



研究生教材

英语教程

— 工 程 类 —

张守樟

西安交通大学出版社

研究生教材

英 语 教 程
(工 程 类)

张 守 樟

西安交通大学出版社

内 容 简 介

本书是一本适用于工程类型硕士生学习英语的教材,它着重培养了学生英文阅读和写作的能力。全书由3部分(20个课文)组成:第1部分扼要而系统地复习英语的基本用法;第2部分用来提高英语阅读及写作能力;第3部分阅读文献资料与英文专题写作。本书也适用文、理、工、农、医各类研究生和高年级本科生。

(陕)新登字007号

英 语 教 程

(工程类型硕士研究生)

张守樟

责任编辑 罗 兰

*

西安交通大学出版社出版

(邮政编码 710049)

西安交通大学出版社印刷厂印装

陕西省新华书店经售

*

开本850×1168 1/32 印张 12.25 字数:306千字

1991年10月第1版 1991年10月第1次印刷

印数:1—5000

ISBN-5605-0429-9/H·29 定价:4.00元

研究生教材总序

研究生教育是我国高等教育的最高层次,是为国家培养高层次的人才。他们必须在本门学科中掌握坚实的基础理论和系统的专门知识,以及从事科学研究工作或担负专门技术工作的能力。这些要求具体体现在研究生的学位课程和学位论文中。

认真建设好研究生学位课程是研究生培养中的重要环节。为此,我们组织出版这套研究生教材,以满足当前研究生教学,主要是公共课和一批新型的学位课程的教学需要。教材作者都是多年从事研究生教学工作,有着丰富教学和科学研究经验的教师。

这套教材首先着眼于研究生未来工作和高技术发展的需要,充分反映国内外的最新学术动态,使研究生学习之后,能迅速接近当代科技发展的前沿,以适应“四化”建设的要求;其次,也注意到研究生公共课程和学位课程应有它最稳定、最基本的内容。这是研究生掌握坚实的基础理论和系统的专门知识所必要的。因此,在研究生教材中仍应强调突出重点,突出基本原理和基本内容,以保持学位课程的相对稳定性和系统性,内容有足够的深度,而且对本门课程有较大的覆盖面。

这套研究生教材虽然从选题、大纲、组织编写到编辑出版,都经过了认真的调查论证和细致的定稿工作,但毕竟是第一次编辑这样高层次的教材系列,水平和经验都感不足,缺点与错误在所难免。希望通过反复的教学实践,广泛听取校内外专家学者和使用者的意见,使其不断改进和完善。

BA260/03

西安交通大学研究生院
西安交通大学出版社

1986年12月

前 言

本教材是专为工程类型硕士学位研究生编写的,它由 3 个部分(20 个课文)组成。第 1 部分(第 1—5 课)扼要而系统地复习英语的基础知识和用法;第 2 部分(第 6—15 课)用来扩充、提高和加深英语的阅读及写作能力;第 3 部分(第 16—20 课)是阅读工程类英美文献及专题写作。

全书大约需要 150 个学时。

本教材贯彻了“精讲多练”、“因材施教”的原则;在保证英语学习的基本要求时(精读课文、课文练习、语法练习、写作),还能满足较高层次学生的需要(泛读、快速阅读)。

怎样使用本教材?各学校的英语学习时数不一,班上硕士生的英语水平也有高低,因此本教材中的 Text, Exercises to the Text, Quick Review of Grammar 和 Writing 要求每个学生必须完成。而另两项内容(Extensive Reading 和 Fast Reading)视各校学时的多少及班内学生的程度可让他们在课外独自完成,但老师需按所配练习要求进行检查。《教师用书及参考答案》另印成册。

