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English for Health Sciences II

Supakorn Phoocharoensil

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English for Health Sciences II

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ราคาเล่มละ 320 บาท

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PREFACE

As a textbook for an English-for-Specific-Purposes (ESP) course, *English for Health Sciences II* has been designed to serve the needs of students enrolled in EL311 (English for Health Sciences 2), offered by the Language Institute of Thammasat University. The target readers of this textbook are students from disciplines related to health science, e.g. dentistry, medicine, nursing, and others all of whom are required by their faculties to register for this course, upon completion of its prerequisite, EL211 (English for Health Sciences 1). Not only has this coursebook been created for Thammasat University students, but also for those from other institutions who will find the material useful in developing their English skills in the context of health science.

English for Health Sciences II comprises eight units, each of which consists of five major sections, i.e. *Reading Comprehension, Reading Skill, Listening, Language Focus and Writing*, and *Speaking*. The text for the *Reading Comprehension* of each unit has been carefully selected from updated, reliable sources. This is followed by reading comprehension practice, i.e. *Comprehension Check, Vocabulary Check*, and *References*. The reading texts are more challenging in terms of complexity and length than those in EL211. For the reading skill development, fundamental skills, such as skimming, scanning, and guessing word meanings from context clues, are presented through authentic extracts from health-science materials. The student is then guided to more advanced skills such as distinguishing between facts and opinions, making inferences, and drawing conclusions through induction and deduction.

Due to the fact that the course for which this textbook was written aims to familiarize students with academic English, the listening section highlights improving strategies useful for listening to academic lectures, e.g. listening for main ideas, listening for supporting details, and inferring a speaker's intention. This is followed by *Language Focus and Writing*, which provides linguistic explanations with respect to the selected topics, e.g. linking adverbials, using defining language, using formal language in writing, hedging, and paraphrasing. The examples used for illustration are corpus-based, which means they are from authentic sources in order to prepare students for their future health-oriented professions. Whereas the focus of EL211 is on paragraph writing, this advanced coursebook allows students to develop their essay writing skill. All the basics of essay writing, e.g. how to write the introductory, body, and concluding paragraphs effectively, are introduced through sample health-science essays. Furthermore, methods of drafting different types of essays, such as exemplification, process, cause/effect, comparison/contrast, and argumentation among others, are clearly explained.

Each unit ends with speaking skill development. As the purpose of this coursebook is to promote academic English use, the speaking section also concentrates on practicing academic oral skills in the health-science context. Targeted speaking skills include making spoken summaries, giving examples and opinions orally, and using hedging in expressing causes and effects.

After having been pilot-tested in classrooms, this coursebook has been brought to light and completion through constructive comments from course instructors and students. It is hoped that those who would like to teach or study English for Health Sciences at a more advanced level will benefit from this ESP coursebook.

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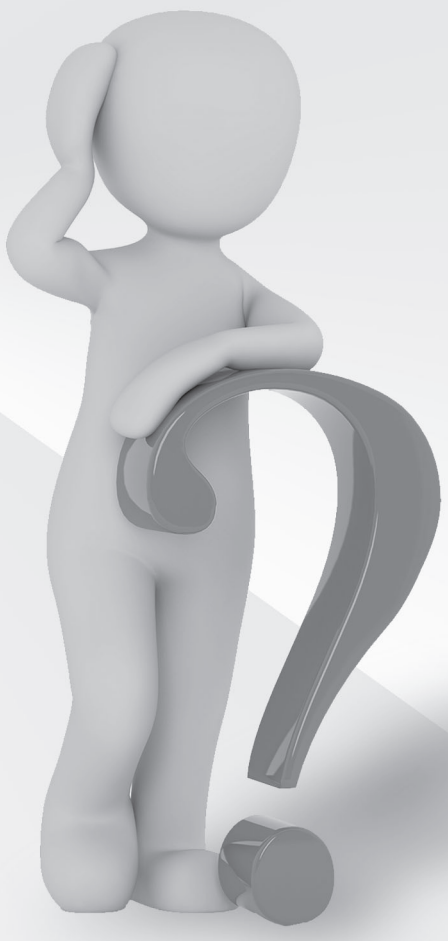
Course Plan

