2019 年暑期国际课程项目

International Summer Course Program

中国药科大学教务处

国际课程汇总表

序号	开课单位	任课教师	任课教师所属院校	职称	课程名（英文）	课程名（中文）	授课对象
1	生命科学与技术学院	Stefano Moro	意大利帕多瓦大学	Professor	Introduction to Molecular Modeling and Drug Design	分子模建与药物设计导论	15 级临药，16-18 级所有专业学生
2	基础医学与临床药学学院	Ikumi Tamai	日本金泽大学	Professor	Membrane Transport and Pharmacokinetics	跨膜运输与药代动力学	15 级临药，16-18 级所有专业学生
3	基础医学与临床药学学院	王子晖	香港科技大学	Professor	Evolution of Genetic Code	遗传密码的进化	15 级临药，16-18 级所有专业学生
4	理学院	Pui Kai Li	美国俄亥俄州立大学	Professor	How are drugs discovered?	药物研发与前沿进展	15 级临药，16-18 级所有专业学生
5	理学院	Jie Jack Li	美国旧金山大学	Associate Professor	History of Drug Discovery and Case Studies	药物发现史及药物合成实例探究	15 级临药，16-18 级所有专业学生
6	国际医药商学院	Chiaoyun Kuo	美国南加州大学	Assistant Professor	Medical Product Regulations in the U.S.	美国药事法规	15 级临药，16-17 级所有专业学生
7	国际医药商学院	JACK WARREN SALMON	美国伊利诺伊大学芝加哥分校	Professor	Global Health Systems	全球卫生体系	15 级临药，16-18 级所有专业学生
8	国际医药商学院	王存同	美国伊利诺伊大学厄巴纳-香槟分校	Professor	Quantitative Analysis of Pharmaceutical Management	医药管理数量分析	15 级临药，16-18 级所有专业学生

9	国际交流合作处	汪昕	澳大利亚麦考瑞大学	SENIOR LECTURER	Psychology of Language	心理语言学	15级临药，16-18级所有专业学生
10	外语系	Jaesung Sim	美国曼斯菲尔德大学	Professor	Pharmacy Data Base Systems	药品数据库系统	15级临药，16-18级所有专业学生
11	外语系	Lee Stocks	美国曼斯菲尔德大学	Associate Professor	Physical Geology and Map Reading	物理地质学和地图解说	15级临药，16-18级所有专业学生
12	外语系	Jonathan C. Rothermel	美国曼斯菲尔德大学	Associate Professor	Understanding American Politics: Framework and Issues	美国政治解读:构架和问题	15级临药，16-18级所有专业学生
13	外语系	Sheri Sunderland	美国曼斯菲尔德大学	Assistant Professor	International Relations and Global Issues	国际关系和全球问题	15级临药，16-18级所有专业学生
14	外语系	Timothy J. Madigan	美国曼斯菲尔德大学	Professor	Statistics for Social Science	人文社科统计方法	15级临药，16-18级所有专业学生
15	外语系	Mary E.Daly	美国曼斯菲尔德大学	Associate Professor	The Opioid Crisis in the United States	美国成瘾性药品危机	15级临药，16-18级所有专业学生
16	外语系	Baotong Gu	美国佐治亚州立大学	Associate Professor	Business Writing	商务英语写作	15级临药，16-18级所有专业学生
17	外语系	George Pullman	美国佐治亚州立大学	Professor	Rhetoric and Persuasive Writing	修辞学和议论文写作	15级临药，16-18级所有专业学生
18	外语系	Frank Michael Chua	美国曼斯菲尔德大学	Associate Professor	American Westward Movement and Frontier History	美国西进运动及拓边史	15级临药，16-18级所有专业学生
19	外语系	Guanqiu Qi	美国曼斯菲尔德大学	Assistant Professor	Dictionary learning based medical image fusion	基于字典学习的医学图像融合	15级临药，16-18级所有专业学生

20	外语系	Scott Roger Zubek	美国 曼斯菲尔德大学	Adjunct Professor	Introduction to Geographic Information Systems (GIS)	地理信息系统概论	15 级临药，16-18 级所有专业学生
21	中药学院	陳新	澳门大学	Professor	Wonder in Life Sciences	生命科學的奇蹟	15 级临药，16-18 级所有专业学生
22	中药学院	Rong L. He	美国 芝加哥州立大学	Associate Professor	Essential Immunology	免疫学基础	15 级临药，16-18 级所有专业学生
23	中药学院	Michael X. Zhu	德克萨斯大学	Professor	Neuropharmacology	神经药理学	15 级临药，16-18 级所有专业学生
24	中药学院	Kuniyoshi Shimizu	日本九州大学	Associate Professor	Utilization of natural resourcesas bioactive ingredient for medicine, cosmetics, functional foods and aroma	天然功能性成分在药物、化妆品、功能食品的应用及植物芳香成分研究	15 级临药，16-18 级所有专业学生
25	药学院	顾晓晨	加拿大 曼尼托巴大学	Professor	Transdermal Delivery and Cosmetic Applications	经皮给药和化妆品应用	15 级临药，16-18 级所有专业学生
26	药学院	Richard A. Gemeinhart	美国伊利诺伊大学芝加哥分校	Professor	Advanced Drug Delivery System	高端药物递送系统	15 级临药，16-17 级药学（包括生科基地、理科基地）、药物化学、药物分析、药物制剂、制药工程、食品质量与安全、临床药学、生物制药、生物工程、生物技术、海洋药学、中药学、中药资源与开发、中药制药

目录

INTRODUCTION TO MOLECULAR MODELING AND DRUG DESIGN

分子模建与药物设计导论

开课学院：生命科学与技术学院

<table>
<tr><td rowspan="5">任课教师 Instructor's Information</td><td>姓　　名 Name</td><td colspan="2">Prof. Stefano Moro</td><td rowspan="3">  </td></tr>
<tr><td>性　　别 Gender</td><td colspan="2">男 Male</td></tr>
<tr><td>国　　籍 Nationality</td><td colspan="2">意大利 Italian</td></tr>
<tr><td>职称/职务 Title</td><td>教授 Full Professor</td><td>邮箱地址 Email</td><td>stefano.moro@unipd.it</td></tr>
<tr><td>最终学位 Degree</td><td>博士 Ph.D.</td><td>任职单位 Work Place</td><td>意大利帕多瓦大学药学与药理学系 Dept. Pharmaceutical and Pharmacological Sciences University of Padova ITALY</td></tr>
<tr><td rowspan="3">课程信息 Course Information</td><td colspan="2">课程名称(中英文对照) Course Name</td><td colspan="2">分子模建与药物设计导论 Introduction to Molecular Modeling and Drug Design</td></tr>
<tr><td>授课对象 Open to</td><td>本科生 Undergraduate</td><td>学 时 Class Hour</td><td>24</td></tr>
<tr><td>授课时间 Lecture Schedule</td><td>7.7-7.13</td><td>考核方式 Assessment Method</td><td>综合考评 Multiple choice test</td></tr>
</table>

Resume of Instructor

Stefano Moro received his M.S. degree in Medicinal Chemistry (1991) and the Ph.D. degrees in Physical Organic Chemistry (1995) at University of Padova. Following his doctoral studies, from 1996 until 1998, he was Fogarty Postdoctoral Associate with Dr. Kenneth Jacobson in the Molecular Recognition Section, National Institute of Diabetes, Digestive, and Kidney Diseases, of the National Institutes of Health in Bethesda (MD, USA), before joining again the University of Padova in 1999 as Assistant Professor. In 2003, Dr. Moro was invited as Visiting Professor at the School of Pharmacy of the ETH of Zurich, Switzerland. In 2010 he was appointed as Full Professor in Medicinal Chemistry of the University of Padova, Italy.

Stefano Moro is the principal investigator of the Molecular Modeling Section (MMS, mms.dsfarm.unipd.it) at the Department of Pharmaceutical and Pharmacological Sciences.
He has authored or co-authored more than 250 original research papers and 2 EU patent. Until today, its H-index is equal to 52 extracted from more than 8500 citations (Scopus, 30/01/2019).
Stefano Moro is also the recipient of several national and international awards: March 1991: Federchimica National Award for Young Research Excellence in Chemistry;October 1993: IBM Foundation National Award for Research Excellence in Chemistry; January 1998: N.I.H. Fellow Award for Research Excellence; May 2000: Federchimica National Award for Research Excellence in Chemistry; September 2002: Farmindustria National Award for Research Excellence in Medicinal Chemistry.
His name was included in the VIA-Academy Top Italian Scientists.

Course Description

本课程旨在介绍新药设计优化领域中的先进计算方法学和处理方式的基本知识，展现药物的理化性质和药理特征之间的关联，并从分子水平上推测它们可能的作用机制。
课程为理论教学，但须经一系列实验进行巩固，在此过程中学生将学习到多种计算工具和信息学分析方法，这些工具和方法已被广泛应用于药学和生物技术领域学术研究和工业实践。
This course aims to provide the student with basic knowledge on modern computational methodologies and computing in the field of design and optimization of new drugs, characterization a priori of their chemical-physical and pharmacological properties, and study at the molecular level of their possible mechanisms of action.
The course is theoretical but it is corroborated of a series of exercises, where a student will know some of the computational tools and informatics most used in both academic and in the various industrial reality to character pharmaceutical and biotechnology.

Syllabus

Time-independent methodologies in the identification and optimization of drug candidates:
structures and properties similarity,
pharmacophore hypothesis,
molecular docking,
virtual screening.

Time-dependent methodologies in the identification and optimization of drug candidates:
molecular dynamics (MD),
supervised molecular dynamics (SuMD)

free energy perturbation (FEP).

Evaluation. *The examination at the end of the course aims to test the student's ability to understand important aspects related to the molecular modeling and drug design.*

Final exam: *multiple choice test*

MEMBRANE TRANSPORT AND PHARMACOKINETICS

跨膜运输与药代动力学

开课学院：基础医学与临床药学学院

<table>
<tr><td rowspan="5">任课教师
Instructor's Information</td><td>姓　　名
Name</td><td colspan="2">Ikumi Tamai</td><td colspan="2" rowspan="2">  </td></tr>
<tr><td>性　　别
Gender</td><td colspan="2">男</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">日本</td><td colspan="2"></td></tr>
<tr><td>职称/职务
Title</td><td>教授</td><td>邮箱地址
Email</td><td>tamai@p.kanazawa-u.ac.jp</td></tr>
<tr><td>最终学位
Degree</td><td>博士</td><td>任职单位
Work Place</td><td>日本金泽大学</td></tr>
<tr><td rowspan="3">课程信息
Course Information</td><td colspan="2">课程名称(中英文对照)
Course Name</td><td colspan="3">跨膜运输与药代动力学
Membrane Transport and Pharmacokinetics</td></tr>
<tr><td>授课对象
Open to</td><td>大一至大三学生</td><td>学 时
Class Hour</td><td>24</td></tr>
<tr><td>授课时间
Lecture Schedule</td><td>7.8-7.13</td><td>考核方式
Assessment Method</td><td>书面作业 50%，演讲 50%</td></tr>
</table>

Resume of Instructor

Ikumi Tamai教授于1988年毕业于日本东京大学，获得药学博士学位，1989至1991年在美国芝加哥大学和密西根大学从事博士后研究。1992年起工作于金泽大学、东京理工大学药学院，目前任金泽大学药物跨膜转运及药物代谢研究室主任，主要研究方向为药物代谢动力学及药物转运体。曾任日本药动学会《Drug Metabolism&Pharmacokinetics》杂志主编，现任《Biopharmaceutics & Drug Disposition》副主编，同时为《Drug Metabolism & Disposition》、《Molecular Pharmaceutics》等四个国际知名杂志的编委。

Course Description

本课程主要将介绍药物代谢动力学以及膜转运体在生理上、药物代谢、药物治疗以及新药开发中的重要作用。课程将围绕药物代谢动力学和膜转运体的基本概念，利用各种案例阐明OATP, URAT等转运体的在药物相互作用、食物与药物相互作用、以及内源性物质转运中重要性。通过课程的学习，学生可掌握药物代谢动力学的基础知识，同时对药物转运体的作用有基本的了解。

This class mainly deals with the bases of pharmacokinetics, membrane transport and importance of membrane transporters in drug absorption and

disposition to understand pharmacokinetic properties of drugs, which should be important in drug development and pharmacotherapy. In addition, importance of membrane transporters for nutrients and physiological compounds are described, including urate and carnitine. More practically, classification of membrane transport process and transporter molecules are explained. Pharmacokinetic relevance of transporters are described. Transporter-based regulations of physiological compounds such as uric acid mainly and carnitine optionally are described. In addition, the mechanisms for altered serum uric acid levels by clinically used drugs are explained that are important to maintain normal serum uric acid level. Through this course, students learn current understanding of pharmacokinetics, membrane transport and transporters that are especially important for students who learn pharmaceutical sciences.

