



BARNES SCHOOL OF SPORTS THERAPY

Diploma in Sports Therapy

Course Syllabus

PART ONE

P1.1 ANATOMY, PHYSIOLOGY AND PATHOLOGY

AIMS: This module aims to provide students with an extensive underpinning knowledge of general anatomy, physiology and pathology.

CONTENT:

CELLS & TISSUE
SKELETAL SYSTEM
JOINTS
CARDIOVASCULAR SYSTEM
LYMPHATIC SYSTEM
IMMUNITY
MUSCLES
NERVOUS SYSTEM
SENSORY
OLFACTORY
SKIN
DIGESTIVE SYSTEM
URINARY SYSTEM
ENDOCRINE SYSTEM
REPRODUCTIVE SYSTEM
RESPIRATORY SYSTEM
BIOCHEMISTRY

A COMPREHENSIVE LIST OF PATHOLOGIES – For example Arthritis (Osteo), Asthma, Diabetes Mellitus, Fibromyalgia, Irritable Bowel Syndrome and Multiple Sclerosis

P1.2 BODY MASSAGE

AIMS: This module aims to provide students with the fundamental knowledge and practical skills of body massage as a foundation to more advanced types of massage therapy.

CONTENT:

1/ INTRODUCTION TO MASSAGE - Definition, aims, benefits

2/ PREPARATION FOR MASSAGE - Hygiene, environment, case history, dignity, attitude, presentation

3/ CONTRAINDICATIONS OF MASSAGE - List of contraindications to body massage and correct actions when identified

4/ POSITIONING - Client positions for massage, client comfort, masseur position / posture, adjustable / non adjustable beds

5/ ACTION PLANS AND FEEDABCK - Forming action plans, communication with client, observation, client feedback

6/ MASSAGE SKILLS - Practical massage skills, full body massage routine

P1.3 PROFESSIONAL STANDARDS

AIMS: This module aims to supply students with a thorough knowledge of the principles of health and safety and how they apply to sports therapists.

CONTENT:

HSE

RESPONSIBILITIES

RISK ASSESSMENT

MANAGEMENT OF HEALTH AND SAFETY AT WORK

CORPORATE MANSLAUGHTER

SLIPS AND TRIPS

HAZARDS

FIRE AND EVACUATION

HYGIENE

PROFESSIONALISM

P1.4 BUSINESS PRACTICES

AIMS: This module aims to give students guidance and information on how to develop and run a business based around sports therapy.

CONTENT:

1/ STARTING UP - Equipment, premises, insurance, professional memberships, self employment, charges, business plans

2/ EXPANDING - Diversifying, employing staff, advertising, professional relationships, target groups, branding

P1.5 APPLIED ANATOMY, PHYSIOLOGY AND PATHOLOGY

AIMS: The aim of this module is to identify for students the areas of anatomy, physiology and pathology that are most relevant to sports therapists and to provide them with a sound knowledge of these topics.

CONTENT:

- 1/ TERMINOLOGY GLOSSARY - Important terminology and descriptions
- 2/ SURFACE ANATOMY - Bony landmarks, surface musculature
- 3/ JOINTS - Shoulder, elbow, wrist, hip, knee and ankle joint anatomy, types, classification, conditions
- 4/ MUSCLES - Structure, function and nature of muscle tissue
- 5/ TENDONS AND LIGAMENTS - Structure, function and nature of tendon and ligament tissue
- 6/ SKELETON - Structure, function and nature of the skeleton
- 7/ INFLAMMATION AND REPAIR - Phase of inflammation, healing, swelling, spasms, ruptures, scar tissue

P1.6 SPORTS MASSAGE

AIMS: This module aims to introduce the more advanced massage techniques associated with sports massage and to further develop the confidence and practical competence of the students.

