**FOD 2030:**

**Food Decisions and Health**

Level: Intermediate

Prerequisite: FOD 1010: Food Basics

**Unit Plan**

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Ed. 4760

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**Unit Summary**

Students will learn how to balance the energy equation by using strategies for food intake analysis and preparing appropriate foods that help fuel the body efficiently and effectively.

***Prerequisite:*** *FOD1010: Food Basics*

**Rationale**

Learning how to maintain and live a healthy lifestyle is a skill that all youth should learn. Unfortunately, many youth today are becoming obese due to a lack of exercise and knowledge about nutritional intake. In addition, many youth are also feeling the pressures from social media to have an unrealistic body shape and weight. Due to body image challenges in both male and female students, unhealthy dieting and eating disorders are developing at an alarming rate. In this course, students will learn about how to balance their energy intake with their outtake in a healthy way to manage their weight and health. By obtaining this knowledge now, these students can use these strategies in their future and teach them to their children. Students will also recognize and learn about the influences of social media on body image. Once youth begin to see how outside factors influence their life, they can begin to take steps to minimize these effects. FOD 2030 not only teaches children how to physically and mentally live a healthy lifestyle, but it also provides students will recipes and practical life skills to practise these teaching in real life outside of the classroom.

**Food Decisions and Health Learning Outcomes**

|  |
| --- |
| **1. describe the relationships between body image, wellness, healthy eating and active living** |

1.1 describe basic body shapes

1.2 identify psychological and social factors that influence body image

1.3 describe body composition, considering the following factors:

1.3.1 health costs of unhealthy lifestyle choices; e.g., tobacco use for weight management, fad diets, physical inactivity

1.3.2 body weight versus body composition

1.3.3 methods of measuring body composition

1.3.4 variables in ideal body composition

1.4 discuss why most diets are ineffective and interfere with natural metabolism and hunger regulation, and:

1.4.1 formulate and apply criteria for evaluation of diets

1.4.2 compare concepts of maintaining a healthy body weight versus dieting to manage weight

|  |
| --- |
| **2. describe strategies for achieving and maintaining adequate food intake, according to *Eating Well with Canada’s Food Guide*, and healthy active living, according to *Canada’s Physical Activity Guide to Healthy Active Living*** |

2.1 predict the impact of food intake and active living on the energy balance equation and changes in energy input and energy output by:

2.1.1 evaluating factors influencing energy input

2.1.2 analyzing the significance of food patterns in altering energy input

2.1.3 differentiating among factors that affect energy output

2.1.4 comparing energy output required for different types and levels of physical activity

2.1.5 discussing goals for achieving and maintaining healthy body composition

2.2 analyze personal energy balance equation

|  |
| --- |
| **3. demonstrate knowledge and skill in the planning, preparing and evaluating of suitable foods for achieving growth and development during teen years** |

3.1 select, prepare and evaluate a minimum of five recipes suitable for healthy living

3.2 prepare a homemade snack and compare the nutritional values to a comparable commercial snack; e.g., granola, granola bar, cookies, muffins

3.3 select, prepare and evaluate the effectiveness of foods in meeting the goals of optimal nutrition, considering:

3.3.1 different cooking methods; e.g., deep-fried potatoes versus oven-baked potatoes

3.3.2 varying ingredients; e.g., fat substitution with fruit purée

3.4 plan, prepare and evaluate a healthy balanced meal to assist with the achievement of:

3.4.1 growth and development during teen years

3.4.2 healthy body weight

|  |
| --- |
| **4. identify and demonstrate safe and sanitary practices** |

4.1 maintain a clean, sanitary, safe work area

4.2 apply universal precautions related to:

4.2.1 personal protective equipment (PPE); e.g., hair coverings, aprons, gloves

4.2.2 hand-washing techniques

4.2.3 infectious diseases

4.2.4 blood-borne pathogens

4.2.5 bacteria, viruses, molds

4.2.6 safety and first-aid applications; e.g., back safety, cuts, slip and trip hazards