Syllabus

1: Introduction to ADME PK
2: Basis of membrane transport and transporters
3: Characteristics of drug transporters; MDR1, BCRP, MRPs, OATPs, OATs, OCTs
4: Effect of food and PGx on transporters, OATP2B1
5: Mechanisms regulating SUA mainly by transporters including food effect and uric acid related diseases.

EVOLUTION OF GENETIC CODE

遗传密码的进化

开课学院：基础医学与临床药学学院

<table>
<tr><td rowspan="5">任课教师 Instructor's Information</td><td>姓　　名 Name</td><td colspan="2">王子晖</td><td rowspan="3"></td></tr>
<tr><td>性　　别 Gender</td><td colspan="2">男</td></tr>
<tr><td>国　　籍 Nationality</td><td colspan="2">加拿大/中国香港</td></tr>
<tr><td>职称/职务 Title</td><td>教授</td><td>邮箱地址 Email</td><td>bcjtw@ust.hk</td></tr>
<tr><td>最终学位 Degree</td><td>博士</td><td>任职单位 Work Place</td><td>香港科技大学</td></tr>
<tr><td rowspan="3">课程信息 Course Information</td><td colspan="2">课程名称(中英文对照) Course Name</td><td colspan="2">遗传密码的进化 Evolution of Genetic Code</td></tr>
<tr><td>授课对象 Open to</td><td>全体本科生</td><td>学 时 Class Hour</td><td>24</td></tr>
<tr><td>授课时间 Lecture Schedule</td><td>7.7-7.13</td><td>考核方式 Assessment Method</td><td>小组展示</td></tr>
</table>

Resume of Instructor

王子晖 加拿大多伦多大学终身教授、香港科技大学生物化学系首任主任、生物技术研究所创建所长、香港特区政府创新科技署生物技术委员会委员、香港科技大学生命科学部兼任教授，香港生物技術有限公司主席。1963年毕业于多伦多大学获得生物化学博士学位。王子晖教授是生命起源、遗传密码进化及合成生物学领域国际权威。他的实验室首先提出三十亿年不变的生命界通用遗传密码进行改变产生HR15合成生命的概念。并在Nature，PNAS等国际期刊发表论文百余篇。王教授学识渊博，语言表达力强，热情待人，教学经验丰富，深受学生爱戴。

Course Description

Genetic information arose from replicator induction by metabolite in accordance with the metabolic expansion law. Messenger RNA and transfer RNA stemmed from a template for binding the aminoacyl-RNA synthetase ribozymes employed to synthesize peptide prosthetic groups on RNAs in the Peptidated RNA World. Coevolution of the genetic code with amino acid biosynthesis generated tRNA paralogs that identify a last universal common ancestor (LUCA) of extant life close to Methanopyrus, which in turn points to archaeal tRNA introns as the most primitive introns and the anticodon usage of

Methanopyrus as an ancient mode of wobble. The prediction of the coevolution theory of the genetic code that the code should be a mutable code has led to the isolation of optional and mandatory synthetic life forms with altered protein alphabets.
遗传信息来自代谢物根据代谢扩展定律诱导复制子。 mRNA和tRNA源自用于结合氨基酰基-RNA合成酶核酶的模板，所述氨酰基-RNA合成酶核酶用于在肽化RNA世界中的RNA上合成肽修复基团。遗传密码与氨基酸生物合成的共同进化产生了tRNA旁系同源物,这些旁系同源物识别了现存生命中接近 Methanopyrus 的最后一种普遍共同祖先（LUCA），后者又指出古菌内含子是最原始的内含子和 Methanopyrus 的反密码子使用。古老的摇摆模式。 对代码应该是可变代码的遗传密码的协同进化理论的预测导致了可选的和强制性的合成生命形式的分离，其具有改变的蛋白质字母表。

Syllabus

8 July : Coevolution theory
9 July : Last universal common ancestor (LUCA)
10 July : Peptidated RNA World
11 July : Transfer RNA
12 July : Metabolic Expansion Law
13 July : Synthetic life

HOW ARE DRUGS DISCOVERED?

药物研发与前沿进展

开课学院：理学院

任课教师 Instructor's Information	姓　　名 Name	Pui Kai Li		
	性　　别 Gender	Male		
	国　　籍 Nationality	USA		
	职称/职务 Title	Professor	邮箱地址 Email	li.27@osu.edu
	最终学位 Degree	Ph.D.	任职单位 Work Place	Ohio State University
课程信息 Course Information	课程名称(中英文对照) Course Name	How are drugs discovered? 药物研发与前沿进展		
	授课对象 Open to	Undergraduate and graduate students	学 时 Class Hour	24
	授课时间 Lecture Schedule	3 hrs a day	考核方式 Assessment Method	Short report, group and individual oral presentations (in English)

Resume of Instructor

Dr. Pui Kai Li is currently the faculty at the Division of Medicinal Chemistry, Colleg of Pharmacy, The Ohio State University. He received his bachelor degree in Pharmacy from the University of Wyoming (1983) and Ph.D degree in Medicinal Chemistry at The Ohio State University (1988). Dr. Li has been involved in teaching Medicinal Chemistry focusing on drug design and discovery for more than 25 yrs. He also established research programs in discovery new drugs for the last 25 yrs and has published more than 100 research papers on new drugs development.

Resume: Pui Kai Li, Ph.D.

Birthday – August 30, 1957
Occupation – Professor
University name – The Ohio State University
Address – College of Pharmacy, The Ohio State University, Columbus OH 43210 USA
Phone # 614-688-0253 Fax 614-688-5886
email : li.27@osu.edu
Classes taught the last 3 yrs at The Ohio State University

1. Medicinal chemistry I (for pharmacy students) – focus on drugs for the treatment
of hypertension and diabetes.
2. Medicinal chemistry II (for Pharmacy student) – focus on drugs for the treatment
of infectious diseases (antibiotics), pain (anti-inflammatory) and cancer immunotherapeutic agents.
3. Advanced Medicinal Chemistry – Signal Transduction pathway and cancer – overview the major signaling pathways (receptor tyrosine kinase, PI3 kinase Akt,
Ras/Raf MAPkinase signaling, STAT, cell cycle signaling, signaling of immune
cells and cancer immunotherapy).
4. Principle of drug action (for pharmacy student) – focus on principle of drug
design and action.
5. Introduction to Medicinal Chemistry (for undergraduate students) – focus on the
principle of drug design and discovery

Education and Academic position
1983 Bachelor degree in Pharmacy, University of Wyoming,
1988 Ph.D. degree in Medicinal Chemistry, Division of Medicinal Chemistry and
Pharmacognosy, College of Pharmacy, The Ohio State University
Academic Appointments
1984 – 1986 Graduate Teaching Assistant, The Ohio State University, Columbus, OH
1986 – 1988 Graduate Research Assistant, The Ohio State University, Columbus, OH 1988 – 1989 Postdoctoral Researcher, Department of Medicinal Chemistry, College
of Pharmacy, The Ohio State University, Columbus, OH
1989 – 1990 Postdoctoral Researcher, Department of Veterinary Physiology and
Pharmacology, The Ohio State University, Columbus, OH
1990 -1996 Assistant Professor, School of Pharmacy, Department of
Pharmaceutical Chemistry and Pharmaceutics, Duquesne University,
Pittsburgh, PA
1995 – 1999 Associate Professor, School of Pharmacy, Department of
Pharmaceutical Chemistry and Pharmaceutics, Duquesne University,
Pittsburgh, PA
1999 – 2003 Associate Professor, College of Pharmacy, Division of
Medicinal Chemistry and Pharmacy, The Ohio State University,
Columbus, OH

2003 – 2013 Associate Professor, College of Pharmacy, Chair, Division of Medicinal Chemistry and Pharmacy, The Ohio State University, Columbus, OH

2013 – present Associate Professor, College of Pharmacy, Division of Medicinal Chemistry and Pharmacy, The Ohio State University, Columbus, OH

Research projects the last 3 yrs

1. Design and synthesis of niclosamoide analogs as androgen receptor degradator for prostate cancer.
2. Design, synthesis and studies of Mps1/TTK kinase inhibitors for cancers.
3. Design and synthesis of mixed lineage kinase 4 (MLK4) inhibitors for Glioblastoma.
4. Design, synthesis and studies of STAT3 inhibitors as potential agents for the treatment of cancers.
5. Design, synthesis and studies of Vitamin E analogs as antitumor agents for prostate cancer.

Selected Publications (out of a total of 105 publications)

Li, Y.; Li, P. K.; Roberts, M. J.; Arend, R. C.; Samant, R. S.; Buchsbaum, D. J. Multi-targeted therapy of cancer by niclosamide: A new application for an old drug. Cancer Lett. Jul 10;349(1): 8-14 (2014)

Kim, T.D.; Fuchs, J.R; Schwartz, E.; Abdelhamid D.; Berry, W.L.; Li, C.; Ihnat, M.A;
Li, P.K.; Janknecht, R. Pro-growth role of the JMJD2C histone demethylase in HCT-
116 colon cancer cells and identification of curcuminoids as JMJD2 inhibitors. American Journal of Translational Research 15(6), 236 – 47, (2014)

Kesnger, J.W.; Mehta, M.; Lerner, M.R.; Brackett, D.J.; Brueggemeier, R.W.; Li, P.K.'; Panto, J.T. Anticancer Research 35(1) 47-52, (2015)

Arend RC, Londoño-Joshi AI, Gangrade A, Katre AI, Kurpad C, Li Y, Samant RS, Li PK, Landen CN, Yang ES, Hidalgo B, Alvarez RD, Straughn JM, Forero A, Buchsbaum DJ.

Niclosamide and its derivatives are potent inhibitors of Wnt/β-catenin, mTOR and STAT3 signaling in ovarian cancer. Oncotarget: 7(52): 86803-86815 (2016).

Zhao J, Yu H, Liu Y, Gibson SA, Yan Z, Xu X, Gaggar A, Li PK, Li, C, Benveniste EN, Dong L, Qin H. Protective Effects and Mechanisms of Suppressing STAT3 Pathway on LPS-induced Acute Lung Injury. Am J Physiol Lung Cell Mol Physiol: 311(5) L868-880 (2016).

Sugimoto Y, Sawant DB, Fisk HA, Mao L, Li C, Chettiar S, Li PK, Darby MV, Brueggemeier RW. Novel Pyrrolopyrimidines as Mps1/TTK Kinase Inhibitors for Breast Cancer. Bioorg Med Chem: 25(7), 2156-2166 (2017).

Course Description

Course description: In the near future, China will be the world leader in drug discovery. For students interested in life sciences, it is important to understand the drug discovery process. This course will present in a simple and clear manner the process of drug discovery. Students will learn the cutting edge processes of drug discovery with examples of the latest new drugs (for cancers, diabetes and HIV) currently used to treat patients. This course is suitable for undergraduate students majoring in life sciences and also students interested in medical research.

课程描述：在不久的将来，在药物发现领域中国将成为世界领先。对生命科学感兴趣的学生来说，了解药物发现过程是很重要的。本课程将以简单明了的方式介绍药物发现的过程。并用最新的治疗癌症、糖尿病和HIV的药物来向学生们介绍最前沿的药物发现过程。本课程适用于药学、生命科学专业的本科生以及对医药学研究感兴趣的学生。

Course format: course will be delivered (in English) in a more interactive manner. It will involve lectures will powerpoint presentation. Students will be required to be involved in research paper review, team based learning and group discussions (in English). Students will have a lot of opportunity to communicate with the teacher and the other students in English.