CONTENT:

- 1/ DEEP TISSUE MASSAGE - Description, benefits, use, contraindications, practical application
- 2/ MYOFASCIAL RELEASE - Description, benefits, use, contraindications, practical application
- 3/ FRICTIONS AND SOFT TISSUE RELEASE - Description, benefits, use, contraindications, practical application
- 4/ HOT AND COLD THERAPY - Cryotherapies, cryokinetics, thermal therapies, uses, contraindications

5/ CLINICAL STRETCHING - Flexibility, cautions, active, passive, PNF, practical application

6/ SPORTS MASSAGE - Combining skills, tailoring to the individual, practical application

P1.7 SPORTS INJURIES

AIMS: This module aims to develop students understanding of the mechanisms of injury and of the different conditions associated with sports injuries.

CONTENT:

1/ SPORTS INJURIES OF THE NECK AND SHOULDER

2/ SPORTS INJURIES OF THE ARM AND ELBOW

3/ SPORTS INJURIES OF THE WRIST AND HAND

4/ SPORTS INJURIES OF TRUNK AND HIP

5/ SPORTS INJURIES OF THE KNEE

6/ SPORTS INJURIES OF THE LEG, ANKLE AND FOOT

P1.8 FIRST AID

AIMS: This module aims to provide students with the core skills of emergency first aid.

CONTENT:

SCENE ASSESSMENT

BARRIERS

PATIENT ASSESSMENT

RICE

EMERGENCY SERVICES

RECOVERY POSITION

CARDIOPULMONARY RESUSITATION

MONITORING PATIENT

BLEEDING/WOUND MANAGEMENT AND DRESSING

CHOKING MANAGEMENT

HEART ATTACK MANAGEMENT

SHOCK MANAGEMENT

ASTHMA MANAGEMENT

FRACTURES
SIGNS AND SYMPTOMS
COMMUNICATION
FIRST AID BOX/CONTENTS
ACCIDENT BOOK

PART TWO

P2.1 PRINCIPLES OF EXERCISE AND FLEXIBILITY

AIMS: To provide students with an extensive knowledge of exercise and flexibility and to instil in them the ethos of the Barnes School of Sports Therapy which encourages the physical fitness and ability in its therapists so they may 'lead by example' in the gymnasium and in the clinic.

CONTENT:

1/ HISTORY TAKING - Importance of knowing and understanding client/patient history before commencing exercise

2/ BODY RESPONSE TO EXERCISE - Physiological changes to the body during exercise, monitoring clients during exercise

3/ AEROBIC AND ANAEROBIC SYSTEMS - Aerobic and anaerobic thresholds, aerobic and anaerobic respiration

4/ WARM UP - Principles of warm up for exercise, dynamic stretch, pulse raise, preparation and rehearsal

5/ MAIN SESSION - Principles of the main session, session goals, structure, exercise categories, session design

6/ COOL DOWN - Principles of cool down in exercise, pulse lower, static/assisted stretch, return to normal

7/ STRETCHING IN EXERCISE - Different types of stretching, when and when not to stretch, importance of flexibility in exercise

P2.2 HEALTH AND FITNESS SCREENING

AIMS: This module aims to supply students with the knowledge and practical skills to carry out a wide range of fitness and health screening procedures.

CONTENT:

1/ HEALTH SCREENING - Principles, BMI, body composition, body fat calipers, RHR, BP, peak flow, lung efficiency, ECG

2/ FITNESS SCREENING - Cooper tests, step tests, strength tests, plyometric tests, flexibility testing, measurements, VO2 max,

3/ PROGRESS MONITORING - Recording data, measuring against charts, measuring against ability.

4/ ACTION PLANS - Interpreting results, implementing action plans

P2.3 CLINICAL ASSESSMENT

AIMS: This module aims to furnish students with the knowledge and skills to competently carry out a wide range of clinical tests and assessments and to form a reasoned hypothesis and suitable action plan based upon their findings.