4.3 use all materials, products and implements appropriately

4.4 clean, sanitize and store materials, products and implements correctly

4.5 dispose of waste materials in an environmentally safe manner

|  |
| --- |
| **5. demonstrate basic competencies** |

5.1 demonstrate fundamental skills to:

5.1.1 communicate

5.1.2 manage information

5.1.3 use numbers

5.1.4 think and solve problems

5.2 demonstrate personal management skills to:

5.2.1 demonstrate positive attitudes and behaviours

5.2.2 be responsible

5.2.3 be adaptable

5.2.4 learn continuously

5.2.5 work safely

5.3 demonstrate teamwork skills to:

5.3.1 work with others

5.3.2 participate in projects and tasks

|  |
| --- |
| **6. identify possible life roles related to the skills and content of this cluster** |

6.1 recognize and then analyze the opportunities and barriers in the immediate environment

6.2 identify potential resources to minimize barriers and maximize opportunities

|  |  |
| --- | --- |
| **ICT Learning Outcomes Division 4**  **C.1 - Students will access, use and communicate information from a variety of technologies.** | |
|  | |
| 4.1 | plan and perform complex searches, using more than one electronic source |
| 4.2 | select information from appropriate sources, including primary and secondary sources |
| 4.3 | evaluate and explain the advantages and disadvantages of various search strategies |
| 4.4 | communicate in a persuasive and engaging manner, through appropriate forms, such as speeches, letters, reports and multimedia presentations, applying information technologies for context, audience and purpose that extend and communicate understanding of complex issues |
|  |  |
| **C.2 - Students will seek alternative viewpoints, using information technologies.** | |
|  | |
| 4.1 | consult a wide variety of sources that reflect varied viewpoints on particular topics |
| 4.2 | evaluate the validity of gathered viewpoints against other sources |
|  |  |
| **C.3 - Students will critically assess information accessed through the use of a variety of technologies.** | |
|  | |
| 4.1 | assess the authority, reliability and validity of electronically accessed information |
| 4.2 | demonstrate discriminatory selection of electronically accessed information that is relevant to a particular topic |
|  |  |
| **C.4 - Students will use organizational processes and tools to manage inquiry.** | |
|  | |
| 4.1 | use calendars, time management or project management software to assist in conducting an inquiry |
|  |  |
| **C.5 - Students will use technology to aid collaboration during inquiry.** | |
|  | |
| 4.1 | use telecommunications to pose critical questions to experts |
| 4.2 | participate in a variety of electronic group formats |
|  |  |
| **C.6 - Students will use technology to investigate and/or solve problems.** | |
|  | |
| 4.1 | investigate and solve problems of prediction, calculation and inference |
| 4.2 | investigate and solve problems of organization and manipulation of information |
| 4.3 | manipulate data by using charting and graphing technologies in order to test inferences and probabilities |
| 4.4 | generate new understandings of problematic situations by using some form of technology to facilitate the process |
| 4.5 | evaluate the appropriateness of the technology used to investigate or solve a problem |
|  |  |
| **C.7 - Students will use electronic research techniques to construct personal knowledge and meaning.** | |
|  | |
| 4.1 | use appropriate strategies to locate information to meet personal needs |
| 4.2 | analyze and synthesize information to determine patterns and links among ideas |
| 4.3 | use appropriate presentation software to demonstrate personal understandings |
|  |  |
| **F.1 - Students will demonstrate an understanding of the nature of technology.** | |
| 4.1 | assess the strengths and weaknesses of computer simulations in relation to real-world problems |
| 4.2 | solve mathematical and scientific problems by selecting appropriate technology to perform calculations and experiments |
| 4.3 | apply terminology appropriate to technology in all forms of communication |