课程形式：课程全英文授课，将以更具互动性的方式进行。它将包括讲课，幻灯片演示。学生将被要求参加研究论文的复习，小组学习和小组讨论（英文）。学生将有很多机会与老师和其他学生用英语交流。

Syllabus

- *Overview of Drug Discovery*
- *Program selection (what type of diseases do we want to treat, Cancer, Diabetes, HIV?)*
- *Identification of drug targets and drug hit: small molecules or natural products*
- *What are high throughput drug screening and virtual screenings.*
- *What are the approaches after identify drug hits (Lead optimization – pharmacophore and structure activity relationships)*
- *Drug optimization methods*

- *What are ADME (administration, distribution, metabolism, excretion) and drug properties.*
- *Examples of New Drug discovery*
  For cancer – latest epigenetic drugs
  For Diabetes – glucose transporter inhibitors
  For HIV – Integrase inhibitors

HISTORY OF DRUG DISCOVERY AND CASE STUDIES

药物发现史及药物合成实例探究

开课学院：理学院

<table>
<tr><td rowspan="5">任课教师
Instructor's
Information</td><td>姓　　名
Name</td><td colspan="2">Jie Jack Li</td><td rowspan="2">  </td></tr>
<tr><td>性　　别
Gender</td><td colspan="2">Male</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">USA</td><td rowspan="2"></td></tr>
<tr><td>职称/职务
Title</td><td>Associate
Professor</td><td>邮箱地址
Email</td></tr>
<tr><td>最终学位
Degree</td><td>PhD</td><td>任职单位
Work Place</td><td>USF</td></tr>
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Information</td><td>课程名称
（中英文对照）
Course Name</td><td colspan="3">药物发现史及药物合成实例探究
History of Drug Discovery and Case Studies</td></tr>
<tr><td>授课对象
Open to</td><td>Whole
Students</td><td>学 时
Class Hour</td><td>24</td></tr>
<tr><td>授课时间
Lecture
Schedule</td><td>July 7–13</td><td>考核方式
Assessment
Method</td><td>An Essay</td></tr>
</table>

Resume of Instructor

李杰，化学副教授。分别于1983年及1988年于南京大学获得学士学位与硕士学位，1995于印第安那大学获得博士学位，后于麻省理工学院进行博士后培训。具有15年药剂师从业经验，先后出版英文书刊25本。

Dr. Jie Jack Li received his BS and MS from Nanjing University in 1983 and 1988, respectively. He earned his PhD at Indiana University in 1995 and carried out his postdoctoral training at MIT. After 15 years working as a medicinal chemist, his is now an associate professor of chemistry. He has published 25 books in English.

Course Description

课程涵盖主要治疗领域的药物史，重点是人文的一面。八种重要药物的合成将作为案例研究讨论。

This course covers history of medicines in major therapeutic fields, with emphasis on humanistic side. The synthesis of ten important drugs will be

discussed as case studies.

Syllabus

Case Study 1: Discovery of linezolid (Zyvox), Inhibitor of the initial phase of bacterial protein synthesis
Case Study 2: Discovery of Imatinib Mesylate (Gleevec), a Protein Kinase Inhibitor
Case Study 3: Discovery of Amlodipine (Norvasc), A Calcium Channel Blocker
Case Study 4: Discovery of Duloxetine (Cymbalta) A Serotonin and Norepinephrine Reuptake Inhibitor (SNRI)
Case Study 5: Celecoxib (Celebrex)
Case Study 6: Discovery of Sofosbuvir (Sovaldi), an HCV NS5B Polymerase Inhibitor
Case Study 7: Entecavir (Baraclude), A Carbocyclic Nucleoside for the Treatment for Chronic Hepatitis B
Case Study 8: Syntheses of Atorvastatin (Lipitor)
Alternative if Time allowed:
Case Study 9: Syntheses of Rivaroxaban (Xarelto): A Factor Xa Inhibitor for the Treatment of Thrombotic Events
Case Study 10: Discovery of Esomeprazole (Nexium), A Proton Pump Inhibitor for Treating GERD

MEDICAL PRODUCT REGULATIONS IN THE U.S.

美国药事法规

开课学院：国际医药商学院

<table>
<tr><td rowspan="5">任课教师
Instructor's
Information</td><td>姓　　名
Name</td><td colspan="2">Chiaoyun Kuo</td><td rowspan="2">  </td></tr>
<tr><td>性　　别
Gender</td><td colspan="2">Male</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">USA</td><td rowspan="2"></td></tr>
<tr><td>职称/职务
Title</td><td>Assistant Professor</td><td>邮箱地址
Email</td></tr>
<tr><td>最终学位
Degree</td><td>PhD</td><td>任职单位
Work Place</td><td>University of Southern California</td></tr>
<tr><td rowspan="3">课程信息
Course
Information</td><td colspan="2">课程名称(中英文对照)
Course Name</td><td colspan="3">Medical Product Regulations in the U.S.</td></tr>
<tr><td>授课对象
Open to</td><td>3rd and 4th year college students</td><td>学 时
Class Hour</td><td>24</td></tr>
<tr><td>授课时间
Lecture
Schedule</td><td>6 hours per day, July 8 to July 12 (5 days) in two-hour & 15 minute periods</td><td>考核方式
Assessment
Method</td><td>One Multiple-Choice Exam (July 12); and a group project and presentation (July 12)</td></tr>
</table>

Resume of Instructor

Dr. Kuo is a faculty member in the Department of Regulatory and Quality Sciences, School of Pharmacy where he coordinates the courses like “Asian Regulatory Environments”, “Current Thinking in Regulatory Affairs”, “Pharmaceutical Product Reimbursement” and is the principal instructor for topics of “orphan drug regulations”, “clinical trial application drafting”, and “medical product intellectual property”. He also directs the Consulting Service in the International Center for Regulatory Science providing consultation on regulatory compliance, submission requirements, and strategic planning for innovative products to USC investigators and community members. Dr. Kuo has been working in regulatory affairs for the past 15 years and engaged in full spectrum of medical products and regulatory activities – from drugs and biologics, to medical devices, dietary supplements, cosmetics, as well as quality, auditing and clinical trials. His prior experiences including basic research, bioinformatics, and patent persecution. Dr. Kuo completed his Ph.D. in the field of biomedical sciences, received degrees and postdoctoral training at USC

and Stanford University and is certified by the USPTO and the Regulatory Affairs Professional Society (RAPS).

Course Description

This introductory course is designed as a first course for students enrolled in the formal Regulatory Science Master's program. It also can be an optional course that serves as an overview for international students and students from other disciplines, such as graduate programs in biomedical, pharmaceutical and engineering fields. The course is designed to introduce the laws, regulations and institutions governing medical products in North America. Students will be introduced to the purposes of regulations and their relationships with the law. Particular attention will be paid to regulations that shape the developmental path of medical products. The students should be able to map the history of regulatory policies in the US. They should be able to differentiate the spheres of organization, authority and products regulated of FDA centers and local authorities. Students will also become familiar with the regulations shaping the structure and conduct of preclinical and clinical trials.

Syllabus

Medical Product Regulations in the U.S.
CPU, Nanjing
July 8-12, 2019

Instructor: Dr. Chiaoyun Benson Kuo
E-mail address: chiaoyuk@usc.edu

Required Text:
Douglas J. Pisano and David Mantus (2014) FDA Regulatory Affairs (Third Edition)
(Preview version in PDF format is available)

Course Description :
This introductory course is designed as a first course for students enrolled in the formal Regulatory Science Master's program. It also can be an optional course that serves as an overview for international students and students from other disciplines, such as graduate programs in biomedical, pharmaceutical and engineering fields. The course is designed to introduce the laws, regulations and institutions governing medical products in North America. Students will be introduced to the purposes of regulations and their relationships with the law. Particular attention will be paid to regulations that shape the developmental path of medical products.

General Course Objectives:
The textbook, in-class discussions, lecture materials and student presentations

are designed to help students:

1. To be able to map the history of regulatory policies in the US;
2. To be able to differentiate the spheres of organization, authority and products regulated of FDA centers; and
3. To become familiar with the regulations shaping the structure and conduct of preclinical, clinical trials and post-market surveillance.

Tentative Course Schedule/Outline

July 8

1. Introduction to FDA and Medical Product Regulations
    1.1. Policy, Law and Regulation
    1.2. FDA History, Structure and Roles
    1.3. Pharmaceutical Development
    1.4. Intellectual Property Rights
    1.5. Preclinical Investigation and Good Laboratory Practice (GCP)
    1.6. Clinical Studies and Reimbursement

July 9

2. Drug and Biologics Regulations
    2.1. Innovative Drug Development
    2.2. Biologics Product Regulations
    2.3. Orphan Drug Regulations
    2.4. Generic Drug Regulations
    2.5. Over-the-Counter Drugs
    2.6. TCM and Dietary Supplements

July 10

3. Medical Device Regulations and Quality System Requirements
    3.1. Regulations of Medical Devices
    3.2. Medical Device Classification
    3.3. Registration, Listing and 510(k) process
    3.4. De Novo Process
    3.5. Medical Product Quality
    3.6. Combination Products

July 11

4. Clinical Trial Designs and FDA Expedited Programs
    4.1. Clinical Trials of Drugs: History and Requirements
    4.2. Clinical Trial Designs
    4.3. Expediated Review Programs
    4.4. Post-market Surveillance Programs
    4.5. Medical Product Reimbursement
    4.6. Careers in Regulatory Affairs

July 12

5. Review and Group Presentations
   - Final Exam
   - 10 pre-designed topics will be presented in English by student groups

The course schedule is flexible. If we need more time for a chapter, we will take the time. Conversely, we may get ahead of schedule at times.

Expectations

1. To attend class.
2. To participate in class discussions.
3. To be prepared for each exam or assignment.
4. To work in team and make group presentation.

Course Grades

Final grades will be assigned on the basis of the average of the final exam, written group paper, group presentation and class participation; according to the following weights:

Final Examination	80%
Project	20%
	100%

GRADING SCALE

100 - 93	=	A
92 - 90	=	A-
89 - 87	=	B+
86 - 83	=	B
82 - 80	=	B-
79 - 77	=	C+
76 - 73	=	C
72 – 70	=	C-
69 - 67	=	D+
66 - 63	=	D
62 - 60	=	D-
< 60	=	F

GLOBAL HEALTH SYSTEMS

全球卫生体系

开课学院：国际医药商学院

<table>
<tr><td rowspan="5">任课教师
Instructor's Information</td><td>姓　　名
Name</td><td colspan="2">JACK WARREN SALMON, Ph.D.</td><td rowspan="3">  </td></tr>
<tr><td>性　　别
Gender</td><td colspan="2">男/Male</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">美/USA</td></tr>
<tr><td>职称/职务
Title</td><td>公共卫生教授、药学教授
/Professor of Public Health & Pharmacy</td><td>邮箱地址
Email</td><td>j.salmon@comcast.net</td></tr>
<tr><td>最终学位
Degree</td><td>博士/BS, MS, Ph.D.</td><td>任职单位
Work Place</td><td>伊利诺伊大学芝加哥分校
/University of Illinois at Chicago (Retired)</td></tr>
<tr><td rowspan="3">课程信息
Course Information</td><td colspan="2">课程名称(中英文对照)
Course Name</td><td colspan="2">全球卫生体系/Global Health Systems</td></tr>
<tr><td>授课对象
Open to</td><td>大二以上
/Senior Undergraduate and postgraduate</td><td>学 时
Class Hour</td><td>24</td></tr>
<tr><td>授课时间
Lecture Schedule</td><td>2019.07.07-12 am
每天上午</td><td>考核方式
Assessment Method</td><td>讨论、报告、论文
/class performance, presentation and thesis</td></tr>
</table>

Resume of Instructor

Salmon教授是伊利诺伊大学芝加哥分校药学院教授、公共卫生学院教授、城市规划与公共事务学院教授、医学院教授，曾任药学院药物政策与经济学系主任。Salmon教授目前已退休，但仍笔耕不辍，与各国学者合作发表大量论文、出版著作、撰写医改专栏，还担任费城两所医学院应用健康领域的客座教授与社区医学与环境卫生领域的副教授。Salmon教授在国际卫生领域也十分活跃，不仅发起并组织美国诸多合作研究网络，还在德国、泰国、沙迦、阿联酋、台湾等国家和地区进行讲座和学术交流活动。Salmon

教授曾访问中国若干次，和国内学者也联合出版卫生服务和医药产业领域的著作。任课教师简历和自述请见附件。

Professor University of Illinois at Chicago Colleges of Pharmacy, School of Public Health College of Urban Planning and Public Affairs, College of Medicine (retried). Currently active researcher and writer, publishing extensively with colleagues. Previously Adjunct Professor of Allied Health and Associate Professor of Community Medicine and Environmental Health at two Philadelphia Medical Schools. Leadership positions in national professional organizations providing extensive friendship network across the USA. Taught courses in Germany, Thailand, Sharjah, UAE, Taiwan. Visited China twice and published with Chinese colleagues on health care and pharmaceutical industry. See attached curriculum vitae and bibliography of Professor Salmon.