Unit	Topic	Reading	Listening	Language Focus	Writing Skill Development	Speaking
1	What is Health Science?	• Students will be able to identify the main idea and supporting details of health-science passages. • Students will be able to skim a health-science text.	• Students will be able to prepare themselves before listening to a lecture. • Students will be able to understand the main idea of a lecture.	• Students will be able to define health-science terms using academic language.	• Students will be able to identify the major components of an essay. • Students will be able to write an effective thesis statement.	• Students will be able to summarize and present the main points of academic articles orally.
2	Cinnamon's Incredible Benefits	• Students will be able to scan a health-science text for specific information. • Students will be able to scan graphic aids providing health science information.	• Students will be able to identify supporting details of a health-science listening text.	• Students will be able to use different kinds of linking adverbials in health-science contexts.	• Students will be able to produce an effective introductory paragraph. • Students will be able to produce an effective concluding paragraph.	• Students will be able to connect ideas using linking adverbials in speaking in health-science contexts. • Students will be able to use notes for oral presentations.
3	Unhealthy Sleep	• Students will be able to identify cohesive devices in reading a health-science text. • Students will be able to differentiate between coherent and incoherent texts.	• Students will be able to recognize the relationship between parts of a lecture.	• Students will be able to produce advanced passive construction in health-science contexts.	• Students will be able to write process essays the topics of which are related to health science.	• Students will be able to describe an instruction orally in health-science contexts.

Unit	Topic	Reading	Listening	Language Focus	Writing Skill Development	Speaking
4	Selfies: Oral Health Care Improvement	• Students will be able to identify abstract concepts and concrete information in a health-science text.	• Students will be able to distinguish between major and minor points in listening to a health-science text.	• Students will be able to use formal language in health-science contexts.	• Students will be able to write exemplification essays the topics of which are related to health science.	• Students will be able to orally give examples related to health science.
5	Pet Exposure May Reduce Allergy and Obesity	• Students will be able to determine the meaning of an unfamiliar health-science vocabulary item from context clues.	• Students will be able to recognize a speaker's degree of certainty in listening to a health-science text.	• Students will be able to use various hedging techniques in writing health-science reports.	• Students will be able to write cause and effect essays the topics of which are related to health science. • Students will be able to write medical certificates.	• Students will be able to employ hedging in expressing causes and effects in health-science contexts.
6	The Value of Second Opinion	• Students will be able to distinguish between facts and opinions in a health-science text.	• Students will be able to recognize a speaker's degree of certainty in listening to a health-science text when expressing an opinion.	• Students will be able to describe facts and express opinions in health-science contexts using academic language.	• Students will be able to write argumentative essays the topics of which are related to health science.	• Students will be able to give opinions in health science academic discussion.

Unit	Topic	Reading	Listening	Language Focus	Writing Skill Development	Speaking
7	Largest Genetic Study of Mosquitoes Reveals Spread of Insecticide Resistance Across Africa	• Students will be able to make inferences from a health-science text.	• Students will be able to infer a speaker's intention.	• Students will be able to paraphrase groups of sentences in health-science contexts.	• Students will be able to write comparison/ contrast essays the topics of which are related to health science.	• Students will be able to compare and contrast in speaking about health-science topics.
8	Botulinum Neurotoxin	• Students will be able to draw conclusions from health-science texts using deduction and induction.	• Students will be able to recognize emphasis through sentence stress in listening to a health-science text.	• Students will be able to produce emphatic sentence structures in health-science contexts. • Students will be able to write emails to patients effectively.	• Students will be able to identify the academic writing problems in health-science contexts. • Students will be able to rectify the academic writing problems in health science contexts.	• Students will be able to assess audience's needs in academic presentation about health-science topics.

