



SUBJECT OUTLINE

Subject Name:

Dietary Planning Across the Lifespan

Subject Code:

NMDD221

SECTION 1 – GENERAL INFORMATION

Award/s:	Total Course Credit Points:	Level:
Bachelor of Health Science (Naturopathy)	128	3 rd Year
Bachelor of Health Science (Nutritional and Dietetic Medicine)	96	3 rd Year
Duration: 1 Semester		
Subject Coordinator: Karen Wallace (Perth Campus)		
Subject is: Core	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:

Blended Learning (Online and Live streamed) 1 x 2 hour synchronous lecture (on campus or live streamed) 1 x 1 hour tutorial activities / workshops online as indicated

Intensive Delivery (Summer School) Contact hours are delivered over 5 weeks with 2 x 4 hour days delivered per week
Content: Combination lecture and tutorial activities

Assessment: Mid-semester Written Exam - Week 3; Fact Sheet – Week 4; Anthropometric and Dietary Analysis Report - Week 6

Full Time

Part Time

Pre-requisites: NMDS111, NMDF121, NMDM121

Co-requisites: Nil

SECTION 2 – ACADEMIC DETAILS

Subject Rationale

This subject introduces the skills for assessing clients' diets and determining appropriate plans for modifying diet and food choices in individuals. Building on knowledge from previous nutritional medicine and bioscience subjects, students explore nutritional assessment tools such as anthropometric measurements and dietary analysis software, and learn principles for working with clients to assist them with implementing changes to their diets. The changing nutritional needs across the human lifespan are examined with reference to common conditions. This



subject prepares students for clinical practice where they will address the nutritional and dietary management of clients' health conditions.

Learning Outcomes

1. Describe and interpret types of dietary, biochemical and anthropometric data which inform client cases and dietary planning.
2. Examine data for a presenting client case to determine contributing factors and specific needs according to the life stage.
3. Locate and appraise appropriate evidence based dietary planning resources to inform clinical practice according to life stage.
4. Generate and communicate individualised dietary treatment plans using the Endeavour Case Analysis Framework.

Assessment Tasks

Type	Learning Outcomes Assessed	Session Content Delivered	Due	Weighting
Mid-semester Written Exam (1 hour)	1-4	1-5	Week 7	35%
Fact Sheet (500 words equivalent)	1-3	1,2, 6-8	Week 10	20%
Anthropometric and Dietary Analysis Report (1500 words)	2-4	1-13	Week 14	45%

All written assessments and online quizzes are due at 11:55 p.m. Sunday and submitted through the LMS

Prescribed Readings:

1. Brown, J. E. (2017). *Nutrition through the lifecycle* (6th ed.). Cengage Learning. [ebook available]

Recommended Readings:

1. Appleton, A., & Vanbergen, O. (2013). *Metabolism and nutrition* (4th ed.). Elsevier. [ebook available]
2. Katz, D. L., Friedman, R. S. C., & Lucan, S. C. (2014). *Nutrition in clinical practice: A comprehensive, evidence-based manual for the practitioner* (3rd ed.). Lippincott Williams & Wilkins. [ebook available]
3. Kopelman, P. G., Caterson, I. D., & Dietz, W. H. (Eds.). (2010). *Clinical obesity in adults and children* (3rd ed.). Wiley-Blackwell. [ebook available]



4. Langley-Evans, S. (2015). *Nutrition health and disease: A lifespan approach*. John Wiley & Sons. [ebook available]
5. Mahan, L. K., & Raymond, J. L. (2016). *Krause's food & the nutrition care process* (14th ed.). Elsevier; Saunders.
6. Ross, A. C., Caballero, B., Cousins, R. J., Tucker, K. L., & Ziegler, T. R. (2014). *Modern nutrition in health and disease* (11th ed.). Wolters Kluwer Health. [ebook available]
7. Whitney, E., Rolfes, S. R., Crowe, T., Cameron-Smith, D., & Walsh, A. (2016). *Understanding nutrition* (Australia and New Zealand ed., 3rd ed.). Cengage Learning. [ebook available]

