

YEAR: 9	Health Education	UNIT TITLE: <u>Preventative Health</u>	LENGTH: 5 Lessons
AIM: “To develop students’ capacity to enhance personal health and wellbeing ... <i>and advocate lifelong health...</i> ”			
Page 11, NSW Board of Studies PDHPE 7-10 Syllabus Aim			
RATIONALE: “PDHPE provides the opportunity for young people to explore issues that are likely to impact on the health and wellbeing of themselves and others, now <i>and in the future</i> . The issues that affect young people include physical activity, mental health, drug use, sexual health, nutrition, supportive relationships, personal safety, gender roles and discrimination. Health issues that <i>have the potential to appear in later life</i> are also relevant due to their relationship to lifestyle patterns established in adolescent years and the possibility that they may impact on family and other significant adults in students’ lives.”			
Page 8, NSW Board of Studies PDHPE 7-10 Syllabus Rationale			
UNIT DESCRIPTION: Students’ will develop a greater understanding of the need for lifelong preventative health care, through exposure to a service manual approach. Teachers, students and students’ families can now access the Gold Book service manuals as an example of one set of tools that they can elect to use as a system for their lifelong preventative health requirements.			
OUTCOMES: Strand 3: Individual and Community Health			
Page 12,37-39 NSW Board of Studies PDHPE 7-10 Syllabus			
Knowledge, Understanding and Skill Objectives: Students will take actions to protect, promote and restore individual and community health.		Stage 4 Outcomes:	
Value and Attitude Objectives: Students will value health-enhancing behaviours that contribute to active, enjoyable and fulfilling lifestyles. Students will develop a willingness to participate in creating and promoting healthy and supportive communities and environments.		A student:	
Page 11,12, NSW Board of Studies PDHPE 7-10 Syllabus		5.6 analyses attitudes, behaviours and consequences related to health issues affecting young people	
		5.7 analyses influences on health decision-making and develops strategies to promote health and safe behaviours	
		5.8 critically analyses health information, products and services to promote health	
		Page 12, 37-39 NSW Board of Studies PDHPE 7-10 Syllabus	

CONTENT:**STAGE 5****Strand 3: Individual and Community Health****Students learn about:**

Healthy food habits

- Sources of nutritional information
- Disordered eating and body image
- Diets, dieting, exercise and energy balance
- Socio-cultural influences on food choices
- Nutrition and fluid replacement for physical activity

Drug use

- Effects on community
- Marketing strategies and the media
- Influences on alcohol and binge drinking
- Influences on cannabis use
- Other illicit drugs e.g. opiates, hallucinogens, psycho-stimulants
- Consequences of illicit and unsanctioned drug use

Sexual health

- Sexual choices and their consequences
- Planning and managing sexual health

Road safety

- Responsible driver and passenger behaviour
- Major causal factors in road and traffic related injuries, e.g. human (speeding, drug use, fatigue, occupant restraint), environmental, vehicular
- Consequences of unsafe road-use behaviour
- Skills and attitudes that support road safe behaviour

Empowering individuals and community

- Individual and Community action
- Developing personal skills, e.g. advocacy
- Developing supportive environments

Students learn to:

- Explore the relationship between body image and gender, and the impact of the media on the manufacture of the ideal male and female body types
- Investigate factors that influence food choices, e.g. culture and customs, gender and media
- Identify appropriate fluid replacement strategies for participation in physical activity and actions to manage dehydration
- Examine the consequences of alcohol use on the individual and community
- Investigate marketing strategies and media influences with tobacco and alcohol
- Describe the short-term effects and long-term consequences of illicit drug use on the individual and community
- Identify and evaluate safe sexual health practices, including methods of contraception
- Propose and present strategies designed to promote safe road-use attitudes and behaviours
- Use simulation software to make health decisions and solve problems relevant to young people, e.g. determining strategies that promote safe road use
- Describe priority actions and first aid management in the case of road injury and trauma
- Analyse the range of influences that impact on an individual's ability to behave in healthy and safe ways in relation to mental health, healthy food habits, drug use, sexual health, road use, personal safety & physical activity
- Propose and evaluate strategies that take into account influences on health-decision making, and support young people to behave in healthy and safe ways
- Analyse the impact of peers and the media on the selection of health products and services

