

SUBJECT OUTLINE



Subject Name:

Weight Management in Health and Disease

Subject Code:

NMDW221

SECTION 1 – GENERAL INFORMATION

Award/s:	Total course credit points:	Level:
Bachelor of Health Science (Naturopathy)	128	Elective 4 th Year
Bachelor of Health Science (Nutritional and Dietetic Medicine)	96	Core 2 nd Year
Duration: 1 Semester		
Subject Coordinator: Vicki van der Meer (Melbourne campus)		
Subject is: Core or Elective	Subject Credit Points: 2	

Student Workload:

No. timetabled hours per week: 3	No. personal study hours per week: 2	Total hours per week: 5
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Delivery Mode:

Face to face	2 hours lecture	1 hour practical
Intensive Delivery	Details:	Summer School - contact hours are delivered over 5 weeks with 2 x 4 hour days delivered per week. Assessment: Practical Participation for intensive delivery is assessed in class. Mid Semester Examination for the intensive is completed at the end of the session in Week 3. Literature search and appraisal is due Sunday at the end of Week 4. Final case-based exam for the intensive is conducted in Week 6 of the Summer School period.
Full Time		
Part Time		

Pre-requisites: NMDF121, NMDM121, BIOC211

Co-requisites: BIOE221, BIOS222

SECTION 2 – ACADEMIC DETAILS

Subject Rationale

This subject addresses the multifactorial issues that contribute to obesity and underweight issues. Students learn to assess weight morbidity and risk factors as well as learning various strategies for weight management that incorporate lifestyle change, exercise and diet. Change management and coaching is addressed to assist clients with successfully implementing lifestyle change required to gain or lose weight.

Learning Outcomes

1. Conduct a dietary consultation and provide a nutrition plan for weight management.
2. Assess anthropometric measurements in relation to an individual dietary plan.
3. Access and critique current weight management research.
4. Apply appropriately current public health support tools.
5. Identify psychosocial factors related to weight management and appropriately manage/refer.

Assessment Tasks				
Type	Learning Outcomes Assessed	Week Content Delivered	Due	Weighting
Practical Tutorial Participation	1-5	1-13	Sessions 1-13	15%
Mid-Semester Exam (1 hour)	1, 3, 5	1-5	Session 6	25%
Evidence Based Practice Independent Literature Search and Appraisal (500 – 700 words)	3	5,6	Week 10	15%
Case-based Final Exam (2 hours)	1-5	1-13	Final Examination Period	45%
All written assessments are due at 11:55PM and submitted through the LMS				

Prescribed readings:

- Baur, L. A., Twigg, S. M., & Magnusson, R. S. (Eds.). (2012). *A modern epidemic: Expert perspectives on obesity and diabetes*. Sydney, NSW: Sydney University Press.
[open access <http://purl.library.usyd.edu.au/sup/9781920899851>]

Recommended readings:

- Egger, G., & Swinburn, B. (2010). *Planet obesity: How we're eating ourselves and the planet to death*. Crows Nest, NSW: Allen & Unwin. [ebook available]
- Glanz, K., Rimer, B. K., & Viswanath, K. (Eds.). (2015). *Health behaviour and health education: Theory, research and practice* (5th ed.). Hoboken, NJ: Wiley. [ebook available]
- Kazaks, A. G., & Stern J. S. (2013). *Nutrition and obesity, assessment management and prevention*. Burlington, MA: Jones and Barlett Learning. [ebook available]
- Kopelman, P. G., Caterson, I. D., & Dietz, W. H., (Eds.). (2010). *Clinical obesity in adults and children* (3rd ed.). Oxford, England: Wiley-Blackwell. [ebook available]
- Sainsbury-Salis, A. (2011). *Don't go hungry for life*. Sydney, NSW: Bantam Books. [ebook available]
- Stewart, L., & Thompson, J. (Eds.). (2015). *Early years nutrition and healthy weight*. West Sussex, England: Wiley Blackwell. [ebook available]
- Waters, E., Swinburn, B., Seidell, J., & Uauy, R. (Eds.). (2010). *Preventing childhood obesity: Evidence policy and practice*. Hoboken, NJ: Wiley. [ebook available]
- Watson, R., Zuckerman, M., & Zuckerman, E. (Eds.). (2014). *Nutrition in the prevention and treatment of abdominal obesity*. Amsterdam, Netherlands: Elsevier Academic Press. [ebook available]

Resources:

- Deakin University Faculty of Health. (2014). *WHO Collaborating Centre for Obesity Prevention*. Retrieved from <http://www.deakin.edu.au/health/who-obesity/>
- National Health and Medical Research Council. (2014). *Obesity and overweight*. Retrieved from <http://www.nhmrc.gov.au/your-health/obesity-and-overweight>
- University of Sydney. (2014). *Charles Perkins Centre*. Retrieved from <http://sydney.edu.au/perkins/>