Subject Content		
Week	Lectures	Tutorials / Practicals
1.	<p>Introduction (Subject Outline / Subject Aims / Assessment / Teaching Resources)</p> <p>Introduction to Dietary Planning Nutritional Screening and Assessment</p> <ul style="list-style-type: none"> ➤ Foundations and considerations of a healthy diet ➤ The role of dietary guidelines and nutrient reference values (NRVs) ➤ Energy equations ➤ Dietary analysis principles ➤ Assessment of nutritional status 	<p>Activities are developed to allow the students to explore relevant concepts, expand on ideas and have peer and lecturer interaction. Activities also allow for formative assessment and feedback</p> <p>Post lecture activities:</p> <ul style="list-style-type: none"> ➤ Review and test to check understanding of the NRVs ➤ Interactive mind map to illustrate the physical signs and pathology tests used in nutritional assessment
2.	<p>Anthropometric Assessment</p> <ul style="list-style-type: none"> ➤ Group discussion – nutritional assessment mind maps ➤ Body mass index (BMI), waist circumference, bioelectrical impedance analysis ➤ Interpretation of body composition in relation to dietary planning ➤ Lean muscle mass as a predictor of catabolic and anabolic states, nutritional implications and management 	<p>Post lecture activities:</p> <ul style="list-style-type: none"> ➤ View videos showing: <ul style="list-style-type: none"> ⊙ Skin folds measurement ⊙ Other measures of body composition ➤ Summarise the types and uses/limitations of anthropometric assessment methods
3.	<p>Dietary Clinical Assessment</p> <ul style="list-style-type: none"> ➤ Quiz to check anthropometric understanding ➤ Food intake recording ➤ Nutritional assessment software and Apps ➤ Goal setting and client motivation ➤ Obstacles and strategies for implementing food choice changes 	<p>Post lecture activities:</p> <ul style="list-style-type: none"> ➤ Record your food intake for at least two days via Foodzone or FoodWorks ➤ Review the reports and write three SMART goals for yourself to improve your dietary intake
4.	<p>Fertility and Pre-conception</p>	<p>Pre lecture activities:</p>



	<ul style="list-style-type: none"> ➤ Discuss food analysis reports and SMART goals in small groups ➤ Fertility rates, trends and influences ➤ Contributing factors to infertility ➤ Dietary and nutritional recommendations for pre-conception 	<ul style="list-style-type: none"> ➤ Pre-reading: Hechtman, Clinical Naturopathic Medicine (1st Ed – e book), Chapter 19 ➤ Summarise dietary recommendations for preconception for use in tutorial <p>Tutorial (in class):</p> <ul style="list-style-type: none"> ➤ Preconception case study group work
5.	<p>Pregnancy and Lactation</p> <ul style="list-style-type: none"> ➤ Nutrition and dietary planning in pregnancy and lactation ➤ Healthy gestational weight gain ➤ Food safety in pregnancy ➤ Dietary management of: <ul style="list-style-type: none"> ⊙ Pre-eclampsia ⊙ Gestational diabetes ⊙ Anaemia in pregnancy 	<p>Post lecture activities</p> <ul style="list-style-type: none"> ➤ Pregnancy fact sheet activity – focus on prevention of pre-eclampsia and gestational diabetes
6.	<p>Infancy</p> <ul style="list-style-type: none"> ➤ Peer review/discussion of pregnancy fact sheets ➤ Nutritional requirements in infancy ➤ Breastfeeding ➤ Bottle feeding ➤ Introduction of solid foods 	<p>Post lecture activities:</p> <ul style="list-style-type: none"> ➤ Review WHO resources and watch video on growth charts and possible diet related issues in infants ➤ Contribute to an interactive mind map showing the uses and limitations of growth charts
7.	<p>Childhood</p> <ul style="list-style-type: none"> ➤ Check understanding and limitations of the use of growth charts ➤ Nutritional requirements in childhood ➤ Factors influencing food intake ➤ Fussy eaters ➤ Childhood obesity ➤ Nutritious and appealing meals and snacks for young children 	<p>Mid-semester Written Exam – 1 hour – refer to instructions on the Loop</p>
<p>NON-TEACHING WEEK (note that make-up classes may be scheduled in this week)</p> <p>Semester 1 – This aligns with the week after Easter so it may fall between Weeks 6 to 8</p> <p>Semester 2 & Online students – The non-teaching week falls between Weeks 7 and 8</p>		
8.	<p>Adolescence</p> <ul style="list-style-type: none"> ➤ Nutritional requirements and dietary planning in adolescence ➤ Key indicators of nutrition risk in adolescence ➤ Food behaviours/ habits and influences ➤ Common nutritional deficiencies 	<p>Post lecture activities:</p> <ul style="list-style-type: none"> ➤ Interactive mind map summarising nutrition risk and challenges in adolescence