Identify how and why health knowledge has changed and propose actions that may assist young people to manage the constantly changing nature of health information

Outcome	Students learn about:	Students learn to:	Teaching and learning activities	Resources
	<p>Healthy food habits: Sources of nutritional information. Diets, dieting, exercise and energy balance.</p> <p>Drug use: Effects on community. Marketing strategies and the media. Influences on alcohol and binge drinking. Influences on cannabis use.</p> <p>Sexual health: Sexual choices and their consequences. Planning and managing sexual health.</p> <p>Road safety: Responsible driver and passenger behaviour. Major causal factors in road and traffic related injuries, e.g. human, environmental and vehicular. Consequences of unsafe road-use behaviour.</p> <p>Empowering individuals and community: Individual action Community action Developing supportive environments</p>	<p>Investigate factors that influence food choices, e.g. culture and customs, gender and media. Examine the consequences of alcohol use on the individual and community. Investigate marketing strategies and media influences with tobacco and alcohol. Describe the short-term effects and long-term consequences of illicit drug use on the individual and community. Identify and evaluate safe sexual health practices, including methods of contraception. Propose and present strategies designed to promote safe road-use attitudes and behaviours. Describe priority actions and first aid management in the case of road injury and trauma. Analyse the range of influences that impact on an individual's ability to behave in healthy and safe ways in relation to mental health, healthy food habits, drug use, sexual health, road use, personal safety & activity. Propose and evaluate strategies that take into account influences on health-decision making, and support young people to behave in healthy and safe ways.</p>	<p>Lesson One <i>Task 1</i> – Encourage students to independently complete Age 14 age page (pp 50 & 51), making use of height measuring tape and weighing scales, including calculating their BMI. (Allow 15 minutes)</p> <p><i>Task 2</i> – Have several students present their thoughts on Age 14 age page Section A. Broadly discuss student's reactions to the commonest causes of severe illness and disease in their age group, briefly looking at other Age Pages as a comparison. Point out the importance of seeing the problem as it is, so that one can then start looking for solutions. (Allow 25 minutes)</p> <p><i>Task 3</i> – Broadly review individual concepts associated with Age 14 age page, as appropriate visiting smoking, nutrition, physical activity, vaccination, drug use, sexual health, personal safety and mental health, more to point out the service manual concept taught in the Gold Books, rather than spend any significant time discussing any one concept. (Allow 10 minutes)</p> <p><i>Summary</i> – Summarise service manual concept, using the contents of the Gold Book Preface (including the proverb). (Allow 5 minutes)</p> <p><i>Homework</i> - Encourage students to look at a car's service manual at home and/or ask if they can bring a car service manual to next lesson for comparison to the Gold Book.</p> <p><i>Extension</i> – To gain a wider perspective of the importance of preventative health care, read the short chapters in Section One of the Gold Book.</p> <p>Lesson One Evaluation – Discussion of the age page completion task presented above with students, along with an informal review of the way they have filled in Age 14 age page, should help teachers assess students' comprehension of the preventative health aspects on the Age 14 service manual page.</p>	<p>Gold Book service manual for each student.</p> <p>Set of weighing scales.</p> <p>Height measuring tape.</p>