Course Description

全球卫生体系以高年资本科生为主要授课对象。目前中国已经进入全民医保覆盖的新阶段，领域中的学者和学生都急需了解其他国家卫生服务体系的设计，在基础上才能更好理解公众的健康需求以及所需要的健康服务、政策、项目、规范是什么样的。在次背景下，医药产业和跨国药企也产生了相应的变革。了解上述领域中药师职责和职业环境的变化对我校学生来说有深刻的影响。课程中还将重点阐述各国药物流行病学的应用。学生将分组就相关指定命题进行讨论和汇报。教材全部采用英文材料，同时辅助提供相关联的中文文献便于增强理解。同时，还将设计课堂小测验以了解学生对所授内容的掌握程度。

Global Health Systems for undergrads. While undergoing health care reform toward universal coverage in China, students need other national health system perspectives to plan their practice options to address broader public health needs. Much is changing worldwide in the profession of pharmacy and with developments the multi-national pharmaceutical industry. Knowledge of changing roles and environments for pharmacists can greatly benefit students. The key place of pharmacoepidemiology (drug use in populations) in assessing any system will be highlighted. Small groups of students will be organized for presentations on assigned topics after lecture discussions encouraging active learning. Course articles in English, complemented by Chinese literature where available, will provide background for various subjects and nations' inquiries. Periodic quizzes will be also used to identify students' grasp of the covered material.

Syllabus

时间安排/Global Health Systems course topics will include:

- 07/07 09:00-12:00
  - Types of Nation's Health Care Systems (NHS, NHI, Private, and

Mixed)/国家卫生服务体系的类型（国家卫生服务体系、国家医保、商业医疗、混合型）

- Disease structures and varying approaches to health system design/疾病构成及卫生体系的设计方式

- 07/08　09:00-12:00
  - The rise and threat of social epidemics, social and ecological conditions/社会流行病、社会生态环境的产生及威胁
  - Examples: England, Germany, Canada, USA, China, India, Japan, Developing nations/案例：英国、德国、加拿大、美国、中国、印度、日本、发展中国家
- 07/09　09:00-12:00
  - The global drug market/全球药物市场
  - Multinational Pharmaceutical industry developments/跨国药企的发展
  - Importance of advances in medical technology and information technology/医学技术及信息技术进步的重要性
- 07/10　09:00-12:00
  - Pharmacoeconomic and pharmacoepidemiology analyses/药物经济学和药物流行病学分析
- 07/11　09:00-12:00
  - Pharmacists relations with other professionals in coordinated care/整合型服务中药师的作用及与其他执业人员的关系
  - Community assessments for drug needs and practical interventions/用药需要及干预的社区分析
- 07/12　09:00-12:00
  - What way forward for China and the Pharmacy profession?/中国未来卫生服务体系的道路及药学专业的发展方向?

授课形式

Lectures, discussions, small group assignments and presentations, and student self-study/library research/Internet searches will be utilized to promote learning and understanding of the subject material. Students will be assessed for their learning and performances/讲座、讨论、小组作业及汇报、自学；图书资料及网络检索；结课评价将基于学习过程及表现综合评定。

QUANTITATIVE ANALYSIS OF PHARMACEUTICAL MANAGEMENT

医药管理数量分析

开课学院：国际医药商学院

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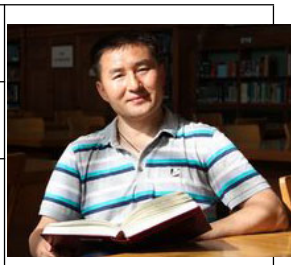
<tr><td rowspan="5">任课教师 Instructor's Information</td><td>姓　　名 Name</td><td colspan="2">王存同</td><td rowspan="2">  </td></tr>
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<tr><td>职称/职务 Title</td><td>教授</td><td>邮箱地址 Email</td><td>ctwang@cufe.edu.cn</td></tr>
<tr><td>最终学位 Degree</td><td>博士</td><td>任职单位 Work Place</td><td>University of Illinois at Urbana-Champaign, UIUC</td></tr>
<tr><td rowspan="3">课程信息 Course Information</td><td colspan="2">课程名称(中英文对照) Course Name</td><td colspan="2">医药管理数量分析 Quantitative Analysis of Pharmaceutical Management</td></tr>
<tr><td>授课对象 Open to</td><td>本科生</td><td>学 时 Class Hour</td><td>24</td></tr>
<tr><td>授课时间 Lecture Schedule</td><td>2019.7.7-2019.7.12</td><td>考核方式 Assessment Method</td><td>课堂作业</td></tr>
</table>

Resume of Instructor

人口学博士、教授。博士毕业于北京大学（与 University of Michigan 合作培养），就职于美国伊利诺伊大学。从事社会统计及计量经济分析、人口健康学、人口社会学、人口经济学等领域的研究与教学。

2013 年入选教育部新世纪优秀人才计划，兼任国家人口计生委综合改革专家组专家、美国人口学会(PAA) 会员、国际人口联盟(IUSSP)会员、IUSSP 社会科学定量方法培训专家组成员、北京大学社会科学方法培训特聘教授、美国伊利诺伊大学及芝加哥大学合作研究员。

SSCI/SCI 索引期刊发表研究论文 30 余篇、中文核心期刊发表定量研究

论文 40 余篇，出版著作 4 部；主持国家社科基金项目 2 项、横向课题 12 项；以子课题负责人身份参与国家重大自然科学基金 2 项、国家部委横向课题 10 余项。

Course Description

随着社会科学研究逐渐向科学化、精细化、实证化发展，在科研过程对于定量研究所需的能力要求也逐步提高。但在医药卫生经管类专业本科生的课程设置中，对于此项能力的培养还远未达到实际科研要求，导致本科生在科研过程中，尤其是研究逐步深入到定量研究阶段，需要设计实验，建立模型，搜集数据展开分析评价时，需花费大量时间精力自学相关研究方法，造成了大量的时间、精力的浪费，而且最终学习效果差强人意，影响研究质量。

本次医药管理数量分析训练营将循序渐进，力图使学员在较短时间内了解常用健康研究领域计量模型的基本思想、原理、条件及适用范围，并以真实数据为演示案例，培训学员模型构建、软件应用及结果解读的能力，提高学员定量论文写作的水平。

With the gradual development of social science research towards scientificalization, refinement and positivism, the ability requirement for quantitative research in the process of scientific research is gradually improved. However, in the course design of undergraduates majoring in medical and health economics and management, the cultivation of this ability is far from meeting the actual requirements of scientific research. As a result, undergraduates need to design experiments, build models and collect data for analysis and evaluation, and spend a lot of time and energy on self-study of relevant research methods in the process of scientific research, especially in the stage of quantitative research. A lot of time and energy are wasted, and the ultimate learning effect is unsatisfactory, which affects the quality of research.

This training camp will step by step, trying to make students understand the basic ideas, principles, conditions and scope of application of measurement

models in the field of health research in a short period of time, and take real data as demonstration cases to train students ‘ability of model building, software application and result interpretation, so as to improve the students' writing level of quantitative papers.

Syllabus

第一天	理论：统计学及计量经济学基本概念 实验：STATA 入门操作
第二天	理论：一元与多元线性回归 理论：违背经典回归假定的应对
第三天	理论：多元线性回归模型与实验设计 实验与讨论：案例分析与论文写作
第四天	理论：二分因变量模型与实验设计 实验与讨论：案例分析与论文写作
第五天	理论：多分类因变量模型与实验设计 实验与讨论：案例分析与论文写作
第六天	理论：定序回归模型、计数变量回归模型与实验设计 实验与讨论：案例分析与论文写作

PSYCHOLOGY OF LANGUAGE

心理语言学

开课学院：国际交流合作处

<table>
<tr><td rowspan="5">任课教师 Instructor's Information</td><td>姓　　名 Name</td><td colspan="2">汪昕</td><td rowspan="3">  </td></tr>
<tr><td>性　　别 Gender</td><td colspan="2">女</td></tr>
<tr><td>国　　籍 Nationality</td><td colspan="2">中国</td></tr>
<tr><td>职称/职务 Title</td><td>SENIOR LECTURER</td><td>邮箱地址 Email</td><td>x.wang1@mq.edu.au</td></tr>
<tr><td>最终学位 Degree</td><td>博士</td><td>任职单位 Work Place</td><td>Macquarie University</td></tr>
<tr><td rowspan="3">课程信息 Course Information</td><td colspan="2">课程名称(中英文对照) Course Name</td><td colspan="3">Psychology of Language (心理语言学)</td></tr>
<tr><td>授课对象 Open to</td><td>本科生</td><td>学 时 Class Hour</td><td>24 课时</td></tr>
<tr><td>授课时间 Lecture Schedule</td><td>7 月 9 日至 13 日</td><td>考核方式 Assessment Method</td><td>多项选择和个人课堂 presentation</td></tr>
</table>

Resume of Instructor

汪昕博士就职于麦考瑞大学语言系。曾在新加坡国立大学，牛津大学任教。她的研究兴趣主要是心理语言学，双语，二语习得。

Course Description

This course will introduce students to the foundations of Psychology of Language (Psycholinguistics), which examines how the human mind and brain process linguistic information. Experimental techniques in studying human language processing and mechanisms will also be introduced and discussed. Most topics will center on the issue of Bilingualism and Second Language Acquisition.

Syllabus

Day 1: How does the human mind/brain process language?

Day 2: Experimental Techniques to do language research
Day 3: Lexical Processing and Mechanisms
Day 4: Sentence Processing and Mechanisms
Day 5: Bilingualism and Second Language Acquisition

PHARMACY DATA BASE SYSTEMS

药品数据库系统

开课学院：外语系

任课教师 Instructor's Information	姓　　名 Name	Jaesung Sim		
	性　　别 Gender	Male		
	国　　籍 Nationality	S. Korea		
	职称/职务 Title	Department Chairperson	邮箱地址 Email	jsim@mansfield.edu
	最终学位 Degree	Ph. D.	任职单位 Work Place	Mansfield University of Pennsylvania, USA
课程信息 Course Information	课程名称(中英文对照) Course Name	Pharmacy Data Base Systems		
	授课对象 Open to	All Students	学　时 Class Hour	16 hours (1 credit)
	授课时间 Lecture Schedule	Mon: 2 hours, Tue-Fri: 3 hours Sat: 2 hours	考核方式 Assessment Method	Assignments, Project & Presentation

Resume of Instructor

Education:

- Doctor of Philosophy in Business Administration, University of North Texas
- Master of Management Information Systems, Texas Tech University
- Master and Bachelor of Public Administration, Won Kwang University, KOREA

Currently, a Chairperson and Associate Professor at Department of Mathematics and Computer Information Science at Mansfield University of Pennsylvania, USA

Taught multiple courses including Visual Basic Programming, Introduction to Microcomputers, Software for Business Applications, Management Information Systems, System Analysis and Design, System Implementation and Project Management, Software Engineering, Data Base Systems, E-Commerce Systems, MIS Seminar, etc.

Published several articles on Data Science, Human Computer Interaction, E-commerce, and IT Practices over well-known research journals.

Course Description

This is an introductory course to Data Base Systems, in which students will learn basic theories on relational database systems, and data modeling. At the same time, through Microsoft Access, students will practice how to design and implement an ideal database for a relevant field of students' interests, like pharmacy.
This class is composed of lectures & class works with labs, and is evaluated by assignments & a group project presentation.