1 What is Health Science?



READING COMPREHENSION

What is Health Science?

Health science refers to a wide range of disciplines related to the provision of health care to humans and animals through the application of science, engineering, mathematics and technology. It is a field in which knowledge is taken from pure science and other related sources and applied to practical and clinical practices to maintain and improve the health of living beings. The branches of health science are virtually endless, spanning traditional and conventional Western medicine, as well as alternative and folk medicine. It can even include spiritual-based healing processes.

The list of occupations within the health sciences is also extensive, including jobs within five major career paths: diagnostic services, therapeutic services, support services, health informatics, and biotechnology research and development. Health science professionals work in hospitals, dental offices and laboratories, government and private research centers, pharmaceutical and biotechnology companies, community and public agencies, and large health care organizations, to name just a few.

Interview with a Health Sciences Professional

The best way to get an understanding of any professional's day-to-day duties and responsibilities is to speak directly with someone in the field. We spoke with Scott Cunningham, a research and development technologist in the Mayo Clinic's Division of Clinical Microbiology, to find out what it's like to work in his professional health sciences.

▷ *What attracted you to a career as a medical technologist?*

I think it's the hands-on science. As a medical technologist, it's what I trained for. You get to see a variety of things. I've kind of fine-tuned myself to microbiology, but there are multiple areas in medical technology that a

person can either specialize in or rotate through, including tissue-typing, blood banking, hematology, chemistry, microbiology… those are the big players in a clinical laboratory.

▷ *Can you describe your job duties as a research and development technologist at the Mayo Clinic?*

We bring tests up from scratch, taking basic science principles or papers and turning them into clinical tests that are utilized on a day-to-day basis. We also validate a number of tests that have already been built at other companies that, in order to enter the lab, have to undergo vigorous tests to make sure they work properly. And then I also serve as kind of a technical go-to person for the tests in the lab, so that when tests go down or they're having issues with tests or procedures, I'm often consulted to come up with an explanation, work-around or fix.

▷ *Can you describe a typical day at work?*

There's really not a normal, set-in-stone scheduled day. I usually have one or more projects that I'm working on. A lot of the projects take multiple days or several hours, so I like to set those up in advance. This gives me the flexibility to deal with issues that come up in the lab, or to deal with anything management needs to address. So it's a lot of project management. It's really independent, which is what I like, but there are also timelines that I am expected to meet. It's definitely not as structured or as rigorous as when you are doing diagnostic practice in a clinical lab.

▷ *Is this a typical nine-to-five job?*

It can be, when things are quiet and there's not a lot of troubleshooting going on, but there are often times when a lot more is happening. Some experiments are time-dependent, so I have to flex my schedule to stay a little late or come in a little early. You can't just cut time

off on some of those protocols that we do. So it's very much dictated by timed projects and workload.

▷ *What are some of the most challenging aspects of your work?*

The most challenging part of the job is the controlled chaos on a day-to-day basis. There is the unpredictability of not knowing if you are going to meet your end goal all the time. There's a certain amount of failure that you have to be willing to accept. You don't know whether something is going to fail until you get there. Another challenge is ensuring that I have a healthy work/life balance.

▷ *What do you find to be most satisfying about what you do?*

I think just coming up with novel ways to diagnose infectious diseases and getting my hands on things really early on, before they become commonplace. We're always on the cutting edge of new diagnostic tests, and that's really challenging and exciting. It's always a big puzzle, and that's what is really attractive. Every day I'm going in to solve a puzzle or put a puzzle together. It's chaotic at times, but it's mentally stimulating and satisfying to have that on a daily basis.

(Retrieved July 25, 2017, from http://www.publichealthonline.org/health-sciences/)

COMPREHENSION CHECK

A. ***Directions:*** **Using the information from the passage, answer the following questions.**

1. What is the definition of health science?

_____

2. According to Paragraph 1, what is the aim of studying health science?

_____

3. What are the five major career paths of health science professionals?

_____