Outcome	Students learn about:	Students learn to:	Teaching and learning activities	Resources
	<p>Road safety</p> <ul style="list-style-type: none"> • Responsible driver and passenger behaviour • Major causal factors in road and traffic related injuries, e.g. human (speeding, drug use, fatigue, occupant restraint), environmental, vehicular • Consequences of unsafe road-use behaviour • Skills and attitudes that support road safe behaviour <p>Empowering individuals and community</p> <ul style="list-style-type: none"> • Individual action • Community action • Developing personal skills, e.g. advocacy • Developing supportive environments 	<p>Propose and present strategies designed to promote safe road-use attitudes and behaviours</p> <p>Use simulation software to make health decisions and solve problems relevant to young people, e.g. determining strategies that promote safe road use</p> <p>Describe priority actions and first aid management in the case of road injury and trauma</p> <p>Analyse the range of influences that impact on an individual's ability to behave in healthy and safe ways in relation to mental health, healthy food habits, drug use, sexual health, road use, personal safety & physical activity</p> <p>Propose and evaluate strategies that take into account influences on health-decision making, and support young people to behave in healthy and safe ways</p> <p>Analyse the impact of peers and the media on the selection of health products and services</p> <p>Identify how and why health knowledge has changed and propose actions that may assist young people to manage the constantly changing nature of health information</p>	<p>Lesson Two</p> <p><i>Task 1</i> – Discuss and cement gains made with Lesson One. Review any car service manuals brought in by the students, looking for similarities between Gold Book and car manual. (Allow 10 minutes).</p> <p><i>Task 2</i> – By means of introduction only, briefly list and discuss the common causes of severe disease and major injury as found in Section A, Age 14 age page, (Gold Book p50). (Allow 5 minutes).</p> <p><i>Task 3</i> – If there are computers available that access the internet, guide the class through an internet search to find out how many children aged 10 – 14 have succumbed to injury and poisoning over the last 10 years, and compare these with age 15 – 19. If there is no computer access, then provide this data in tabular form from the following website (www.aihw.gov.au/mortality/data/external_06.xls). Divide the students into appropriately sized groups to discuss this data and make the following recommendations back to the class, asking them to:-</p> <ol style="list-style-type: none"> (a) Comment on what strategies may have lead to the recorded decline seen in this GRIM (General Record of Incidence of Mortality) data. (b) Discuss why the age 15 – 19 year old data is so much worse than the 10 – 14 year data. (c) Work out what preventative health strategies they would institute if they were the Government, to try and get all of these numbers as close to zero as possible. (d) Discuss what they can do in their own group to prevent any of their members becoming a statistic on the GRIM tables. <p><i>Homework</i> – (i) Select a case from the www.gold-book.net/casebook/parents webpage, and fill in a blank sheet of paper with the answers to Section B & C of the chosen age page. This can be handed in for discussion at the next lesson, OR, (ii) Show their service manual to their own parents/guardians. If appropriate, ask the students to gain their parents/guardians consent to interview them, and record the answers of Section B & C (corresponding to the age of the parents/guardians that they interview) on a blank sheet of paper. If parents/guardians would like their student to discuss their preventative health details in class, ask the parents/guardians to document this, as well as date and sign this so that the teacher can then use their information in a class discussion. Note: There are obvious confidentiality concerns here with parent/guardian privacy issues, for example cervical cancer screening. This needs to be stressed to the students. The general benefits to be gained by this exercise are significant if this can be done sensitively, as some parents will (for several reasons) be keen for their teenagers and classmates to learn from their experience.</p>	<p>Gold Book service manual for each student.</p> <p>Car service manuals</p> <p>Class computers with web access OR provision of GRIM tables</p>

Outcome	Students learn about:	Students learn to:	Teaching and learning activities	Resources
	<p>PDHPE AIM: “To develop students’ capacity to enhance personal health and wellbeing ... <i>and advocate lifelong health...</i>”</p> <p>Road safety</p> <ul style="list-style-type: none"> • Responsible driver and passenger behaviour • Consequences of unsafe road-use behaviour • Skills and attitudes that support road safe behaviour 	<p>PDHPE RATIONALE: “PDHPE provides the opportunity for young people to explore issues that are likely to impact on the health and wellbeing of themselves and others, now <i>and in the future</i> ... Health issues that <i>have the potential to appear in later life</i> are also relevant due to their relationship to lifestyle patterns established in adolescent years and the possibility that they may impact on family and other significant adults in students’ lives.”</p> <ul style="list-style-type: none"> • Propose and present strategies designed to promote safe road-use attitudes and behaviours • Use simulation software to make health decisions and solve problems relevant to young people, e.g. determining strategies that promote safe road use • Describe priority actions and first aid management in the case of road injury and trauma 	<p>Lesson Three <i>Task 1</i> – Cement the previous two lessons, and discuss any aspects that students bring up from these previous preventative health care tutorials. (Allow 10 minutes). <i>Task 2</i> – Review homework from last lesson. Select five students to present to the class their completed age page sheet homework exercise (either from analysis of the www.gold-book.net/casebook/parents case examples or from any parents or guardians who gave permission for their cases to be discussed). (Allow 7 minutes per student, up to 35 minutes). <i>Task 3</i> – Lead a general discussion on the important aspects of preventative health care that have come to light following this homework – e.g. smoking cessation, good nutrition, moderation in alcohol consumption, regular physical exercise, weight control, cancer screening, blood pressure monitoring, etc. In this discussion, look specifically at what common diseases these service manuals are trying to prevent. (Allow 10 minutes). <i>Homework</i> – Encourage students to visit http://www.firstaidweb.com to complete their own CPR and First Aid module, if they have not yet completed a first aid course.</p> <p>Lesson Three Evaluation – Listening to student presentations on their parent preventative health review should help teachers assess students’ comprehension of this topic.</p>	<p>Class computers with web access</p> <p>Gold Book service manual for each student.</p>