Syllabus

Student Learning Outcomes:

At the end of the course the student will be able to:

1. Develop a conceptual model of a database
2. Become conversant with the fundamentals of the Relational Database construction and manipulation
3. Determine requirements and detailed design using Entity-Relationship Diagrams
4. Implement a database to the relevant domain area of students, like Pharmacy.

Course Evaluation and Grades:

The evaluation will be the combination of presentations, and assignments.

Group Project Presentations:	1 x 200 = 200
Assignments:	4 x 100 = 400
Total:	600

Instructor's Expectations:

This course requires a certain amount of self-discipline in order to be successful. You will need to spend a some amount of time exploring the course topics in a hands-on environment, either on your own computer or on a computer in one of CPU's computer labs. Please allocate plenty of time in your schedule for this course.

Class Attendance Policy:

Success in this class will require being here. We will be doing in-class work for a grade every day and homework will be assigned often.

Late/Missed Assignments:

Students are expected to submit classroom assignments by the due date. If you

need additional time to complete an assignment, please contact the instructor before the due date to discuss the situation and determine an acceptable resolution.

Class Schedule:

Date	Topic
Monday 7/08	Introduction of Course, Lecturer, & Students Classwork: Table
Tuesday 7/09	Assignment Discussion by Students and Lecturer Lecture: Database Systems Classwork: Form
Wednesday 7/10	Assignment Discussion by Students and Lecturer Lecture: Relational Database Model Classwork: Query
Thursday 7/11	Assignment Discussion by Students and Lecturer Lecture: Data Modeling Classwork: Report
Friday 7/12	Assignment Discussion by Students and Lecturer Lecture: Pharmacy Data Base Classwork: Project
Saturday 7/13	Project Presentation by Students Course Evaluation and Award Ceremony

PHYSICAL GEOLOGY AND MAP READING

物理地质学和地图解说

开课学院：外语系

<table>
<tr><td rowspan="5">任课教师
Instructor's
Information</td><td>姓　名
Name</td><td colspan="2">Dr. Lee Stocks</td><td rowspan="3">  </td></tr>
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<tr><td>国　籍
Nationality</td><td colspan="2">USA</td></tr>
<tr><td>职称 /职务
Title</td><td>Associate Professor</td><td>邮 箱 地 址
Email</td><td>lstocks@mansfield.edu</td></tr>
<tr><td>最终学位
Degree</td><td>Phd</td><td>任 职 单 位
Work Place</td><td>Mansfield University of Pennsylvania, USA</td></tr>
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Course Name</td><td colspan="3">Physical Geology And Map Reading</td></tr>
<tr><td>授课对象
Open to</td><td>All Students</td><td>学　时
Class Hour</td><td>16</td></tr>
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Lecture
Schedule</td><td>7/7– 3hrs
7/10–3hrs
7/8– 3hrs
7/11–4hrs
7/9– 3hrs</td><td>考核方式
Assessment
Method</td><td>In–classlabs/activities
Homework problems
Grouppresentation
Final Exam</td></tr>
</table>

Resume of Instructor

My name is Lee Stocks and I am a geoscientist. I have been working in the field for 23 years now. I have 17 years of college teaching experience, to include several tier one research universities and am currently posted as an Associate Professor at Mansfield University, teaching Geology and Earth Sciences. I have a varied background in government, industrial, and commercial research environments, with experience in geology, geomorphology, geography, and geospatial sciences including remote sensing, GIS and geostatistical analysis. I worked several years with the West Virginia State GIS Technical Center, West Virginia Geological Survey, and West Virginia Speleological Survey.

My research focuses on karst geomorphology, or landforms formed by the dissolution of limestone, particularly the geohazards and impacts in those karst

environments, including sinkholes, landslides and caves. More recently my research has centered on a morphometric and geomorphic analysis of Carolina Bays, where elliptical features show common orientation with unknown origin. Likewise I have begun applying geophysical techniques of ground penetrating radar to explore sinkholes, caves, clandestine graves.

I have dual bachelor's degrees in Political Science and Geoscience from Concord University, a Master's degree in Natural Resouce Geography from West Virginia University and a Doctorate in Physical Geography and Geology from Kent State University, specializing in sinkholes.Outside of academia I spend my time with my family biking, hiking, geocaching, fossil hunting, mapping caves, and ridgewalking, looking for new cavesto explore.

Course Description

PHYSICAL GEOLOGY

Geology encompasses the study of our planet, and students in this course will explore: how it formed, the nature of its interior, the materials of which it is composed, landforms, earthquakes and volcanoes, geologic resources, and geologic history. Current events that students learn about in the news, ranging from volcanic eruptions, earthquakes, landslides, and more will fit into a larger picture of how Earth works and why such things happen.

This course takes students on a journey to discover how the Planet Earth originated and was modified since its formation about 4.5 billion years ago. Geologic processes from the time of the 'Big Bang' to the last 'Ice Age' and everything in- between will be explored. The class begins with the origin and birth of the universe and the different planets in our solar system. From this broader perspective, we will zoom in to study the intricacies of our planet. Students will then learn about the origin, structure, chemical and physical contents, geomorphology and various physical features that exist on Earth. Specifically we will study the crystals, minerals, rocks, and fossils that form the outer layer of the planet and how they have been modified by the agencies of erosion – namely wind, water and ice over billions of years. We will also study phenomena like volcanism, earthquakes and folding/faulting that mold and shape the structure of the Earth. Concurrent exercises emphasize the skills needed for the identification of minerals and rocks, the interpretation of land surface features based on topographic maps, and an understanding of folding, faulting, and rock relationships through the interpretation of geologic maps

Syllabus

Student Learning Outcomes(SLO)

Course-Level:

SLO-1 Describe the general structure of the Earth and its occurrence, including the origin of the elements

SLO-2 Distinguish between and explain relative and numerical ages; discuss how the Earth and living organisms have changed over the last four billion years

SLO-3 Discuss plate tectonic theory and explain the dynamic processes, including rock formation and deformation, volcanism, and earthquakes, occurring in the Earth using theseprinciples

SLO-4 Define igneous, sedimentary, and metamorphic rocks; describe their origins, types, formation, andexamples

SLO-5 Describe the geologic settings and origins of the various landforms and soil types; discuss how these were formed, including the processes of weathering and erosion

Program-Level:

- Explain the dynamics between the four basic components of Earth'sphysical
  system: atmosphere, biosphere, hydrosphere and lithosphere
- Collect accurate geologic and environmental data using techniques and practices that follow industry guidelines
- Communicate technical data clearly in written and oralreports

General Education-Level:

- Describe how scientific methods were used to develop key concepts in the targetdiscipline
- Discuss the benefits and limitations ofscience
- Present or derive information from graphical representations of basic processes andresults
- Understand how scientific data areinterpreted
- Understand how scientific hypotheses are formed and**tested**
- Solve basic problems appropriate to thediscipline

Demonstrate theoretical knowledge and technical skills in thelaboratory

Course Materials

<u>Text:</u>PDF files of the text will be provided.

Murck, B. W., Skinner, B. J., & Mackenzie, D. (2010). *Visualizing Geology, 2nd ed*. Hoboken, N.J.:Wiley.

Evaluation Procedures

Final grades will be based on the following criteria and will use the + and – system.

Item (#)	**Points**	**Percentage**	***Final Grade***
Labs /Classwork (10)	40 pts each (400pts)	40 %	*900-1000pts = A*
Textbook Quizzes (2)	200 pts each (400pts)	40 %	*800-899pts= B*
Homework (5)	20 pt each (100pts)	10 %	*700-799pts= C*
Group Presentation	100 pts	10%	*600-699pts= D* <600pts=F
TOTAL	***1000pts***	***100%***	

Class Policies

Class Attendance Policy: Success in this class will require being here. We will be doing in-class work for a grade every day and homework will be assigned often.

Late/Missed Assignments

Students are expected to submit classroom assignments by the due date. Should you need additional time to complete an assignment contact me before the due date to discuss the situation and determine an acceptable resolution.

TENTATIVE COURSE OUTLINE PHYSICAL GEOLOGY

Day	Topics	Objectives	Readings	Notes
1	First Look at Planet Earth	CO-1	**Chapter 1**: Earth as Planet	**Classwork**: USGS Video
	Minerals	CO-1	**Chapter 2**: Earth Materials	**Classwork:** Minerals
	Telling Time Geologically	CO-2	**Chapter 3**: Rock Record & Deep Geologic Time	**Homework**: Dating Isochrons
	Plate Tectonics	CO-3	**Chapter 4**: Plate Tectonics	**Classwork:** Hawaii Plate Rates
2	Earthquakes	CO-3	**Chapter 5**: Earthquakes and Earth's Interior	**Homework**: Virtual Earthquake **Classwork**: Earthquake Video
	Earthquakes and Volcanoes	CO-4	**Chapter 5**: Earthquakes and Earth's Interior	**Classwork:** Earthquake energy **Classwork:** Tsunamis
3	Igneous Rocks	CO-4	**Chapter 6:** Volcanoes and Igneous Rocks	**Quiz #1: Chapter 1-5** **Classwork:** Krakatoa Video
	Igneous Rocks	CO-4	**Chapter 6:** Volcanoes and Igneous Rocks	**Classwork:** Volcano Cores
	Igneous Rocks	CO-4	**Chapter 6:** Volcanoes and Igneous Rocks	**Classwork:** Igneous Rocks
4	Weathering and Soils	CO-5	**Chapter 7**: Weathering and Erosion	**Classwork:** Soil Loss/Erodibility **Homework**: Mass Wasting
	Sedimentary Rocks	CO-4	**Chapter 8**: From Sediment to Sed. Rock	**Classwork**: Buncombe Co. Slope
	Sedimentary Rocks	CO-4	**Chapter 8:** Sediment to Sedimentary Rock	**Classwork:** Sedimentary Facies
5	Crustal Deformation	CO-3	**Chapter 9:** Folds, Faults, and Geologic Maps	**Classwork:** Topo Profiles
	Metamorphic Rocks	CO-4	**Chapter 10**: New Rocks From Old	**Classwork:** Metamorphic Rocks
	Course Wrap-Up: Discussion **Final Exam: Chapters 6-10**			

UNDERSTANDING AMERICAN POLITICS: FRAMEWORK AND ISSUES

美国政治解读：构架和问题

开课学院：外语系

<table>
<tr><td rowspan="4">任课教师
Instructor's Information</td><td>姓　　名
Name</td><td colspan="2">Jonathan C. Rothermel</td><td rowspan="2">  </td></tr>
<tr><td>性　　别
Gender</td><td colspan="2">Male</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">USA</td><td rowspan="2">jrotherm@mansfield.edu</td></tr>
<tr><td>职称/职务
Title</td><td>Associate Professor</td><td>邮箱地址
Email</td></tr>
<tr><td>最终学位
Degree</td><td>Phd (Political Science)</td><td>任职单位
Work Place</td><td>Mansfield University of Pennsylvania, USA</td></tr>
<tr><td rowspan="3">课程信息
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Course Name</td><td colspan="3">Understanding American Politics: Framework and Issues</td></tr>
<tr><td>授课对象
Open to</td><td>All Students</td><td>学 时
Class Hour</td><td>16</td></tr>
<tr><td>授课时间
Lecture Schedule</td><td>7/8 - 3 hrs
7/9 - 3 hrs
7/10 - 4 hrs
7/11 - 3 hrs
7/12 - 3 hrs</td><td>考核方式
Assessment Method</td><td>In-class activities
Readings/Homework
Tests
Group Presentation</td></tr>
</table>

Resume of Instructor

My name is Jonathan C. Rothermel. I have a Ph.D. in Political Science from Temple University (2010), a secondary education teaching certification from Alvernia University (2000), a Master's degree in Political Science from Temple University (1998), and a Bachelor's degree in Political Science from Millersville University of Pennsylvania (1995). I have almost twenty years of teaching experience at the collegiate level. In my current position as an Associate Professor at Mansfield University, I have taught a wide variety of political science courses in the sub-fields of American Politics and International Relations since I was hired in 2008, including Introduction to International Relations, Introduction to American Politics, Globalization, International Law, Constitutional Law, Campaigns and Elections, Human Rights and International Activism, and US Foreign Policy.

