## Subject Name:
Dietary Planning Across the Lifespan

## Subject Code:
NMDD221

### SECTION 1 - GENERAL INFORMATION

**Award/s:**
- Bachelor of Health Science (Naturopathy) 128 3rd Year
- Bachelor of Health Science (Nutritional and Dietetic Medicine) 96 3rd Year
- Bachelor of Health Science (Nutritional Medicine) 96 3rd Year

**Duration:** 1 Semester

**Subject Coordinator:** Karen Wallace (Perth campus)

**Subject is:** Core  
**Subject Credit Points:** 2

**Student Workload:**

<table>
<thead>
<tr>
<th>No. timetabled hours per week</th>
<th>No. personal study hours per week</th>
<th>Total hours per week</th>
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<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>5</td>
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**Delivery Mode:**
- **Face to Face (On campus)**: 1 x 2 hour lectures 1 x 1 hour tutorial
- **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:** Attendance and Active Participation - Weeks 1-5; Mid-semester Written Exam - Week 3; 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. Evaluate anthropometric investigations to establish specific nutritional needs across the lifespan to optimise health.
2. Review appropriate evidence-based individualised therapeutic dietary plans according to life stage.
3. Construct therapeutic dietary plans using data obtained from dietary analysis software.
4. Evaluate client nutritional status and apply principles and strategies according to identified life stage.
## Assessment Tasks

<table>
<thead>
<tr>
<th>Type</th>
<th>Learning Outcomes Assessed</th>
<th>Session Content Delivered</th>
<th>Due</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>Attendance and Active Participation</td>
<td>N/A</td>
<td>N/A</td>
<td>Sessions 1-13</td>
<td>15%</td>
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<tr>
<td>(rubric based)</td>
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<tr>
<td>Mid-semester Written Exam</td>
<td>1-4</td>
<td>1-5</td>
<td>Session 7</td>
<td>40%</td>
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<td>(1 hour)</td>
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<tr>
<td>Anthropometric and Dietary Analysis Report</td>
<td>2-4</td>
<td>1-13</td>
<td>Week 14</td>
<td>45%</td>
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<td>(1500 words)</td>
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All written assessments and online quizzes are due at 11:55 p.m. and submitted through the LMS

### Prescribed Readings:


### Recommended Readings:

### Subject Content

<table>
<thead>
<tr>
<th>Week</th>
<th>Lectures</th>
<th>Tutorials / Practicals</th>
</tr>
</thead>
</table>
| 1.   | **Introduction** (Subject Outline / Subject Aims / Assessment / Teaching Resources)  
  **Introduction to Dietary Planning Nutritional Screening and Assessment**  
  - Foundation of a healthy diet following holistic nutrition principles  
  - Review of dietary guidelines and nutrient reference values (NRVs)  
  - Energy equations  
  - Food records  
  - Exchange lists and programs  
  - Physical signs of nutrient deficiencies  
  - Biochemical analysis of nutrient deficiencies | 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  
  - **Practical**  
    - Students use the various tools introduced in this session to assess the nutritional status of their partner |
| 2.   | **Anthropometric Assessment**  
  - Body mass index (BMI), hip / waist, skin folds, bioelectrical impedance analysis  
  - Interpretation of body fat and lean muscle mass in relation to dietary planning  
  - Changes in lean muscle mass as a predictor of catabolic and anabolic states and nutritional implications and management |  
  - **Demonstration**  
    - Conducting anthropometry  
  - **Practical**  
    - Students conduct anthropometry in pairs |
| 3.   | **Dietary Clinical Assessment**  
  - Diet diaries  
  - Nutritional assessment software  
  - Advantages and disadvantages of software  
  **Implementing Change and Adherence**  
  - Establishing goals for modification of the diet  
  - Motivating the client to initiate dietary changes  
  - Obstacles to implementing food choice changes and modifications to diet |  
  - **Demonstration**  
    - Dietary analysis software  
  - **Practical**  
    - Conduct a 24 hour dietary analysis |
| 4.   | **Infertility and Pre-conception Diets**  
  - Diet and lifestyle factor associated with infertility  
    - **Men**  
    - **Women**  
  - Dietary recommendations to aid fertility  
    - **Men**  
    - **Women**  
  - Pre-conception and early pregnancy diets for improving reproductive outcomes |  
  - **Activity**  
    - Develop a pre-conception checklist for a couple who are planning to conceive in about three months |
5. **Pregnancy and Lactation**  
- Nutrition and dietary planning in pregnancy and lactation  
- Healthy weight gain  
- Food safety  
- Dietary management of  
  - Pre-eclampsia  
  - Gestational diabetes  
  - Anaemia  
  - Other  
- Dietary approaches for optimizing breast milk supply  
- Mastitis  