Outcome	Students learn about:	Students learn to:	Teaching and learning activities	Resources
	<p>Healthy food habits</p> <ul style="list-style-type: none"> • Sources of nutritional information • Disordered eating and body image • Diets, dieting, exercise and energy balance • Socio-cultural influences on food choices <p>Revise PDHPE AIM:</p> <p>“To develop students’ capacity to enhance personal health and wellbeing ... <i>and advocate lifelong health...</i>”</p>	<ul style="list-style-type: none"> • Explore the relationship between body image and gender, and the impact of the media on the manufacture of the ideal male and female body types • Investigate factors that influence food choices, e.g. culture and customs, gender and media <p>Re-visit PDHPE Rationale:</p> <p>“PDHPE provides the opportunity for young people to explore issues that are likely to impact on the health and wellbeing of themselves and others, now <i>and in the future</i>. The issues that affect young people include ... nutrition. Health issues that <i>have the potential to appear in later life</i> are also relevant due to their relationship to lifestyle patterns established in adolescent years and the possibility that they may impact on family and other significant adults in students’ lives.”</p>	<p>Lesson Four</p> <p><i>Task 1</i> – Discuss and cement gains made with first lessons.</p> <p><i>Task 2</i> – Review the nutritional advice provided on the Age 14 age page, comparing older age pages. Visit www.racgp.org.au/guidelines & download nutrition advice from RACGP Red Book page 36. Compare to service manual advice. Ask students to consider the recommendations, and propose reasons for them.</p> <p style="text-align: right;">(Allow 15 minutes)</p> <p><i>Task 3</i> – Ensure that everyone has calculated their BMI correctly. Ask 2 students to present their calculation in front of the class. Discuss what the lifetime benefits of using the service manual weight charts could be every 1-2 years around the time of the student’s birthday. What diseases in Australia today would be significantly improved by adequate population weight control, given the obesity epidemic? (Hypertension, Ischaemic Heart Disease, Stroke, Diabetes)</p> <p style="text-align: right;">(Allow 10 minutes)</p> <p><i>Task 4</i> - Demonstrate this to students by asking them to blow through their straw into a half filled cup of water. Compare this to the pumping action of the heart. Now ask them to moderately tightly squeeze the straw and try and blow the same amount of air. Compare the increased air pressure and the workload of the cheek and diaphragm muscles, as this is similar to the increased resistance that the heart has to pump against in obesity, leading to a higher pressure (hypertension), and pump failure (heart disease).</p> <p style="text-align: right;">(Allow 10 minutes).</p> <p><i>Summary</i> – Again summarise service manual concept to briefly point out to students the importance of firstly seeing the obesity problem as it is and then secondly addressing the diet to try and prevent these problems. Cement progress to date.</p> <p style="text-align: right;">(Allow 10 minutes)</p> <p>Lesson Four Evaluation – Discussion of RACGP nutritional advice, BMI calculation and diseases associated with obesity should help teachers assess students’ comprehension of the preventative health aspects in Section B of the Age 14 service manual page.</p>	<p>Class computers with web access</p> <p>Gold Book service manual for each student.</p> <p>Drinking straw</p> <p>Half cup of water</p>