I had the privilege to teach at CPU last summer (2018 ISCP-CPU). I taught International Relations & the United Nations (1.0 credit) and thoroughly enjoyed the experience. I was very impressed with the English-competency of CPU students, and my interactions with the students were very positive. My

wife, Dr. Sheri Sunderland, is also interested in teaching at CPU. She is applying to teach International Relations & Global Issues. This summer, I propose to teach a basic, introductory course on the framework of the American political system.I believe that Chinese students will benefit from a basic understanding of American politics, including political issues (such as gun control, immigration, US foreign policy, and the Electoral College).

My research interests have varied over the years. Currently, I am interested in how international institutions help states overcome interstate conflict. In particular, I have been studying attempts to resolve a contentious territorial dispute between Belize and Guatemala. In addition, I am also interested in research related to the benefits of international study abroad. Since 2014, my colleague and I have organized a two-week, short-term study abroad trip to Belize every summer. The trip is an academically rigorous course that emphasizes the collection of field research. To that end, I facilitate many opportunities for our students to 'interview' stakeholders in Belizean society. In addition to the logistics of organizing this type of trip, I am also interested in the impact that it has on students who have limited exposure international travel. Finally, I regularly publish political and social op-ed pieces in state and national news outlets on a wide variety of contemporary issues, including presidential politics and international relations. Here is an overview of my recent op-eds:

- Rothermel. "This Year is Going to Be a Bumpy One – Here's How You Can Prepare
for Political Tumult" published on PennLive.com – *The Harrisburg Patriot* (January 8, 2019)
- Rothermel. "America First Should Never Mean America Alone" published on PennLive.com – *The Harrisburg Patriot* (October 24, 2018)
- Rothermel. "More Pennsylvanians Must Be Able to 'Pursue Their Happiness'" published on *The Pittsburgh Post-Gazette* (March 11, 2018)
- Rothermel. "In a War with North Korea, There's No Hollywood Ending" published on PennLive.com – *The Harrisburg Patriot* (September 28, 2017)
- Rothermel. "This is the Biggest Problem with Foreign Aid" published on PennLive.com – *The Harrisburg Patriot* (July 12, 2017)
- Rothermel. "Democrats, Don't Go To War Over Gorsuch" published on Philly.com

– *The Philadelphia Inquirer* (February 13, 2017)

- Rothermel. "To Find the Bright Spot in 2017, Look to Generation Z to Show the Way" published on PennLive.com – *The Harrisburg Patriot* (January 6, 2017)
- Rothermel. "5 Takeaways from Donald Trump's 2016 Win" published on *US News & World Report* online (November 10, 2016)
- Rothermel. "Clinton v. Trump: How to Fix an Already Predictable Debate" published on Foxnews.com (September 24, 2016)
- Rothermel. "Give Politicians a Raise, Get Better Candidates" published on *US News & World Report* online (August 16, 2016)
- Rothermel. "Don-John 2016" published on *US News & World Report* online (July 8, 2016)
- Rothermel. "Bernie's Dropout is Hillary's Move" – published on *US News & World Report* online (April 27, 2016)
- Rothermel. "We're all to Blame for Trump" – published on *US News & World Report* online (February 18, 2016)
- Rothermel. "2016 New Year's Resolutions: What is Good for Us is Good for the Country" – published on Foxnews.com (January 4, 2016)
- Rothermel. "Here's Why the Gun Debate, Ultimately, Goes Nowhere" published on Philly.com – *The Philadelphia Inquirer* (December 3, 2015)
- Rothermel. "The Problem with the French Flag on Facebook" published on US News & World Report online (November 16, 2015)
- Rothermel. "Could Carson Win by a Hair? The Comeback of Stubble in Presidential Politics" published on FoxNews.com (November 1, 2015)
- Rothermel. "2016 Elections? No Thanks, I'd Rather Mow the Lawn" published on USAToday.com (August 11, 2015)
- Rothermel. "Put Down the Selfie Stick" - published on Foxnews.com (February 27, 2015)
- Rothermel (with J. Bosworth). "This Right Here is the Most Important
- Non-Competitive Congressional Race" - published on Politix.com (November 3, 2014)

Course Description

This course is an introductory survey of the American political system.Students will examine the fundamental concepts of the US Constitution: checks and balances, separation of powers, and federalism.The course will outline the powers of each of the major branches of government (legislative, executive, and judicial branches) as well as identify other actors, including political parties,interest groups,and the media,that influence American politics.Students will learn the major differences between the Republican Party and the

Democratic Party. Furthermore, the manner by which a US President is elected (Electoral College) will be explained, and a preview of the 2020 presidential election will be shared. There will also be a discussion about the rise of Donald Trump and a brief overview of past US presidents. Political issues such as gun control, immigration, education, healthcare, social welfare, and US foreign policy will be explained in the context of the American political system. Students will conduct research on political issues and challenges facing the American political system.

Syllabus

Text:

- Excerpts from an introductory American Politics textbook will be photocopied and made available to students via PDF files.
- Short news articles on political issues (e.g. gun control) will be photocopied and made available to students via PDF files.
- Course Requirements:
- In-class Assignments – 20 ponts
- Homework/Essays – 80 points
- Group Project – 20 points
- Tests – 100 points Course Outline (5 days)
- Day 1 – Framework of American Political System (checks and balances, separation of powers, federalism)
- Day 2 – US Presidency (US Presidents, Electoral College, and the Rise of Trump)
- Day 3 – Congress, Supreme Court, Political Parties (Republicans v. Democrats), and Interest Groups
- Day 4 – American Political Issues (Gun control, education system, immigration, social welfare, and healthcare) – group project presentations
- Day 5 – US Foreign Policy (Internationalism v. Isolationism, UN, NATO, US-Sino relations)

INTERNATIONAL RELATIONS AND GLOBAL ISSUES

国际关系和全球问题

开课学院：外语系

<table>
<tr><td rowspan="5">任课教师
Instructor's Information</td><td>姓　　名
Name</td><td colspan="2">Dr. Sheri Sunderland</td><td rowspan="3">  </td></tr>
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Gender</td><td colspan="2">Female</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">USA</td></tr>
<tr><td>职称/职务
Title</td><td>Assistant Professor</td><td>邮箱地址
Email</td><td>Sher07@ptd.net</td></tr>
<tr><td>最终学位
Degree</td><td>PhD (Political Science)</td><td>任职单位
Work Place</td><td>Mansfield University of Pennsylvania, USA</td></tr>
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Course Information</td><td colspan="2">课程名称(中英文对照)
Course Name</td><td colspan="2">国际关系和全球问题
International Relations and Global Issues</td></tr>
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Open to</td><td>All Students</td><td>学 时
Class Hour</td><td>16</td></tr>
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Lecture Schedule</td><td>7/8 - 3 hrs
7/9 - 3 hrs
7/10 - 4 hrs
7/11 - 3 hrs
7/12 - 3 hrs
Mornings</td><td>考核方式
Assessment Method</td><td>In-class activities
Readings/Homework Quizzes
Global Issues Project Final Quiz</td></tr>
</table>

Resume of Instructor

I have a Ph.D. in Political Science from Temple University with a specialization in international relations. My research interests are broadly focused on security studies and more narrowly, on peacekeeping. In particular, I have researched the effectiveness of different types of peacekeeping operations in Africa.

I have considerable teaching experience. Most recently, I have taught at Lock Haven University from 2017-18, Susquehanna University in 2017 and at Mansfield University from 2015-16. I have taught a variety of classes including International Relations, World Politics, United Nations and International Organizations, and World Affairs.

My teaching philosophy is based on the importance of student engagement. I believe that engagement is crucial to student success and my students often comment that they not only enjoy group discussions, but that they feel that they contribute significantly to their learning. Discussions that inspire questions, debates and reflections will help students to think critically and to draw connections between abstract theoretical concepts and current events. I also believe that prompt responses to student questions and assignments by the professor play a key role in keeping students fully engaged in the learning process.

Course Description

The course begins with a brief survey of the major theoreotical approaches to international relations, including realism, liberalism, and constructivism. Students will also be introduced to fundamental concepts of international relations, including anarchy, sovereignty, balance of power, comparative advantage, and globalization, as well as the main actors of international relations, including states, intergovernmental organizations (IGOs), multinational corporations (MNCs), and non-governmental organizations (NGOs).

Next students will be introduced to basic concepts of war and security in international relations, international law, and international organization. Particular attention will be paid to the organization and functions of the United Nations. The United Nations was created in the aftermath of World War II as an organization to promote economic development and conflict resolution. Students will examine the evolution of the United Nations since 1945, including its increasing attention to human rights issues, the important role of the Security Council and its permament members in maintaining international stability, and the impact of economic globalization. Students will analyze the UN General Assembly as a forum for discussing international problems and as a forum for collective action.

Throughout the course students will also have the opportunity to analyze a number of global issues and challenges facing the international community and to recognize the ways in which events abroad affect their lives and the welfare of their society. In addition, students will analyze China's growing role as a world leader in the international community.

Syllabus

Text:

- Bova, Russell. How the World Works: A Brief Survey of International Relations (3/e), Pearson Press, 2017.
- Supplemental academic article on Challenges/Issues Confronting the

United Nations (TBD)
- Supplemental academic article on China ' s Increasing Role in the UN (TBD)
- Supplemental academic articles on IR topics (TBD)

Course Requirements and Breakdown of Grade:
- Tests – 100 points (50%)
- Homework/In-class Assignments – 80 points (40%)
- Global Issue Presentation – 20 points (10%)

Tentative Course Outline (5 days):
- Day 1 – Overview of Fundamental Concepts of IR and IR Theories, Levels of Analysis, Realism, War and International Security – Bova, Chapters 1-4
- Day 2 – Liberalism and Constructivism, International Law and Organization, Overview of the United Nations – Bova, Chapter 5
- Day 3 – Universal Declaration of Human Rights, Peacekeeping, Economic Globalization – Bova, Chapters 6-7
- Day 4 – Global Issues Presentations – Bova, Chapter 8
- Day 5 – China's Role in the World and Global Futures – Bova, Chapter 9

STATISTICS FOR SOCIAL SCIENCE

人文社科统计方法

开课学院：外语系

<table>
<tr><td rowspan="5">任课教师
Instructor's
Information</td><td>姓　　名
Name</td><td colspan="2">Timothy J. Madigan</td><td rowspan="2">  </td></tr>
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Gender</td><td colspan="2">Male</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">USA</td><td></td></tr>
<tr><td>职称/职务
Title</td><td>Professor of Sociology</td><td>邮箱地址
Email</td><td>tmadigan@mansfield.edu</td></tr>
<tr><td>最终学位
Degree</td><td>PhD Sociology Minor Statistics</td><td>任职单位
Work Place</td><td>Mansfield University of Pennsylvania</td></tr>
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Course
Information</td><td colspan="2">课程名称(中英文对照)
Course Name</td><td colspan="2">Statistics for Social Science
人文社科统计方法</td></tr>
<tr><td>授课对象
Open to</td><td>Undergraduates</td><td>学 时
Class Hour</td><td>16</td></tr>
<tr><td>授课时间
Lecture Schedule</td><td>Mornings</td><td>考核方式
Assessment Method</td><td>Classwork, Tests, Research Proposal Presentation</td></tr>
</table>

Resume of Instructor

DEGREES

B.A. Sociology, Concentration in Social Work, Psychology Minor, 1985
Bloomsburg University of Pennsylvania, Bloomsburg PA

M.A. Sociology, 1988
Pennsylvania State University, University Park, PA
Thesis: "The Effects of Family Background on College Enrollment" (Advisor: Dr. Dennis P. Hogan)

Ph.D Sociology, Statistics Minor, January 1992
Pennsylvania State University, University Park, PA
Dissertation: "Cultural Capital and Educational Achievement: Does Participation in High Status Cultural Activities Affect Achievement in School?" (Advisor: Dr. Dennis P. Hogan)

CURRENT POSITION

9/06-present: Associate Professor
Department of History, Philosophy and Political Science
Mansfield University, Mansfield, PA (Dr. Jeff Bosworth, Chair)

PREVIOUS POSITIONS

1/01-2010: Co-Director, Director
Mansfield University State Survey (formerly the Public Mind)
(Annual scientific telephone survey of 700-1,700 adults in Pennsylvania)
Mansfield University, Mansfield, PA

1/01-8/06: Assistant Professor
Department of Sociology/Anthropology and Social Work
Mansfield University, Mansfield, PA (Dr. Nancy Sidell, Chair)