6. **Infancy**  
- Nutritional requirements  
- Breast feeding  
- Bottle feeding  
- Introduction of solid foods  
- Growth chart analysis  
- Failure to thrive  
- Diet related deficiencies  

7. **Mid-semester Written Exam**  
**Childhood**  
- Nutritional requirements  
- Factors influencing food intake  
- Fussy eaters  
- Childhood obesity  
- Nutritious and appealing meals and snacks for children of various ages  

8. **Adolescence**  
- Nutritional requirements  
- Nutrition screening and assessment – key indicators of nutrition risk  
- Food behaviours and influences  
- Common nutritional deficiencies  
- Eating disorders  
- Energy drinks  
- Vegetarianism  

- **Group work**  
  - Short communication to educate client/s on  
    - the importance of food safety  
    - healthy eating plan during pregnancy  
    - how to reduce risk of gestational diabetes  
    - healthy weight gain  
    - how to treat mastitis  

- **Group work**  
  - Compare three infant formulas noting ingredients, nutrient content, marketing / health claims and cost  
  - Assess a minimum of three public health guidelines with regard to introduction of solids  

- **Activity**  
  - Search for and briefly evaluate recipe books and recipe websites offering suggestions for children’s meals and then list your top three recipe books and websites  

- **Activity**  
  - Review school based health program aimed at reducing eating disorders and obesity (e.g. Life Smart 2013)  

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**NON-TEACHING WEEK** (note that 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 & Online students** - The non-teaching week falls between Weeks 7 and 8
| 9. | Adult Nutrition - Part 1  
|    | - Dietary strategies for disease prevention  
|    |   - Cardiovascular disease (CVD)  
|    |   - Cancer  
|    |   - Dementias  
|    |   - Diabetes  
|    |   - Osteoporosis  
|    | - Screening and biochemical assays  
|    | - Common dietary inadequacies in adulthood  
|    | - Common dietary excesses  
|    | • Activity  
|    |   - Case study  
| 10. | Adult Nutrition - Part 2: Weight Management  
|    | - Review metabolic factors associated with overweight and obesity  
|    |   - Genes and obesity  
|    |   - Adipocyte biology  
|    |   - Appetite regulation  
|    | - Dietary interventions for weight loss and evidence of what works  
|    | • Activity  
|    |   - Review and evaluate three commercial weight loss programs and three supplements that claim to promote weight loss  
| 11. | Adult Nutrition - Part 3: Therapeutic Diets  
|    | - Anti-inflammation diet  
|    | - Wellness diet  
|    | - Phytoestrogens and phytochemicals  
|    | - Mediterranean diet  
|    | - Low advanced glycation end-products (AGE) diet  
|    | - Raw food  
|    | - Therapeutic fasting  
|    | • Group work  
|    |   - Search the public health promotion literature to see if you can find any programs that have successfully increased fruit and vegetable intake in adult males  
|    |   - Develop some tips that could be used in clinical practice for encouraging adult male clients to increase their fruit and vegetable intake  
| 12. | Dietary Recommendations for Exercise and Sport  
|    | - Fueling recommendations for pre, during and post exercise  
|    | - Hydration and electrolyte requirements  
|    | - Common sport related nutritional deficiencies  
|    | - Supplements in sport  
| 13. | Older Adults  
|    | - Review of nutritional requirements  
|    | - 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  
|    | • Group work  
|    |   - Working in small groups summarise the signs and symptoms of dehydration and develop some tips for dehydration prevention in older adults  
| 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. | Final Examination Week 1  
|    | There is no final exam for this subject  

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NMDD221 Dietary Planning Across the Lifespan  
Australian College of Natural Medicine Pty Ltd (ACNM) trading as Endeavour College of Natural Health  
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<thead>
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