CONTENT:

1/ THE THEORY OF CLINICAL TESTING - Principles of and reasons for clinical testing, retesting, analysing results and progress

2/ CLINICAL TESTS OF THE SHOULDER - Active, passive and resisted testing, empty can test, lift off test, painful arc test, draw test

3/ CLINICAL TESTS OF THE HIP - Active/passive/resisted testing, Trendelenburg's test, Thomas's test, FABER test, Ober's test

4/ CLINICAL TESTS OF THE KNEE - Active/passive/resisted, anterior/posterior draw test, collateral ligament test, McMurray's test, Apley's test

5/ CLINICAL TESTS OF THE BACK AND NECK - Active/passive/resisted, straight leg raise, slump test

6/ CLINICAL TESTS OF THE WRIST, ELBOW AND ANKLE – Active / passive / resisted, carpal tunnel test, epicondylitis tests, ATFL draw test

7/ ACTION PLAN - Forming a reasoned hypothesis, inconclusive tests, communication with patients.

P2.4 CLINICAL REHABILITATION

AIMS: The aim of this module is to expand the students understanding and skill base of exercise and flexibility to encompass rehabilitative techniques and procedures.

CONTENT:

1/ PRINCIPLES OF REHABILITATION - Rehab pyramid, observation, psychology, assistance, patient care

2/ PLANNING A ROUTINE - Nature of injury, timeframe, resources, patient status/lifestyle, established protocols

3/ INJURY MANAGEMENT - Managing symptoms during rehabilitation, alteration of routines,

4/ PROGRESSION - How and when to progress routines, safety, specific drills, return to sport

P2.5 TAPING AND STRAPPING

AIMS: This module aims to provide students with the knowledge and skills to apply a range of taping and strapping techniques to patients.

CONTENT:

1/ FUNCTIONAL SUPPORT - Aims and benefits of taping and strapping, basic principles, types of strapping

2/ STRAPPING TECHNIQUES - Strapping procedures for the knee, hip, thigh, arm, shoulder, hand, ankle, foot and lower leg

3/ ENGINEERED SUPPORTS - Insight into sports, occupational and health supports, value of supports, quality

P2.6 BASIC BIOMECHANICS

AIMS: This module aims to provide students with knowledge of the fundamental principles of biomechanics and the skills of simple biomechanical assessment.

CONTENT:

1/ THE LIVING MACHINE - Introduction to biomechanics, principles, relevance, factors affecting biomechanics

2/ THE FOOT - Structure of the foot, conditions of the feet, orthotics

3/ THE SPINAL COLUMN - Structure of the spine, conditions of the spine, postural props

4/ RETRAINING - Corrective exercises and routines, discomfort, progression

5/ ANALYSIS - Examination of the body, measurements, gait analysis

P2.7 ELECTROTHERAPY

AIMS: This module's aim is to furnish students with the knowledge and skills which will enable them to use therapeutic ultrasound and interferential treatments within their clinical protocols.

CONTENT:

1/ THERAPEUTIC ULTRASOUND THEORY - Principles, science, benefits, contraindications, safety parameters, contact mediums, placebo

2/ INTERFERENTIAL THEORY - Principles, science, benefits, contraindications, safety parameters

3/ APPLYING THERAPEUTIC ULTRASOUND - Practical application, positioning, contact, dosage, treatment plans

4/ APPLYING INTERFERENTIAL - Practical application, positioning, contact, dosage, monitoring, treatment plans

5/ COMBINED THERAPY - Ultrasound and interferential used together or simultaneously

P2.8 CLINICAL PROTOCOL CONSTRUCTION

AIMS: This module aims to provide students with the knowledge that will enable them to plan clinical protocols and pathways; and to perform clinical audits at suitable intervals.

CONTENT:

1/ BUILDING THE PATHWAY - Constructing a protocol, timeframe, agreed progress checks

2/ CHANGING THE PATHWAY - Monitoring progress, treatment alteration, clinical

audit

3/ REFERRAL - Where and when to refer, Physiotherapists, GP, Osteopath, Chiropractor, Podiatrist

4/ SELECTING TREATMENTS - Forming a reasoned hypothesis, choosing methods, patient involvement