| 4.4 | demonstrate an understanding of the general concepts of computer programming and the algorithms that enable technological devices to perform operations and solve problems |
|  |  |
| **F.2 - Students will understand the role of technology as it applies to self, work and society.** | |
|  | |
| 4.1 | use technology outside formal classroom settings |
| 4.2 | analyze how technological innovations and creativity affect the economy |
| 4.3 | demonstrate an understanding of new and emerging communication systems |
| 4.4 | evaluate possible potential for emerging technologies |
| 4.5 | demonstrate conservation measures when using technology |
| 4.6 | demonstrate an understanding of the basic principles and issues of e-commerce, including such topics as security and privacy, marketing, and implications for governments, businesses and consumers alike |
| 4.7 | use current, reliable information sources from around the world |
| 4.8 | analyze and assess the impact of technology on the global community |
|  |  |
| **F.3 - Students will demonstrate a moral and ethical approach to the use of technology.** | |
|  | |
| 4.1 | demonstrate an understanding of how changes in technology can benefit or harm society |
| 4.2 | record relevant data for acknowledging sources of information, and cite sources correctly |
| 4.3 | respect ownership and integrity of information |
|  |  |
| **F.4 - Students will become discerning consumers of mass media and electronic information.** | |
|  | |
| 4.1 | discriminate between style and content in a presentation |
| 4.2 | evaluate the influence and results of digital manipulation on our perceptions |
| 4.3 | identify and analyze a variety of factors that affect the authenticity of information derived from mass media and electronic communication |
|  |  |
| **F.5 - Students will practise the concepts of ergonomics and safety when using technology.** | |
|  | |
| 4.1 | assess new physical environments with respect to ergonomics |
| 4.2 | identify safety regulations specific to the technology being used |
|  |  |
| **F.6 - Students will demonstrate a basic understanding of the operating skills required in a variety of technologies.** | |
|  | |
| 4.1 | continue to demonstrate the outcomes addressed within the previous divisions. Students interested in pursuing advanced study in such areas as electronics, programming, computer-aided design and drafting (CADD), robotics and other industrial applications of technology will find opportunities in Career and Technology Studies (CTS) courses |
|  |  |
| **P.1 - Students will compose, revise and edit text.** | |
|  | |
| 4.1 | continue to demonstrate the outcomes achieved in prior grades and course subjects |
|  |  |
| **P.2 - Students will organize and manipulate data.** | |
|  | |
| 4.1 | manipulate and present data through the selection of appropriate tools, such as scientific instrumentation, calculators, databases and/or spreadsheets |
|  |  |
| **P.3 - Students will communicate through multimedia.** | |
|  | |
| 4.1 | select and use, independently, multimedia capabilities for presentations in various subject areas |
| 4.2 | support communication with appropriate images, sounds and music |
| 4.3 | apply general principles of graphic layout and design to a document in process |
|  |  |
| **P.4 - Students will integrate various applications.** | |
|  | |
| 4.1 | integrate a variety of visual and audio information into a document to create a message targeted for a specific audience |
| 4.2 | apply principles of graphic design to enhance meaning and audience appeal |
| 4.3 | use integrated software effectively and efficiently to reproduce work that incorporates data, graphics and text |
|  |  |
| **P.5 - Students will navigate and create hyperlinked resources.** | |
|  | |
| 4.1 | create multiple-link documents appropriate to the content of a particular topic |
| 4.2 | post multiple-link pages on the World Wide Web or on a local or wide area network |
|  |  |
| **P.6 - Students will use communication technology to interact with others.** | |
|  | |
| 4.1 | select and use the appropriate technologies to communicate effectively with a targeted audience |