Outcome	Students learn about:	Students learn to:	Teaching and learning activities	Resources
	<p>Road safety</p> <ul style="list-style-type: none"> • Responsible driver and passenger behaviour • Major causal factors in road and traffic related injuries, e.g. human (speeding, drug use, fatigue, occupant restraint), environmental, vehicular • Consequences of unsafe road-use behaviour • Skills and attitudes that support road safe behaviour 	<ul style="list-style-type: none"> • Propose and present strategies designed to promote safe road-use attitudes and behaviours • Use simulation software to make health decisions and solve problems relevant to young people, e.g. determining strategies that promote safe road use • Describe priority actions and first aid management in the case of road injury and trauma 	<p>Lesson Five</p> <p><i>Task 1</i> – Discuss and cement gains made with first lessons. (Allow 5 minutes).</p> <p><i>Task 2</i> – Introduce students to free online first aid and CPR training. Divide the class into two groups. Have both groups visit www.firstaidweb.com, with one group starting the free online CPR module and the other group starting the First Aid training module. (Allow 30 minutes).</p> <p><i>Task 3</i> - After half an hour, select some students from each group to present to the class what they have learned. By the end of this lesson, all students should be able to complete the service manual DRABCD checklist, and understand what each step represents. (Allow 10 minutes).</p> <p><i>Task 4</i> – Ask students to take out Gold Book Service Manuals and check that the Age 14 age page is now completely filled in (healthy eating pyramid, weight chart, DRABCD, with all questions answered). Encourage to students to keep hold of their service manual, as an ongoing tool, but also to remember the essentials that they have now recorded. Ensure all have all sections on Age 14 age page satisfactorily completed. (Allow 10 minutes).</p> <p><i>Homework</i> – Encourage students to visit http://www.firstaidweb.com to complete their own module, and the other module, in their own time.</p> <p>Lesson Five Evaluation – Listening to student presentations on their first 30 minutes of free online first aid training should help teachers assess students’ comprehension of this topic.</p>	<p>Class computers with web access</p> <p>Gold Book service manual for each student.</p>

NOTE: The important concept to impart is the need for an annual, lifelong, preventative health check up. The Gold Book Service Manual is simply one tool that students can use to start a regular lifelong check-up process, just like the service manual in a car.

As well as teaching students about the need for an annual preventative health check up, the Service Manual lessons can be used:-

1. At the start of the calendar year, to focus students on some of the topics relevant to their preventative health care, OR,
2. At the end of the calendar year, to cement gains made on all of these areas, OR,
3. At a time during the year when appropriate to review the preventative health subjects contained within, OR,
4. A combination of the above through the student year, regularly referring back to service manuals as preventative health subjects are discussed.

As well as a class learning manual, these can also be used as an assessment tool, or a homework assignment, as preferred by the teacher.

However, given the above options, the KEY recommendation is that these service manuals are used so that the student learns at an early age the importance of an annual preventative health check up:-

“If you give a man a fish, you feed him today. If you teach a man to fish, you feed him for life”.

In the same way, this method of teaching a service manual approach for health prevention today, should teach students how to use this technique for their preventative health for tomorrow. It is hoped that these service manuals will become a useful tool in the classroom, but also a valuable long term reminder of the need for maintaining *individual responsibility* (Outcome 5.7, p38, PDHPE Years 7-10 Syllabus) to maintain adequate lifelong preventative health.

Extension Training:-

1. Use the service manual to focus in on heart disease and stroke prevention. (i) What lifestyle recommendations are documented to prevent ischaemic heart disease and stroke? (ii) What tests are recommended to be performed at what age to pick up early problems that if left unchecked, might lead to heart disease or stroke? (iii) If all Australians adopted the service manual lifestyle recommendations, estimate how many lives could be saved each year (tricky to estimate, but conservatively around 25% of the current death rate from these two diseases).
2. Visit http://www.aihw.gov.au/mortality/data/current_data.cfm. (i) From this table, ask students to construct a histogram bar graph of the top 10 causes of death currently in Australia. (ii) From this table, ask students to choose 7 diseases (Heart disease, Stroke, Lung cancer, Chronic Airways Disease, Colorectal cancer, Breast cancer, Pneumonia). Use the service manual to work out how each of these diseases should be prevented, by whom and at what age. (iii) Ask students to work out from the service manual what they, their parents and their grandparents should be doing now to prevent these 7 diseases from forming.
3. Visit <http://www.cancerscreening.gov.au> and refer back to the service manuals. See if the recommendations in the service manuals line up with the government recommendations for cancer screening on this website. If they do not, ask why not. For further information, visit http://www.nhmrc.gov.au/guidelines/health_guidelines.htm which may shed some more light on the three cancer screening program government recommendations (as the NHMRC is a different Australian government department to the Department of Health).