Subject Content		
Week	Lecture	Practical
1.	Subject Introduction Introduction to weight management science <ul style="list-style-type: none"> • Epidemiology, definition and classification of underweight and obesity • Energy balance and body weight homeostasis • Energy requirements and expenditure • Health consequences of obesity in adults and children 	Activity: <ul style="list-style-type: none"> • Calculate BMI and own energy needs
2.	Biology of obesity Part 1 <ul style="list-style-type: none"> • Genes and obesity • Metabolomics • Microbiome • Foetal and infant origins of obesity • Adipocyte biology • Eating behaviour 	Activity: <ul style="list-style-type: none"> • Case study
3.	Biology of obesity Part 2 <ul style="list-style-type: none"> • Metabolic fuels and obesity • Carbohydrates • Proteins • Lipids 	Activity: <ul style="list-style-type: none"> • Case study • Calculate individual needs for these and construct a diet plan
4.	Measuring body composition in adults and children <ul style="list-style-type: none"> • Measurement guidelines for different ethnic groups, Australian indigenous people and children • Anthropometrics • Bio Impedance Assessment • Imaging Techniques • Densitometry • Relevance to weight management 	Practical: <ul style="list-style-type: none"> • Students perform BMI and anthropometric assessment Group discussion: <ul style="list-style-type: none"> • Challenges associated with various anthropometric assessments in practice and strategies to overcome these.
5.	Management of weight loss in Adults and Children <ul style="list-style-type: none"> • Five steps of evidence based practice • Evidence appraisal • Evidence of efficacy of different weight loss diets and programs 	Group discussion: <ul style="list-style-type: none"> • A clinical scenario is used to illustrate the five steps of EBP, including integration of evidence and outcome evaluation.
6.	Supplements <ul style="list-style-type: none"> • Nutraceuticals for weight loss • Weight loss supplements • Review of commercial weight loss programs 	Mid-Semester Exam (1 hour) Activity: <ul style="list-style-type: none"> • Find popular supplement online and critique ingredients. Group discussion: <ul style="list-style-type: none"> • Utility of meal replacement supplements in weight loss.
7.	Medications and surgery	Activity:

	<ul style="list-style-type: none"> • Medications • Surgery 	<ul style="list-style-type: none"> • Holistic treatment of a client's nutritional needs post obesity surgery • Case study
MID SEMESTER BREAK (note that any make up classes may be scheduled in this week) Semester 1 - This aligns with the week after Easter so it may fall between weeks 6 to 8. Semester 2 - The break week falls between Weeks 7 and 8.		
8.	Dietary analysis software <ul style="list-style-type: none"> • Analyse macro and micronutrient status • Create individualised dietary goals Tracking in weight management <ul style="list-style-type: none"> • Food diaries • Habit trackers • Apps 	Case study: <ul style="list-style-type: none"> • Complicated case
9.	Diet strategies for healthy weight gain <ul style="list-style-type: none"> • Macronutrients • Beverages • Extra nutrition supplements 	Case study: <ul style="list-style-type: none"> • Develop a weight gain program for two separate cases
10.	Psychology in weight management <ul style="list-style-type: none"> • Psychosocial factors • Stress • Abuse • Poverty • Social stigma of weight management 	Activity: <ul style="list-style-type: none"> • Case study review and discussion • Stress • Abuse • Poverty
11.	Counselling in weight management <ul style="list-style-type: none"> • Cognitive behavioural therapy • Motivational Interviewing • Addressing barriers • Setting goals • Client centred counselling • Dealing with relapse and failure 	Case study: <ul style="list-style-type: none"> • Counselling approaches to case studies • Stress • Abuse • Poverty
12.	Exercise for weight management <ul style="list-style-type: none"> • Types • Timing • Amount • Overcoming barriers to exercise 	Case study: <ul style="list-style-type: none"> • Make lifestyle and exercise guidelines for two different cases.
13.	Facilitating weight loss programs in groups <ul style="list-style-type: none"> • How to develop a weight loss program • Facilitating weight loss groups 	Case study: <ul style="list-style-type: none"> • Develop a weight loss program Group discussion: <ul style="list-style-type: none"> • Share with group
14.	Non-Teaching Week/Practical Examination Week 1 Note that make-up classes may be scheduled in this week.	
15.	Non-Teaching Week/Practical Examination Week 2 Note that make-up classes may be scheduled in this week.	
16-17.	Final Exam Weeks 1 & 2 Please refer to the Examination Timetable for your local campus for the exact day and time of exam.	