

淡江大學九十四學年度第一學期課程教學計畫表

- 壹、科目名稱：土壤力學（二）
- 貳、授課老師：祝錫智
- 參、開課班級：土木系三年級
- 肆、必選修：選修
- 伍、學分數：3學分
- 陸、先修科目：土壤力學（一）
- 柒、教學內容及進度：

複習應力圓
複習土壤剪力強度
土壤穩定性問題簡介
土壓力--Rankine法、Coulomb法、其他方法
承載力---被動土壓力之應用、Terzaghi方法、承載力公式之一般形式
邊坡穩定問題----常用及基本解法
一些黏土壓密問題

- 捌、授課方式：課堂講授
- 玖、教學設備：投影機
- 拾、教材課本：無、自編講義

拾壹、參考書籍：

1. Holtz, R. D. And Kovacs, W. D. (1981), An Introduction to Geotechnical Engineering, Prentice Hall, Englewood Cliffs, New Jersey.
2. Jumikis, A. R. (1962), Soil Mechanics, D. Van Nostrand Company, Princeton, New Jersey.
3. Lambe, T. W. and Whitman, R. V. (1969), Soil Mechanics, John Wiley and Sons, New York. (SI version, 1979)(有中譯本)
4. Perloff, W. H. and Baron, W. (1976), Soil Mechanics: Principles and Applications, Ronald Press, New York.
5. Sowers, G. F. (1979), Introductory Soil Mechanics and Foundations: Geotechnical Engineering, 4th edition, Macmillan, New York.
6. Terzaghi, K., Peck, R. B. and Mesri, G. (1996), Soil Mechanics in Engineering Practice, 3rd Edition, Wiley, New York.

拾貳、成績考核方式：

平時考、期中考、期末考共同計分

拾參、工具書

1. 地質學名詞(國立編譯館)
2. 地工名詞英漢對照(鄭文龍)
3. 大地工程名詞統一譯名(土木水利工程學會)
4. 最新大地工程辭典(游啓亨)

拾肆、備註

每次上課及考試均需帶製圖工具及計算機

多利用網路資源

例：

土壤力學教科書

<http://geo.verruijt.net/software/SoilMechBook.ZIP> (解壓後為 pdf 格式)

土壤力學試驗手冊

<http://www.usace.army.mil/inet/usace-docs/eng-manuals/em1110-2-1906/entire.pdf>



LAURITS BJERRUM



Dr. Bjerrum was born August 6, 1918 in Farso, Denmark. He did his undergraduate work at the Technical University of Denmark and his graduate work at the Federal Institute of Technology, Zurich, Switzerland.

After working in Denmark and Switzerland, Dr. Bjerrum went to Norway in 1951 to become the first Director of the new Norwegian Geotechnical Institute. Dr. Bjerrum successfully built NGI into the best institute of its type in the world. From Dr. Bjerrum and his staff at NGI have come many publications. Their work at on the An excellent speaker, Dr. Bjerrum has lectured at a number of universities in the United States and in Europe, especially at M.I.T. and the University of Illinois. Dr. Bjerrum was President of the International Society of Soil Mechanics and Foundation Engineering during the period of 1965 to 1969. he was a Rankine Lecturer and a Terzaghi Lecturer.

Dr. Bjerrum died suddenly on February 27, 1973. while in England to attend a Rankine Lecture.

(Lambe and Whitman, p.388)

畢傑林博士於 8 月 6 日 1918 生於丹麥的發沙 (Farso, Demark)。初畢業於丹麥工科學大學 (Technical University of Demark)，後赴瑞士秋立墟的國立技術學院 (Federal Institute of Thechnology) 攻讀。

在丹麥與瑞士工作多年，1951入挪威大地技術研究院 (Norwegian Geotechnical Institue, NGI)得開山博士學位。畢傑林博士成功地建立NGI成爲世界類似組織中的最佳研究機構。由畢傑林及其同僚的努力，NGI出版大量書刊問世。有關剪力強度的基本原理，尤其對靈敏粘土，與自然邊坡的穩定等研究，咸奉爲舉圭。

畢傑林博士善口才，先後在美國與歐洲各大學講學，尤其在麻省理工學院，與伊利諾大學較長。博士自 1965 至1969 任國際土壤力學及基礎工程學會會長。並擔任來金講座與德植基講座。

(中文譯本)



<p>sum-ma ba-num a-na a-wi-lim bi-um i-bi-su im-ku ur-ma te-el bitum bis-lami-il banim su-u-id-da-ak B sum-ma niar be-el bitum us-ta nu-it mar banim su-a-ti i-du-ik-ku</p>	<p>sum-mu warad be-el bitim us-lit ni-it narum ki-ma war-tim a-na be-el hitum i-na ad-di-in D sum-ma sa-ga uh-ta ul-li-ik mi-im-mia sa u-hal-li-ku i-ri-ab u-as-sum bitam i-bu-su la u-dan-ni-nu-ma</p>	<p>im-ku lu i-na su-ga ia ma-ni-su a-bilam im-ku-lu i-bi-es F sum-ma banim bitum ana u-wil-lim i-bi-us-na si-bi-ir-su la us-le-is-bi-ma igarum ik-lu-up ba-num su-u i-na kas-pim bra-ma-ni-su igarum su-a-ti u-dan-na-it</p>
<p>FROM THE CODE OF LAWS OF HAMMURABI (2200 BC) KING OF BABYLONIA</p>		
<p>A If a builder build a house for a man and do not make its construction firm and the house which he has built collapse and cause the death of the owner of the house - that builder shall be put to death</p> <p>B If he cause the death of the son of the owner of the house - they shall put to death a son of that builder</p> <p>C If it cause the death of a slave of the owner of the house - he shall give to the owner of the house a slave of equal value</p> <p>D If it destroy properly, he shall restore whatever it destroyed, and because he did not make the house which he built firm and it collapsed, he shall rebuild the house which collapsed at his own expense</p> <p>E If a builder build a house for a man and do not make its construction meet the requirements and a wall fall in, that builder shall strengthen the wall at his own expense.</p> <p style="text-align: right;">Translated by R F Harper "Code of Hammurabi" p 83 - seq.</p> <p style="text-align: left;">E. C. C. L. P. I. C. C. Jacob Föld 1922</p>		

Figure 1 — Code of Hammurabi, 4000 years old.