3/98-12/00: Assistant, Acting, Interim Director
Office of Institutional Research and Planning
Shippensburg University, Shippensburg, PA (Supervisor: Dr. Rick Ruth)

6/97-3/98: Statistician (GS-12 step 4 Statistician Demography)
Education and Social Stratification Branch, Population Division
Bureau of the Census, U.S. Dept. of Commerce, Suitland Maryland (Supervisor: Dr. Jennifer Day)

1/95-5/97: Statistical Consultant (GS-12 step 4 Statistician Demography)
Data Development and Special Reports Division (on Census detail)
National Center for Education Statistics, U.S. Dept. of Education, Washington, D.C. (Supervisor: Dr. Nabeel Alsalam)

4/92-12/94: Statistician (GS-11 and 12 Statistician-Demography)
Education Analysis Staff, Population Division
Bureau of the Census, U.S. Dept. of Commerce, Suitland Maryland. (Supervisor: Dr. Paul Siegel)

TEACHING EXPERIENCES

Courses taught: Social Theory, Introduction to Sociology, Political Sociology, Sociology of Education, Deviant Behavior, Telephone Survey Research, Social Statistics, Social Stratification, Organizational Behavior, The Sociology of Religion, Social Psychology, Environmental Sociology, Sociology of Work, Sociology of China, American Values in Conflict

ADVANCED METHODOLOGICAL AND STATISTICAL TRAINING

Sociological Research Methods (Soc. 513), Michael P. Massagli
Statistical Methods for Social Research (Soc. 574), Clifford C. Clogg
Statistical Methods for Non-experimental Research (Soc. 575), Clifford C. Clogg
Mathematical Demography (Soc. 576), Clifford C. Clogg
Applied Regression (Stat. 501), William L. Harkness
Discrete/Categorical Data Analysis (Stat. 504), Clifford Clogg
Applied Multivariate Statistical Analysis (Stat. 505), James L. Rosenberger
Analysis of Variance and Design of Experiments (Stat. 502), Robert Holtquist

Linear Stuctural Equations (LISREL), Hierarchical Linear Models (HLM), and Survey Data Analysis (SUDAAN), Stephen W. Raudenbush and Michael Brick for the latter two respectively.

SELECTED PROFESSIONAL PUBLICATIONS

"Religion and Education", Timothy Madigan and Josh Pakard, in INTRODUCTION TO SOCIOLOGY: A COLLABORATIVE APPROACH, Ashbury Publishing, 2017.

"Dating attitudes and expectations among young Chinese adults: an examination of gender differences" Journal of Chinese Sociology, 3(12), 2016.

"Teaching Social Stratification in Central China Normal University", Perspectives, Vol. 10, No. 2, 2009.

"The Mansfield University State Survey" Timothy Madigan and Jan Purk, Survey Report, Mansfield University, Mansfield PA, 2009.

"The Opinions of Pennsylvanians toward Water and Sewage Issues", Timothy Madigan, Tapping In 7(4), October 2007.

"Using Life Experiences in China to Encourage Students to Think and Talk about Race" Timothy Madigan, Letter to the Editor, Sociological Forum, p. 555, Vol.22, No. 4, Dec. 2007.

"Cultural Capital", Timothy J. Madigan, in EDUCATION AND SOCIOLOGY: AN ENCYCLOPEDIA, 2002, David Levinson, Peter Cookson, Jr. and Alan Sadovnik editors, Routledge Falmer, NY, NY.

"Who Goes to America's Highly Ranked 'National' Universities?", Jeff Owings, Timothy Madigan, and Bruce Daniel, November 1998, Statistics in Brief, U.S. Department of Education, The National Center for Education Statistics and the U.S. Census Bureau, Washington, D.C. (NCES 98-095)

"Science Proficiency and Course Taking in High School: The Relationship of Science Course taking Patterns to Increases in Science Proficiency Between 8th and 12th Grades", Timothy J. Madigan, March 1997, Statistical Analysis Report, U.S. Department of Education, The National Center for Education Statistics and the U.S. Census Bureau, Washington, D.C. (NCES 97-838)

“Course-Taking Patterns and Gains in Mathematics and Science Achievement Test Scores During High School”, Timothy J. Madigan, 1997, Issue Brief, U.S. Department of Education, The National Center for Education Statistics, Washington, D.C.

"Parent Involvement in Education", Timothy J. Madigan, in THE CONDITION OF EDUCATION 1994, U.S. Department of Education, Office of Educational Research and Improvement (NCES 94-149).

"Parent Involvement in Education", Timothy J. Madigan, Indicator of the Month, October 1994, U.S. Department of Education, Office of Educational Research and Improvement (NCES 94-693).

"Kin Access and Residential Mobility of Young Mothers", Timothy J. Madigan and Dennis P. Hogan, Social Science Quarterly 72(3), Sept. 1991.

EDITOR

American Sociological Association’s digital library of teaching resources (TRAILS) for the area of public policy and social change

REVIEWER

Sociological Inquiry journal, 2009 to 2018.

Sociological Viewpoints, 2006 to present.

ORGANIZATIONAL BEHAVIOR, Prentice Hall.

TAKING SIDES: CLASHING VIEWS ON STATE AND LOCAL GOVERNMENT, McGraw Hill, Contemporary Learning Series, forthcoming.

Course Description

Statistics introduces students to the types of data structures found in social research and the basic statistical tools used to analyze social science data. The course first reviews the primary research designs employed by social scientists to generate quantitative data. It then covers the logic behind the larger social

research process and the role of research designs and data. Most importantly, the course focuses on allowing students to learn and practice statistical methods commonly employed in social science fields. When students finish the course they should be able to choose appropriate research designs, understand the characteristics and value of social science data, and process data to provide meaning to both a technical and non-quantitative audience.

Syllabus

Textbook:
Elementary Statistics in Social Research, 9th Edition, Jack Levin, James Fox, Allyn & Bacon, Boston, 2003

Course Description and Goal:
This course provides students with an introduction to the types of data structures found in social research and the basic statistical tools used to analyze social science data. The course first reviews the primary research designs employed by social scientists to generate quantitative data. It then covers the logic behind the larger social research process and the role of research designs and data. Most importantly, the course focuses on allowing students to learn and practice statistical methods commonly employed in social science fields. When students finish the course they should be able to choose appropriate research designs, understand the characteristics and value of social science data, and process data to provide meaning to both a technical and non-quantitative audience.

I will teach and coach students to be able to perform basic applied social research. I expect students to read the assigned materials before class so that they can begin to absorb the knowledge and skills as well as identify difficult areas. I will review new material, answer questions and focus on the 'why' behind the routine steps employed by social scientists to analyze data. The tests will be multiple choice, true/false, and some problem solving. They will tap into whether students know why they are doing what they are doing. The problem solving questions tap into whether students know what to do. They will be drawn from the material and exercises reviewed. A scientific calculator is necessary. The SPSS student software package is recommended (if available at CPU). Students will be exposed to how to use the computer to process data (if available at CPU).

There will be 2 tests. The questions and problems will come from the material and exercises covered in class. The course will expose students to practical as well as "real" social science data.

Students are expected to create and present a research proposal based on all of the material covered. The instructor can advise on all aspects of the social

science research process: choosing variables, developing hypotheses and research statements, collecting data, descriptive and statistical analyses, write-up, and summarizing and concluding.

Course Structure: a hierarchical presentation of social research and statistical topics as follows:

Part I. Basic Research Methods, Why Social Scientists use Statistics, and Organizing Data

This section reviews the social research methods most commonly employed to gather quantitative data. It introduces the scientific process and how social statistics fit into that process. Understanding the characteristics of data and simple methods to represent its meaning are the two main goals of this section.

Class 1

1. Basic Social Science Research Methods
2. Why Social Researchers Use Statistics. Chapter. 1
3. Organizing Data. Chpt. 2

Part II. Terms Used to Describe Distributions of Data

Two statistical terms are used to characterize data generated by social scientists. This section teaches students the importance these terms, how to calculate them, and their importance to further statistical analysis.

Class 2

1. Measures of Central Tendency. Chapter. 3
2. Measures of Variability. Chapter. 4

Test 1

Part III. From Description to Decision Making

This section introduces the concepts of probability, sampling, and error. Understanding these concepts sets the stage for the material that follows, namely, how to make decisions based on data from samples.

Class 3-4

1. Probability and the Normal Curve. Chapter. 5
2. Samples and Populations. Chapter. 6

Test 2

Part IV. Decision Making

The strength and utility of statistics resides in its use as a decision making tool. Knowing how to use data and statistical tests to make important

decisions that affect people, social policies, and the literature is the main goal of this section. Thus, the student is exposed to the primary statistical tools used by social researchers.

Class 5

1. Testing Differences between Means (T-test). Chapter. 7
2. Analysis of Variance (ANOVA). Chapter. 8

Class 6

1. Nonparametric Tests of Significance (Chi-square test). Chapter. 9
2 Correlation Test and Coefficient. Chapter. 10 followed by review

Class 7

Presentation of Research Proposals

THE OPIOID CRISIS IN THE UNITED STATES

美国成瘾性药品危机

开课学院：外语系

<table>
<tr><td rowspan="5">任课教师 Instructor's Information</td><td>姓　　名 Name</td><td colspan="2">Mary E.Daly</td><td rowspan="2">  </td></tr>
<tr><td>性　　别 Gender</td><td colspan="2">Female</td></tr>
<tr><td>国　　籍 Nationality</td><td colspan="2">American</td><td></td></tr>
<tr><td>职称/职务 Title</td><td>Dr.</td><td>邮箱地址 Email</td><td>mdaly@mansfield.edu</td></tr>
<tr><td>最终学位 Degree</td><td>EdD, MSW, BSN</td><td>任职单位 Work Place</td><td>Mansfield University of Pennsylvania, USA</td></tr>
<tr><td rowspan="3">课程信息 Course Information</td><td colspan="2">课程名称(中英文对照) Course Name</td><td colspan="2">美国成瘾性药品危机 The Opioid Crisis in the United States</td></tr>
<tr><td>授课对象 Open to</td><td>All Students Undergraduates</td><td>学 时 Class Hour</td><td>16</td></tr>
<tr><td>授课时间 Lecture Schedule</td><td>10:00AM – 12:30PM Mon.– Sat.</td><td>考核方式 Assessment Method</td><td>In-class worksheets, a group presentation, one exam</td></tr>
</table>

Resume of Instructor

Education: Education Doctorate, Binghamton Univ. – State University of New York, 2005

Master of Social Work, Marywood University, Scranton, PA, 1996

Bachelor of Science in Nursing, Columbia University, NYC, NY, 1981

Teaching: Associate Professor fall 2015-Present, Assistant Professor fall 2010-spring 2015. Courses taught: Social Work and Health Care,Human Behavior, Gerontology, Case Management, Social Policy, Communites &Organizations, Evaluation Research, Screening for Brief Intervenion & Treatment of Addictions (collaborative curriculum with NORC University of Chicago).

Relevant Work Experience: Registered Nurse 15 yrs, Behavioral Health

Adminstrator 10 yrs, Volunteer Educator on topics in Chronic Disease Self-Management 4 yrs.

Recent Publications: Council on Social Work Education Task Force (2018). Specialized Practice Curricular Guide for Macro Social Work Practice. Alexandria VA: Council on Social Work Education.

Course Description

The misuse of opioid drugs is causing a public health crisis in the United States. Many opioid deaths result from overdoses outside the hospital. Emergency departments routinely treat patients for not using prescription opiods as directed. Addiction impacts pregnancy, child & adolescent development, family dyamics, workplace safety and law enforcement. This drug class includes prescription pain relievers such as oxycodone, hydrocodone, codeine, morphine, fentanyl and the illegal drug heroin. This course examines opioid medical and non-medical use, how addiction happens, the social impacts of addiction, and the options for prevention and treatment in American communities.

Readings: a coursepack of short articles and fact sheets from professional associations such as the American Society of Addiction Medicine, the Addiction Technology Transfer Center, theThe Substance Abuse and Mental Health Services Administration (SAMHSA),and a global newspaper - the New York Times.