本书的第 1 部分由万家翔教授审阅;谢家树教授审阅了本书的第 2、3 部分,在此谨向他们表示诚挚的谢意。

本书在编写过程中得到西安交通大学研究生院的鼎力支持与热情关怀,在此表示感谢。交大外语系郝克琦教授和周光父教授对本书提出了有益的建议,甚为感激。

画家张守麒先生在百忙中为本教材课文绘制了形象生动的插图,使本书增添不少光彩,特此致谢。

编者

1991 年元月



作者简介

张守樟 1962年毕业于南开大学英国语言文学系。现为西安交通大学教授。多年来一直从事研究生的英语教学和研究。

近年来的主要著作有：

《英汉双解插图词典》、《英文写作》、《英语教程(工程类)》、《英语知识》、《奇妙的力学世界》、《奇妙的电学世界》等。

CONTENTS

Part 1	Page
Lesson 1	
Text; American Health System	(2)
Exercises to the Text	(5)
Quick Review of Grammar	(7)
Extensive Reading; New Advances in Medical Science	(12)
Fast Reading; Health Care/Insurance	(16)
Lesson 2	
Text; Don't Burst the Bubble	(20)
Exercises to the Text	(23)
Quick Review of Grammar	(25)
Extensive Reading; The Silent Language	(30)
Fast Reading; A Tragic Condition	(35)
Lesson 3	
Text; Antarctic Adventure	(38)
Exercises to the Text	(43)
Quick Review of Grammar	(45)
Extensive Reading; From the Diary of Robert F. Scott ..	(52)
Fast Reading; Recycling Satellites	(56)
Lesson 4	
Text; The China Breakthrough	(59)
Exercises to the text	(65)
Quick Review of Grammar	(66)
Extensive Reading; Excerpts from Kissinger's Biography	(72)
Fast Reading; Beyond the Seas	(77)
Lesson 5	
Text; The Statue of Liberty	(80)

Exercises to the Text	(87)
Quick Review of Grammar	(89)
Extensive Reading; Gateway to the USA	(93)
Fast Reading; A Shining Beacon	(95)

Part 2

Lesson 6

Text; Bamama Goes to College	(99)
Exercises to the Text	(104)
Review of Grammar	(106)
Extensive Reading; Campus Life	(108)
Writing; Sentence Pattern 1 (S+V+O)	(113)
Fast Reading; Careers for Women	(114)

Lesson 7

Text; American Space, Chinese Place	(118)
Exercises to the Text	(123)
Review of Grammar	(125)
Extensive Reading; Characteristics of Americans and American Society	(128)
Writing; Sentence Pattern 2 (S+V+O+OC)	(132)
Fast Reading; America's Architect	(134)

Lesson 8

Text; Poverty	(138)
Exercises to the Text	(144)
Review of Grammar	(146)
Extensive Reading; A Clean, Well-Lighted Place	(149)
Writing; Sentence Pattern 3 (3+V+it+OC+RO)	(157)
Fast Reading; Three Gallons of Goodwill	(158)

Lesson 9

Text; Brothers in the Eternal Cold	(161)
--	-------

Exercises to the Text	(165)
Review of Grammar	(167)
Extensive Reading: Man in Space	(170)
Writing: Sentence Pattern 4 (S+V+IO+DO).....	(175)
Fast Reading: Toward Quieter Aircraft	(177)
Lesson 10	
Text: How to Kill a Wasp	(180)
Exercises to the Text	(183)
Review of Grammar	(185)
Extensive Reading: Animal Farm	(187)
Writing: Sentence Pattern 5 (S+V+Adv)	(190)
Fast Reading: Following the Rules	(191)
Lesson 11	
Text: The Common Language of Science	(195)
Exercises to the Text	(201)
Review of Grammar	(203)
Extensive Reading: My Friend, Albert Einstein	(205)
Writing: Sentence Pattern 6 (It+to be+P+S)	(213)
Fast Reading: The Bermuda Triangle	(214)
Lesson 12	
Text: Conserving Old Work by Adding New	(218)
Exercises to the Text	(224)
Review of Grammar	(226)
Extensive Reading: Waste Disposal	(229)
Writing: Sentence Pattern 7: (S+V+O/P+Adv)	(235)
Fast Reading: Land for Good Living	(236)
Lesson 13	
Text: Lead Poisoning	(239)
Exercises to the Text	(245)

Review of Grammar	(247)
Extensive Reading; Lead	(250)
Writing; Variety in Sentences	(253)
Fast Reading; A Place for Everything	(257)

Lesson 14

Text; The San Francisco Earthquake	(260)
Exercises to the Text	(266)
Review of Grammar	(268)
Extensive Reading; The Assam Earthquake of 1950	(271)
Writing; Developing Paragraphs	(274)
Fast Reading; Sounds We Cannot Hear	(279)