**Digital Citizenship**

1. **Digital Access:** full electronic participation in society.
2. **Digital Commerce:** electronic buying and selling of goods*.*
3. **Digital Communication:** electronic exchange of information.
4. **Digital Literacy:** process of teaching and learning about technology and the use of technology.
5. **Digital Etiquette:** electronic standards of conduct or procedure.
6. **Digital Law:** electronic responsibility for actions and deeds
7. **Digital Rights & Responsibilities:** those freedoms extended to everyone in a digital world.
8. **Digital Health & Wellness:** physical and psychological well-being in a digital technology world.
9. **Digital Security (self-protection):** electronic precautions to guarantee safety.

FOD Outcomes Summative Assessment

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **FOD Learning Outcomes** | **Assessment**  **=>** |  |  |  |  |  |  |
|  | Safety  Test | Unit 1,2 Test | Journals | Portfolio | Diet Plan for 1 day | Performance tasks | Energy Equation |
| 1.1 |  | √ | √ |  |  |  |  |
| 1.2 |  |  | √ |  |  |  |  |
| 1.3 |  | √ |  | √ |  |  |  |
| 1.4 |  | √ |  |  | √ |  |  |
| 2.1 |  | √ |  | √ |  |  | √ |
| 2.2 |  |  |  |  |  |  | √ |
| 3.1 |  |  |  | √ | √ |  |  |
| 3.2 |  |  |  | √ | √ | √ |  |
| 3.3 |  |  |  | √ | √ |  |  |
| 3.4 |  |  |  | √ | √ |  |  |
| 4.1 | √ |  |  |  |  | √ |  |
| 4.2 | √ |  |  |  |  | √ |  |
| 4.3 | √ |  |  |  |  | √ |  |
| 4.4 | √ |  |  |  |  | √ |  |
| 4.5 | √ |  |  |  |  | √ |  |
| 5.1.1 | √ | √ | √ | √ | √ | √ | √ |
| 5.1.2 |  |  |  |  | √ |  | √ |
| 5.1.3 |  | √ |  |  | √ |  | √ |
| 5.1.4 |  | √ |  | √ | √ |  |  |
| 5.2.1 |  |  |  | √ | √ | √ | √ |
| 5.2.2 | √ |  |  |  |  | √ |  |
| 5.2.3 |  |  | √ | √ | √ | √ |  |
| 5.2.4 |  | √ | √ | √ | √ |  |  |
| 5.2.5 | √ |  |  |  |  | √ |  |
| 5.3 |  |  |  | √ | √ | √ |  |
| 6.1 |  |  | √ |  |  |  |  |
| 6.2 |  |  | √ |  |  |  |  |

ICT Outcomes Summative Assessment

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **FOD Learning Outcomes** | **Assessment**  **=>** |  |  |  |  |  |  |
|  | Safety test | Unit 1,2 test | Journals | Portfolio | Diet Plan for 1 day | Performance task | Energy Equation |
| C.1-4.1 |  |  |  | √ |  |  |  |
| C.1-4.2 |  |  |  | √ |  |  |  |
| C.1-4.3 |  |  |  |  |  |  |  |
| C.1-4.4 |  |  | √ | √ |  |  |  |
| C.2-4.1 |  |  |  | √ |  |  |  |
| C.2-4.2 |  |  |  |  |  |  |  |
| C.3-4.1 |  |  |  | √ |  |  |  |
| C.3-4.2 |  |  |  | √ |  |  |  |
| C.4-4.1 |  |  |  |  |  |  |  |
| C.5-4.1 |  |  |  |  |  |  |  |
| C.5-4.2 |  |  | √ | √ |  |  |  |
| C.6-4.1 |  |  |  |  |  |  |  |
| C.6-4.2 |  |  |  |  |  |  | √ |
| C.6-4.3 |  |  |  |  |  |  | √ |
| C.6-4.4 |  |  |  |  |  |  |  |
| C.6-4.5 |  |  | √ |  |  |  |  |
| C.7-4.1 |  |  |  |  |  |  |  |
| C.7-4.2 |  |  |  |  |  |  |  |
| C.7-4.3 |  |  | √ | √ |  |  |  |
|  |  |  |  |  |  |  |  |
| F.1-4.1 |  |  |  |  |  |  |  |
| F.1-4.2 |  |  |  |  |  |  | √ |
| F.1-4.3 | √ | √ | √ | √ | √ | √ | √ |
| F.1-4.4 |  | √ |  |  |  |  |  |
| F.2-4.1 |  |  | √ | √ | √ | √ | √ |
| F.2-4.2 |  |  |  |  |  |  |  |
| F.2-4.3 |  |  | √ |  |  |  |  |
| F.2-4.4 |  |  |  |  |  |  |  |
| F.2-4.5 |  |  |  |  |  |  |  |
| F.2-4.6 |  |  |  |  |  |  |  |
| F.2-4.7 |  |  | √ | √ | √ |  |  |
| F.2-4.8 |  |  |  |  |  |  |  |
| F.3-4.1 |  |  |  |  |  |  |  |
| F.3-4.2 |  |  | √ | √ | √ |  | √ |
| F.3-4.3 |  |  | √ | √ | √ |  | √ |
| F.4-4.1 |  |  |  | √ |  |  |  |
| F.4-4.2 |  |  | √ |  |  |  |  |
| F.4-4.3 |  |  | √ | √ |  |  |  |
| F.5-4.1 | √ |  | √ | √ | √ | √ | √ |
| F.5-4.2 | √ |  | √ | √ | √ | √ | √ |
| F.6-4.1 |  |  | √ | √ | √ | √ | √ |
|  |  |  |  |  |  |  |  |
| P.1-4.1 |  |  | √ | √ | √ |  | √ |
| P.2-4.1 |  |  |  |  | √ |  | √ |
| P.3-4.1 |  |  | √ | √ |  |  |  |
| P.3-4.2 |  |  | √ | √ |  | √ |  |
| P.3-4.3 |  |  |  | √ | √ |  | √ |
| P.4-4.1 |  |  |  | √ |  |  |  |
| P.4-4.2 |  |  |  | √ | √ |  |  |
| P.4-4.3 |  |  |  |  |  |  |  |
| P.5-4.1 |  |  | √ | √ |  |  |  |
| P.5-4.2 |  |  |  | √ |  |  |  |
| P.6-4.1 |  |  | √ |  |  |  |  |