	<ul style="list-style-type: none"> ➤ Eating disorders ➤ Energy drinks and alcohol ➤ Vegetarianism 	
9.	<p>Adult Nutrition - Part 1</p> <ul style="list-style-type: none"> ➤ Review quiz on dietary strategies for chronic disease prevention: <ul style="list-style-type: none"> ⊗ Cardiovascular disease (CVD) ⊗ Cancer ⊗ Dementias ⊗ Diabetes ⊗ Osteoporosis ➤ Screening for disease risk factors ➤ Common dietary inadequacies and excesses in adulthood 	<p>Pre lecture activities:</p> <ul style="list-style-type: none"> ➤ Pre-reading: Two set journal articles on dietary patterns for chronic disease prevention
10.	<p>Adult Nutrition - Part 2: Weight Management</p> <ul style="list-style-type: none"> ➤ Review metabolic factors associated with overweight and obesity: <ul style="list-style-type: none"> ⊗ Genetic and environmental factors ⊗ Adipocyte biology ⊗ Appetite regulation 	<p>Post lecture activities:</p> <ol style="list-style-type: none"> 1. Research two evidence-based dietary interventions for weight loss 2. Post a short summary of the findings on the discussion board 3. What are some of the challenges and limitations of these interventions?
11.	<p>Adult Nutrition - Part 3: Therapeutic Dietary approaches</p> <ul style="list-style-type: none"> ➤ Discuss evidence-based weight loss interventions and challenges in small groups ➤ Review of therapeutic dietary approaches including: <ul style="list-style-type: none"> ⊗ Mediterranean diet ⊗ DASH diet ⊗ Low advanced glycation end-products (AGE) diet ⊗ Ketogenic diets ⊗ Therapeutic fasting 	<p>Post lecture activities:</p> <ol style="list-style-type: none"> 1. Review a popular dietary approach of choice (eg. Paleo diet, Blue Zones) and summarise the principles and evidence for health benefits 2. Post your summary on the discussion board
12.	<p>Dietary Recommendations for Exercise and Sport</p> <ul style="list-style-type: none"> ➤ Discussion/poll of 'best' therapeutic dietary approaches ➤ Fuelling recommendations for pre, during and post exercise ➤ Hydration and electrolyte requirements ➤ Common sport related nutritional deficiencies 	<p>Post lecture activities:</p> <ul style="list-style-type: none"> ➤ Using the AIS and ASADA websites, complete a worksheet on supplements in sport



13.	<p>Older Adults</p> <ul style="list-style-type: none"> ➤ Discussion/quiz on supplements in sport ➤ Nutritional requirements and dietary plans for active ageing ➤ Nutritional impacts associated with polypharmacy ➤ Physiological change and the effect on digestion and assimilation of nutrients ➤ Health assessment of older adults ➤ Dietary interventions for the management of catabolic states 	<p>Pre lecture activities:</p> <ul style="list-style-type: none"> ➤ Pre-reading: Set journal article/s on nutritional challenges in ageing
14.	<p>Non-Teaching Week/Practical Examination Week 1 Note that make-up classes may be scheduled in this week</p>	
15.	<p>Non-Teaching Week/Practical Examination Week 2 Note that make-up classes may be scheduled in this week</p>	
16.	<p>Final Examination Week 1 There is no final exam for this subject</p>	
17.	<p>Final Examination Week 2 There is no final exam for this subject</p>	