Lesson 15

Text; Inaugural Address; Search for Peace	(282)
Exercises to the Text	(294)
Review of Grammar	(296)
Extensive Reading; President Nixon's Toast	(299)
Writing; Coherence	(301)
Fast Reading; The Future of Society	(305)

Part 3

Lesson 16

Text; Adhesives that Assure a Tight Bond	(309)
Exercises to the Text	(314)
Writing; Summary	(316)

Lesson 17

Text; The First Line of Defense	(320)
Exercises to the Text	(325)
Writing; Abstract	(327)

Lesson 18

Text; Low-Light-Level TV Systems and	
--	--

Complex Systems	(330)
Exercises to the Text	(333)
Writing: Letters	(335)
Lesson 19	
Text: Advertisements	(341)
Exercises to the Text	(345)
Writing: Résumé.....	(345)
Lesson 20	
Text: License and Technical Assistance Agreement'	(350)
Exercises to the Text	(377)

PART

1

Lesson 1

AMERICAN HEALTH SYSTEM

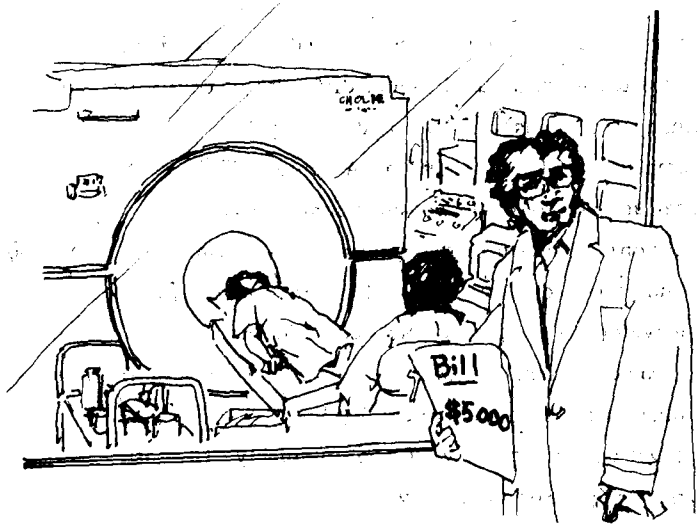
Most people would be impressed by the high quality of medicine available to most Americans. There is a lot of specialization, a great deal of attention to the individual, a vast amount of the financial risk which doctors and hospitals must face in the courts if they handle things badly.

But the Americans are in a mess. The problem is the way in which health care is organised and financed. Contrary to public belief it is not just a free competition system. To the private system has been joined a large public system¹, because private care was simply not looking after the less fortunate² and the elderly.

But even with this huge public part of the system, which this year will eat up 84.5 billion dollars—more than 10 per cent of the U.S budget—large numbers of Americans are left out. These include about half the 11 million unemployed and those who fail to meet the strict limits on income fixed by a government trying to make savings where it can.

The basic problem, however, is that there is no central control over the health system. There is no limit to what doctors and hospitals charge for their services, other than³ what the public is able to pay. The number of doctors has shot up and prices have climbed. When faced with toothache, a sick child, or a heart attack, all the unfortunate person concerned can do is pay up.

Two-thirds of the population are covered by medical insurance. Doctors charge as much as they want knowing that the insurance company will pay the bill.



The medical profession¹ have as a result become America's new big businessmen. The average income of doctors has now reached 100,000 dollars a year. With such vast incomes the talk in the doctor's surgery is as likely to be about the doctor's latest financial deal, as about whether the minor operation he is recommending at several thousand dollars is entirely necessary⁵.

The rising cost of medicine in the U. S. A. is among the most worrying problems facing the country. In 1981 the country's health bill climbed 15.9 per cent—about twice as fast as prices in general.

Words and Expressions

1. impress (im'pres)v. To have a strong effect on the mind.
2. available (ə'veiləbl) adj. That can be got, had, or used.
3. specialization (ˌspeʃəlaɪ'zeɪʃən)n. 专业化
4. financial (fi'nænʃəl) adj. Having to do with money matters.
5. risk (risk) n. Danger. A chance of loss.