**Unit at a Glance**

**May, 2013**

Monday Tuesday Wednesday Thursday Friday

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | 1  Introduction  Course Outline  Body image lesson | 2  Body Shapes  Watch an episode of a sitcom and label characters body shape | 3  Diets lesson |
| 6  Work on diet project with partner (portfolio) | 7  Body composition | 8  Body composition research with partner (portfolio) | 9  Present body composition project to class. Class takes notes on presentations. | 10  Discuss food intake and active living |
| 13  Watch some of “Supersize Me” video and analyze energy equation as a class. | 14  Analyse own energy equation work day 1 | 15  Analyse own energy equation work day 2 | 16  Knowledge Test on units 1 and 2 | 17  Safety lesson |
| 20  Safety test | 21  Evaluate foods lesson | 22  Create snack on video (performance task) | 23  Analyze and evaluate snack work day | 24  Plan for 1 day Diet Plan |
| 27  Prepare one recipe and evaluate work day | 28  Prepare one recipe and evaluate work day | 29  Prepare two smaller recipes and evaluate work day | 30  Prepare one recipe and evaluate work day | 31  Work/Extra day |

**June, 2013**

Monday Tuesday Wednesday Thursday Friday

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 3  Present Portfolios (half class) | 4  Present Portfolios (half class)  Wrap up class | 5 | 6 | 7 |
| 10 | 11 | 12 | 13 | 14 |
| 17 | 18 | 19 | 20 | 21 |
| 24 | 25 | 26 | 27 | 28 |

