropriate person.
- U11.1.16 Manage the safe and effective set up and taking down of equipment.
- U11.1.17 Analyse new risks during the programme and minimise them to an acceptable level for the coaching environment.
- U11.1.18 Communicate information related to health, safety, emergency and operating procedures with participants and others.
- U11.1.19 Explain the methods to manage and minimise the range of injuries and illnesses that can affect participants and others.
- U11.1.20 Explain the use of guidelines, procedures and practices for reporting accidents, injuries and illness.

Delivery:

- U11.1.21 Manage the roles and contributions of participants and others to ensure an equitable coaching environment.
- U11.1.22 Select and use effective communication methods to establish supportive working relationships that are responsive to the changing needs of participants and others.
- U11.1.23 Implement strategies to protect children and vulnerable adults from abuse.
- U11.1.24 Agree ground rules for behaviour with the participants and others.
- U11.1.25 Set appropriate standards of behaviour through own professional practice.
- U11.1.26 Select and use a variety of methods to manage and reward participants behaviour.
- U11.1.27 Encourage participants and others to discover personal solutions to manage disagreements, conflict and inappropriate behaviour.
- U11.1.28 Communicate and confirm the programme and session goals to the participants and others.
- U11.1.29 Assess the participants' physical and mental readiness, level of experience and ability to participate in the coaching programme.
- U11.1.30 Modify the programme in response to the changing needs of the participants or new learning opportunities.
- U11.1.31 Support and encourage participants to undertake activities that are safe and effective in order to ensure physical and mental readiness.
- U11.1.32 Provide opportunities for the active involvement of all participants throughout the programme.
- U11.1.33 Use a range of methods to motivate and encourage all participants appropriate to their level of development.

- U11.1.34 Involve participants in personal development and performance needs using a range of communication methods and styles.
- U11.1.35 Involve participants in the selection, application and modification of session and programme goals.
- U11.1.36 Deliver realistic timings, sequences, volume and intensity for each planned session appropriate for the participants' level of development.

Technique and Performance:

- U11.1.37 Provide technically correct explanations and demonstrations throughout the programme to support participants' needs, development and aspirations.
- U11.1.38 Apply and justify a range of intervention strategies and training methods to support participants' development.
- U11.1.39 Use a range of coaching styles to promote participants' own development and decision-making.
- U11.1.40 Observe and analyse participants' performance during the coaching programme.
- U11.1.41 Provide coaching points and techniques to address areas that require change or further development during the programme.

Concluding Session Safety:

- U11.1.42 Support and encourage participants to select and undertake safe and effective activities to conclude sessions.
- U11.1.43 Manage the coaching environment to ensure it is suitable for future use

Monitor, evaluate and refine the goals of the coaching programme:

- U11.1.44 Implement the planned evaluation schedule to review the effectiveness of programme goals.
- U11.1.45 Collect and analyse accurate information from a range of sources to evaluate the effectiveness of the programme.
- U11.1.46 Negotiate, agree and record any modifications to the coaching programme with the participants and others.
- U11.1.47 Monitor and evaluate the role of others in supporting the coaching programme and developing participants' progress and achievement.

Evaluate Participants Performance:

- U11.1.48 Use a range of communication styles and methods to ensure that participants and others understand the purpose and principles of the evaluation.
- U11.1.49 Implement the planned evaluation schedule to review progress of participants' performance and development.
- U11.1.50 Use a range of methods to collect and analyse information from a range of sources to evaluate participants' performance and development.
- U11.1.51 Create opportunities for participants to discuss their performance and development throughout the programme.
- U11.1.52 Negotiate and agree priorities for improvement with participants and others.
- U11.1.53 Analyse own coaching practice identifying strengths, weaknesses and areas for professional development.
- U11.1.54 Implement current developments across sport, reviewing the impact of new coaching practices on participants and others. U11.1.55 Develop, record and implement a personal action plan in order to update current coaching practice.

Assist others to develop their coaching practice:

- U11.1.56 Review coaching practice of others.
- U11.1.57 Negotiate and agree action plans to develop the coaching practice of others.
- U11.1.68 Provide advice and guidance to others to ensure that they update and agree changes to their action plan.

Syllabus

- Content of all Units - 1 to 10.

Assessment

This unit will be assessed through coursework tasks, an evidence based portfolio and observation by an assessor appointed by the programme co-ordinator