6. court (kɔ:t) n. A building where trials are held. 法院
7. in a mess = in an unpleasant, difficult, or confusing state
8. finance (fi' næns) v. To provide money for.
9. competition (ˌkɒmpɪ' tɪʃən) n. A contest. 竞争
10. eat up (i:t ʌp) v. To consume completely.
11. billion (ˈbɪljən) n. A thousand millions; 1,000,000,000. 十亿
12. budget (ˈbʌdʒɪt) n. A plan for using money. 预算
13. leave out (li : vaʊt) v. Not to put in; omit.
14. income (ˈɪnkəm) n. Money received for work or from property or other things that are owned. 收入
15. shoot up (ʃu : t ʌp) v. To go up quickly; rise fast.
16. pay up (peɪ ʌp) v. To pay in full.
17. insurance (ɪn' juərəns) n. Protection against loss or damage. 保险
18. bill (bɪl) n. A notice of money owed for something bought.
19. deal (di:l) n. a business transaction. 生意交易
20. recommend (ˌrekə' mend) v. To suggest. 推荐

Notes

1. To the private system...这是倒装句。主语是 a large public system。正常的语序是: A large public system has been joined to the private system...
2. the less fortunate 运气不佳的人。此处意为“缺钱的人”。
3. other than 除了。全句的译文:“人们只能支付医生和医院索要的无节制的医疗服务费。”逐字翻译:“除了对人民大众支付医疗服务费有限定外,对医生和医院的要价是不限制的。”在原句中, other than 的后面省略了一些句子成分: There is no limit to what doctors and hospitals charge for their services, other than (there is a limit to) what the public is able to pay.
4. profession 虽是单数名词,但是有“群体”的意思,因此要求使用

复数的谓语动词。句中的 the medical profession = the medical workers(医务工作人员)。其他的单数名词要求使用复数的谓语动词有 government, staff, police, team, audience, committee 等。

For example:

The government (=they) want to reduce taxes.

The staff (=they) are happy with their new working conditions.

虽然这些名词有时也与单数动词连用(The government wants...),但使用复数的动词更符合英国英语的用法。

5. 句子分析与译文

主语: the talk in the doctor's surgery. 谓语: is. 表语: ① likely to be about the doctor's latest financial deal. 表语 ② (as)...as about whether the minor operation is entirely necessary. 在第二个表语中又带有一个定语从句: he is recommending at several thousand dollars. 此定语从句修饰 the minor operation. 状语: with such vast income 修饰全句的谓语动词 is.

译文: 由于医生的经济收入非常丰厚, 因此他在外科手术时的话题很可能与他向病人推荐花数千美元动一次小手术的必要性, 以及他的最近一次经济交易有关。

Exercises to the Text

I. Complete each sentence by joining the words given below.

1. his appearance/ to impress...by/ I
2. available/ statistics/to be /not/for the purpose
3. to finance/by the Government/ some universities
4. the forest/the flame/ to eat up
5. in the cotton market/to be/ there/great competition
6. to shoot up/ after the rain/as if by magic/ mushrooms

7. your doctor and hospital bills/ to pay /you ?
8. in a family budget/ the main items/ food/ clothing/shelter and transport/ to include
9. that position/ a comfortable income/ you/ bring
10. to take/ you/for you cold/ medicine?

I. Translate the following sentences into English, using the words and expressions given in brackets:

1. 这张票的有效期是一个月。(available)
2. 国家的财政状况有了改善。(financial condition)
3. 他把整只生日蛋糕都吃完了。(eat up)
4. 有 3,500 名歌手参加了这次竞赛。(competition)
5. 由于预算的限制,那家公司的经济陷入了困境。(budget)
6. 人的生命是有限的,但对人民的贡献是无限的。(a limit to, no limit to)
7. 有关部门都支持这项计划。(concerned)
8. 他没有理解我的意思。(fail to)
9. 这些家用电器已投了保险。(insurance)
10. 没有人理睬弗雷得,他常被人排斥在外。(leave out)

II. Choose a word from Column A to go with an explanation from Column B.

Column A

Column B

- | | |
|----------------|---|
| 1. finance | a. the business of protecting property, life, |
| 2. recommend | etc. against loss or harm in consideration |
| 3. insurance | of payment to the risk involved |
| 4. medicine | b. some special line of work |
| 5. specializa- | c. sums of money saved |
| tion | d. to suggest a choice as appropriate |
| 6. belief | e. out of work |
| 7. unemployed | f. to supply with money |