**Day by Day Table**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Lesson # | Time Period | Content | Learning Outcomes  CTS | Activities | Assessment  \*\*Formative  \*\*Summative | Materials/  Resources |
| 1 | 60 mins | Introduction  Course outline  Body Image (intro to diets) | 1.2 | Intro questions, course outline, get to know each other, videos, class discussion , research how media can influence body image, Journal response | Informal questioning,  Journal response /3 | Powerpoint,  Poll Everywhere, Computers, videos: <http://www.youtube.com/watch?v=owGykVbfgUE>  <http://www.youtube.com/watch?v=DFClJUNxelg> |
| 2 | 60 mins | Body Shapes | 1.1  1.2 | Learn body shapes, have students stand and give symbols for the different types. Play Simon Says using body shapes.  Watch a very PG section of Simpsons, analyse the characters body shapes in partners. | Teacher observation of student’s responses to the body shape game.  Simpson’s analysis in Portfolio. /6 | Video clip: <http://www.youtube.com/watch?v=6y1XMgpPxfc> |
| 3 | 60 mins | Diets | 1.4 | Look at the Canadian Food Guide  Have students write down what they ate yesterday and compare that to the food guide. | Journal Entry /3 | Canadian Food Guide: <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php> |
| 4 | 60 mins | Diets | 1.4 | Evaluate a diet project in partners (portfolio) | Portfolio project /6 | Computers |
| 5 | 60 mins | Body Composition | 1.3 | What is body composition? Research methods of measuring body composition and variables affecting this (portfolio) | Portfolio project /6 | Computers |
| 6 | 60 mins | Body Composition | 1.3 | Notes: Look at factors of unhealthy lifestyles: tobacco use for weight management, fad diets, physical inactivity.  Class discussion | Journal Entry /3 | Computers |
| 7 | 60 mins | Body Composition | 1.3 | Body weight vs. composition. Students will find an article, post it and review it (portfolio) | Portfolio Project /5 | Computers |
| 8 | 60 mins | Energy intake/outake | 2.1 | Watch some of video: “Supersize Me”  As a class analyse his energy equation  Journal Response | Informal questioning from class analysis,  Journal response /3 | Video: <http://www.youtube.com/watch?v=-Z74og9HbTM>  Computers |
| 9 | 60 mins | Energy intake/outake | 2.1 | Energy notes  Video: Coke Commercial  Class discussion | Journal Response /3 | Poll Everywhere  Video: <http://www.youtube.com/watch?v=bHhCP5ad-zM> |
| 10 | 60 mins | Analyze own diet | 2.2 | Work day | Informal questioning  Energy Equation /6 | Computers |
| 11 | 60 mins | Analyze own diet | 2.2 | Work day | Informal questioning  Energy Equation /6 | Computers |
| 12 | 60 mins | Unit 1,2 test | 1.1  1.2  1.3  1.4  2.1 | Test | Test /10 | Test |
| 13 | 60 mins | Safety | 5.2 | Video  Class discussion  Practise test | Informal questioning, practise test | Video: <http://www.youtube.com/watch?v=ViXh9O87SJ0> |
| 14 | 60 mins | Safety test | 5.2 | Test | Test /10 | Test  Extra Pencils |
| 15 | 60 mins | Evaluation of foods | 3.3 | Analyze a McDonalds salad and burger: what are the differences?  Play the Price is Right: have students guess which foods are more nutritious and why.  Journal Response | Price is right game answers, informal questioning,  Journal response /3 | PowerPoint,  Computers, Price is Right material |
| 16 | 60 mins | Create snack | 3.2 | Work Day | Performance task /10 | Kitchen |
| 17 | 60 mins | Evaluate snack | 3.2 | Work Day | Performance task /10 | Computers |
| 18 | 60 mins | Plan for a 1 day nutritious diet plan | 3.1  3.3  3.4 | Work Day | Informal Questioning  Diet Plan for 1 Day assignment /20 | Kitchen |
| 19 | 60 mins | Prepare and evaluate recipe from diet plan | 3.1  3.3  3.4 | Work Day | Informal Questioning  Diet Plan for 1 Day assignment /20 | Kitchen |
| 20 | 60 mins | Prepare and evaluate recipe from diet plan | 3.1  3.3  3.4 | Work Day | Informal Questioning  Diet Plan for 1 Day assignment/20 | Kitchen |
| 21 | 60 mins | Prepare and evaluate recipe from diet plan | 3.1  3.3  3.4 | Work Day | Informal Questioning  Diet Plan for 1 Day assignment/20 | Kitchen |
| 22 | 60 mins | Prepare and evaluate recipe from diet plan | 3.1  3.3  3.4 | Work Day | Informal Questioning  Diet Plan for 1 Day assignment/20 | Kitchen |
| 23 | 60 mins | Work/Extra Day | - | Take extra class if needed; if not start presenting portfolios one day early. | - | - |
| 24 | 60 mins | Present Portfolios | See Summative Assessment plan | Students will present units work and progress in portfolio | Informal questioning | Computers |
| 25 | 60 mins | Present Portfolios | See Summative Assessment plan | Students will present units work and progress in portfolio | Informal questioning | Computers |