Nutrition

# (age range of 40-59) SESSIONS 1 TO 6

LEARNING OUTCOMES

1. demonstrate systematic understanding and apply the principles of nutrition in a physical activity and / or sports coaching context

2. exhibit conceptual understand of the interaction between nutrition and physiological function.

ASSESMENT TASKS

Task 1: Knowledge Enhancement Activity (20%)

| Class based learning | Activity |
| --- | --- |
|
|  | * How can an individual lead a physically active life and understand the changes of the human body, in particular the impact of nutrition?   + Nutritional requirements of those involved in sport and exercise from both a health and performance perspective. * What informed choices do people need to make to address nutritional and weight related problems and diseases that are typical at this age phase?   + Nutritional issues associated with body composition, specifically weight gain and weight loss from health perspective. understand the potential risks associated with poor nutritional advice |
| * *Web links, Books, Journals, Reports* |

| Group work | Activity |
| --- | --- |
|
|  | * What nutritional and physical activity research informed programmes would you, a physical education teacher and a coach be able to offer as a service in an organised setting or through an enterprise?   + Identify nutritional needs and review nutritional requirements and factors influencing nutrition during adulthood (40-59)   + Differentiate between scientific and non-scientific recommendations. |
| * *Web links, Books, Journals, Reports* |

Changes of the human body

# (age range of 40-59) SESSIONS 5 TO 8

LEARNING OUTCOMES

2. exhibit conceptual understand of the interaction between nutrition and physiological function.

ASSESMENT TASKS

Task 1: Knowledge Enhancement Activity (20%)

| Lecture based learning | Activity |
| --- | --- |
|
|  | * What are the typical changes that the human body undergoes in midlife?   + Physiological applications: Nutrients will be studied in terms of their structure, breakdown, digestion and absorption in the human body. Nutritional intervention(s) based on the critical analysis.   + Describe the concepts of energy, nitrogen and fluid balance and their major determinants.   + Describe the structure, function, requirements and metabolic disposal of carbohydrates, proteins, lipids, water, alcohol, fat and water soluble vitamins, trace elements and minerals   + Demonstrate a detailed understanding of the structure of proteins, including enzymes, and have a comprehensive knowledge of practical and graphical methods involved the investigation of enzyme activity.   + Understand the principles of methods involved in the analysis of proteins.   + Define free energy and describe the relationship of the chemiosmotic theory to mitochondrial electron transport. |
| * *Web links, Books, Journals, Reports* |

| Problem based learning | Activity |
| --- | --- |
|
|  | * How can a physical educator or coach support an individual to understand the ongoing changes of the human body during middle age, such as a slowdown in the metabolic rate?   + Physiological applications: The role of key nutrients will then be explored in relation to homeostasis in the human body, with links to dietary strategies for health enhancing physical activity and exercise will be investigated |
| Practice based Learning | * Health-enhancing physical activity (HEPA) is a primary resource for improving physiological and psychosocial health. Stage models in the   HEPA promotion area should fulfil three functions: description, intervention, and diagnosis. Measure the quantity, intensity, and type of physical activity (PA) using a self-completion questionnaire (Duan *et al,* 2013). |
|  | * *Web links, Books, Journals, Reports* |

Wearable Technology

# SESSIONS 10 TO 11

LEARNING OUTCOMES

3. collect, present, record, analyse, interpret and critically evaluate data in this field, including the use of digital technology.

ASSESMENT TASKS

Task 2: Assignment: Scientific report (group task) (40%)

| Problem based learning | Activity |
| --- | --- |
|
| C:\Users\gv22\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Word\stick_figure_balancing_gadgets_400_clr_9599.png | * What digital wearable and other technology is available to support engagement in physical activity and what criteria can help one make an informed choice on selecting the appropriate technology for the needs of individual participants?   + Review and critically evaluate the functions and costs of a series of wearable technologies and apps   + Consider issues of reliability |
| • *Web links, Books, Journals, Reports* |

| Class based learning  & Group work | Activity |
| --- | --- |
|
|  | * Lab work: review wearable technology and apps that will be of interest to your client group for nutrition and physical activity. * Discuss your findings with your classmates and share your findings. Upload your findings to a virtual learning environment that can be accessed by you and your future clients. |
| * *Web links, Books, Journals, Reports* |

Programme of health enhancing physical activity based on Walking sports

LEARNING OUTCOMES

4. recognise individual needs of participants and develop and critically eluate a programme of health enhancing physical activity for a target population and reach out to a target population to engage in physical activity.

ASSESMENT TASKS

Task 3: Portfolio of engagement with clients and the workplace

| Individual work / Group work | Activity SESSIONS 13 TO 14 |
| --- | --- |
|
|  | * Plan of a season (12 weeks) of practical, information and social sessions for each of the following walking sports * What data and analysis to inform a client consultation session? * What challenging experience do you expect at the workplace? * How will you measure successful experience at the workplace? * What current research will inform your practice? |
| * *Web links, Books, Journals, Reports* |

| Practice oriented learning | Activity SESSIONS 9 TO 10; 13-14; 15-18 |
| --- | --- |
|
|  | * Assist in the running of a series of walking sports sessions and observe how participants are motivated. In addition get hands on experience of leading the warm up and cool down sessions through dynamic activities; and delivering the session using the Sport Education model; the Games for Understanding model; the Skill Practice model and other relevant curricular models * basketball (http://www.surreysportspark.co.uk/sports/Basketball/Walking%20Basketball/) * netball (http://www.englandnetball.co.uk/my-game/Walking\_Netball) * rounders (http://www.roundersengland.co.uk/play/rules/) * football (http://www.walkingfootballunited.co.uk/ ; http://www.worldamputeefootball.com/rules\_i.htm) * hockey https://www.youtube.com/watch?v=HRPYmHzI70s * rugby (http://www.telegraph.co.uk/news/health/elder/11816791/Rugby-as-youve-never-seen-it-before-older-players-give-game-a-more-genteel-pace.html |
| * *Web links, Books, Journals, Reports* |

| Training | Activity SESSIONS 9 TO 10; 13-14; 15-18 |
| --- | --- |
|
|  | * Lead a walking sports session and report on the feedback of the participants regarding * Use of wearable technology during the sessions * Enjoyment * Health / Wellbeing using a standard measurement tool * Motivation before and after the session using a standard measurement tool * Level of competition desirable (league / social) |
| * *Web links, Books, Journals, Reports* |