Syllabus

Tentative Course Outline:

Days 1-2: History of opioid misuse; the Public Health crisis; Medical and non-medical use of opioids; Side effects of medication.
Day 3:Student group presentations on prescribed opioids, heroin and fentanyl based on brief fact sheets.
Days 4 – 5: Tolerance, dependence and the disease of addiction; Risk factors for addiction; Impact on the individual, family, community and workplace; Prevention and treatment of opioid misuse and addiction in an American context.
Day 6: Course conclusion; Final Exam

Grade will be based on 50% in-class work and 50% for the Final Exam.

BUSINESS WRITING

商务英语写作

开课学院：外语系

<table>
<tr><td rowspan="5">任课教师 Instructor's Information</td><td>姓　　名 Name</td><td colspan="2">Baotong Gu 顾宝桐</td><td rowspan="3">  </td></tr>
<tr><td>性　　别 Gender</td><td colspan="2">Male 男</td></tr>
<tr><td>国　　籍 Nationality</td><td colspan="2">USA 美国</td></tr>
<tr><td>职称/职务 Title</td><td>Associate Professor 副教授</td><td>邮箱地址 Email</td><td>bgu@gsu.edu</td></tr>
<tr><td>最终学位 Degree</td><td>PhD 博士</td><td>任职单位 Work Place</td><td>Georgia State University 佐治亚州立大学</td></tr>
<tr><td rowspan="3">课程信息 Course Information</td><td colspan="2">课程名称(中英文对照) Course Name</td><td colspan="2">Business Writing 商务英语写作</td></tr>
<tr><td>授课对象 Open to</td><td>All students</td><td>学 时 Class Hour</td><td>16</td></tr>
<tr><td>授课时间 Lecture Schedule</td><td>Mornings</td><td>考核方式 Assessment Method</td><td>3 quizzes3 次测验
1 designproject1 个设计
1 presentation1 次课堂演讲</td></tr>
</table>

Resume of Instructor

Dr. Baotong Gu is the Director and associate professor of rhetoric and composition at Georgia State University. His research covers such areas as writing technology theories, content management, and cross-cultural communication. In addition to journal articles, Gu has published five edited collections and one scholarly monograph entitled *From Oracle Bones to Computers: The Emergence of Writing Technologies in China*. Gu has also served as a referee reader for such journals as *Technical Communication Quarterly, Technical Communication, Journal of Business and Technical Communication, and Second Language Writing*. He was the director of Lower Division Studies from 2008 to 2010 and the director of the Confucius Institute at Georgia State University from 2010-2014. He also served on the Executive Committee of the ATTW and was the conference chair for the 2012 national ATTW conference.

顾宝桐博士，佐治亚州立大学终身教授，博士生导师。1983 年毕业于

苏州大学，毕业后留校任教。1992 年赴美深造，1994 年获得美国衣阿华州立大学商务与科技英语写作硕士，2000 年获得普渡大学修辞与写作博士。1999—2002 年在东华盛顿大学任教，2002 年至今在佐治亚州立大学任教。2008-2010 年任佐治亚州立大学英语写作部主任，2010—2014 年担任佐治亚州立大学孔子学院美方院长，现任英语系修辞与写作教研室主任。

顾宝桐主要从事修辞与写作、特别是 Technical Communication 方面的教学及研究。在美国大学教授修辞与写作各种课程二十余年。任教的本科、硕士及博士课程包括 English Composition, Business Writing, Technical Writing, Electronic Writing and Publishing, Digital Rhetoric, Digital Media Production, Grant and Proposal Writing, Composition Pedagogy 等。

顾宝桐的研究领域主要包括科技写作、写作技术理论、跨文化交际等。主要学术成果除学术期刊论文外，还出版了六本专著与编著，其中包括 *From Oracle Bones to Computers: The Emergence of Writing Technologies in China; Content Management: Bridging the Gap between Theory and Practice; Designing Web Applications for the 21st Century Writing Classrooms,* 以及《当代西方修辞批评与研究》（上和下，1998 年社科院出版社出版）。同时，他还在各大学术会议上宣读论文 60 多篇。

顾宝桐曾担任全美科技英语写作教师协会 ATTW（AssociationofTeachersofTechnicalWriting）常务理事，ATTW 2012 年全美学术大会主席。他还担任多个学术杂志的评审，包括 *Technical Communication Quarterly, Technical Communication, Journal of Business and Technical Communication, Second Language Writing* 等。

Course Description

This course will introduce students to different genres of business writing, including but not limited to business memos, business letters, resumes, cover letters, reports, proposals, etc. At the same time, it will also teach students effective writing styles, persuasive writing, writing for the audience, writing within meaningful business contexts, writing for international audiences, etc. In teaching students how to write different types of business documents, this course will take into consideration Chinese students' English proficiency levels and writing capacity and focus on improving students' English writing while teaching them effective rhetorical skills. At the end of the course, students will be expected to write rather effective business documents in English and become cultural competent business writers.

Business Writing deals with various issues involved in the business writing practice, such as audience, purpose, form, genres, conventions, and strategies. Our focus will be on how to design business communication products so that they are effective solutions to real communication problems.

Business Writing has the following objectives:

- To foster a view of writing as situated action (people acting through writing within organizations)
- To foster educational practices that demand a consideration of ethics
- To create contexts for writing that are real and sophisticated (through the use of cases, real clients, and service learning with community organizations)
- To recognize that the use of computers is integral to how people write in the workplace and the types of documents they produce
- To advocate reader/user needs
- To create contexts for effective collaboration
- To teach visual and verbal argumentation
- To teach research practices
- To teach students to follow and adjust conventions of business writing

商务英语写作课程将教授三个方面的主要内容：

- 第一是指导学生学习写作各式英语商务文书，包括商务备忘录、商务信函、简历、求职信、商务报告、商务提案等。学生将通过分析实例及样文学习各种文书的写作格式、规范、正确有效的写作方式等。
- 第二是教授学生修辞知识及规则，即如何分析读者/客户的特点、客

户的需求、商务文书的具体目的、商务交流中的各种具体情况，从而设计出最有效的商务文书。

- 第三，根据中国学生大部分英语水平相对有限或水平参差不齐的实际情况，着重练习英语写作句法、文风、遣词等等，以有效帮助他们英语商务文书的写作。

有一定英语基础的学生在修完本课程后，其商务英语写作应该有明显的进步，应能较自如的应对各种商务英语文书的写作设计。

Syllabus

Course Goals Business Writing is an advanced course that deals with various issues involved in the business writing practice, such as audience, purpose, form, genres, conventions, and strategies. Our focus will be on how to design business communication products so that they are effective solutions to real communication problems.

Because of such a focus on the real-world practice, this course will use a case-based approach—that is, we will read about real or semi-real communication situations/needs and then develop solutions, often in the form of a "text," an oral report, or some other appropriate product of communication. In some cases, of course, you may find that there is no perfect solution but a variety of possible approaches to the situation, which in itself will be a source of learning for you. Such a case approach simulates the real-life practice of the professional writer and gives you a chance to experience, almost first hand, what it is like to be a business writer. Although every business writer's practice differs from everybody else's and it's impossible to simulate all the different practices, the rhetorical strategies you learn in this course should prove to be useful in various business writing situations.

This course prepares two groups of students: those of you who intend to be professional writers—people who write *as a profession*—and those of you who intend to be writing professionals—professionals who will write *as part of their job*. Therefore, Business Writing has the following objectives:

- To foster a view of writing as situated action (people acting through writing within organizations)
- To foster educational practices that demand a consideration of ethics
- To create contexts for writing that are real and sophisticated (through the use of cases, real clients, and service learning with community organizations)
- To recognize the fact that computers significantly alter where and how people work and that the use of computers is integral to how people write in the workplace and the types of documents they produce
- To advocate reader/user needs
- To create contexts for effective collaboration
- To teach visual and verbal argumentation
- To teach research practices
- To teach students to follow and adjust conventions of business writing

Attendance & Blunt Version

Participation Class participation is mandatory. You are allowed THREE EXCUSED absences. Anything beyond three excused absences may affect your grade (at instructor's discretion). For any absence, you must inform me in writing before your absence or as soon after it as possible. This writing can be in either hard copy (a formal memo) or email. You must convince me why your absence should be excused. You're responsible for finding out about and completing any assignment you may have missed due to your absence.

Reasoned Version

The environment of this class is intended to emulate that of a professional workplace. Just as tardiness is not acceptable at workplace settings, it is not tolerated in this class either. In a writing class, much of the work is done in class, whether it's group work or class discussions. If you're not there, you're not contributing. In most cases, if you have a legitimate reason for your absence, you'll be excused. To be fair, anytime you miss a class, you get an exciting writing opportunity to showcase your superior persuasive writing skills to explain and justify your absence.☺

Tardiness

Just as punctuality is valued and expected at a workplace, so is it in our class. **DON'T come to class late!** If you have a valid reason being late for class, contact me well in advance. Every third tardiness counts as an absence.\

Other Policies

Late Assignments

No late assignments are accepted!Justification? At a workplace, try how many times you can miss a deadline without being talked to by your supervisor or getting fired. My 30+ years of teaching experience tells me most late work is of subpar or poor quality because they are often completed in haste due to a late start. Start early and give yourself enough time so that the work you turn in can represent your true capabilities. The only exception to this policy is if you have a debilitating injury or illness or very extenuating circumstances that render you incapable of doing school work. I reserve the right to make the final assessment whether your excuse for late turn-in is valid.

Assignment Turn-ins

Turn in all your assignments as email attachments to bgu@gsu.edu, unless you're told otherwise.

Cellphones

No cellphone use is allowed in class unless I tell you otherwise. Please put it on silent and keep it out of sight.

Computer Use

Since our class is held in a computer classroom, it is tempting to surf the web or check your email during class time. Please refrain from using the computer when you're not supposed to. I do NOT expect you to be using a computer when, for example, I'm lecturing or your classmate is doing a presentation. On the other hand, since we're in a computer classroom, we should take advantage of the technologies available to enhance our learning.

Assignments The course work consists of reading and writing assignments. The reading assignments are indicated in the course schedule. The writing assignments consist of the following:

3 Quizzes (30 points)

Three quizzes on commonly used words in business writing.

Brochure Design (50 points)

For this project, you will work in groups to design a brochure for the Business Writing course. You'll imagine that this course will be offered again next year. Your brochure will be used to promote this course and recruit students next year.

Oral Presentation of the Brochure Project (20 points)

After you have designed the brochure, you'll present it to your client (me or the English Department) in order to persuade your audience to accept your project. Therefore, you oral presentation needs to be very persuasive.

Important* A passing grade for all the assignments is a prerequisite to, but not a guarantee for, passing the course. Observe the following rules closely:

- You must complete all the major assignments. If you miss any of the projects, you will automatically fail the class.
- Your reports and assignments should be presentable. If you hand in poorly proofread documents, they will be returned to you for correction before they are graded.
- If you miss a class, it is your responsibility to find out the assignments you missed. An excused absence will not get you off the hook for a tardy assignment.

- **A Special Note:** Submit your work on time. **Late assignments are generally NOT accepted unless for extenuating circumstances.**Work is considered late after class begins on the due date, unless noted otherwise. In cases where late work is accepted, there is a 10% grade reduction for each day your assignment is late.
- **All projects must be submitted electronically via email unless you're instructed otherwise.**

Plagiarism No plagiarism or any other forms of academic dishonesty will be tolerated in this class. Any plagiarismwill result in a grade of F at least for the assignment (and most likely an F for the entire course at the instructor's discretion). In addition, all university policies related to academic honesty apply.

Grading Since your final course grade will be based predominantly on writing assignments and the grading of writing cannot be reduced to simple quantitative measures, I will grade your writing on a holistic basis. Each assignment will have specific grading criteria, which I will explain in class. Generally, however, the three general criteria below will be applied to all the major assignments:

Purpose: How effectively does the document accomplish its intended task?

- Does it meet its goals and the demands of its context (both academic and organizational)? Does it solve a problem or address a significant organizational need? help people?
- Does it provide a sound argument in support if its claims?
- Does it meet readers' needs and expectations? Improve relations between people?
- Does it provide relevant, useful, and accurate information?

Product: How well constructed is the document?

- Is the presentation of material orderly and coherent?
- Is design and formatting effective?
- Are the sentences grammatically correct?
- Does it use visuals effectively?
- Does it have a professional tone and style?

Production: How effectively was the document produced?

- Was the project well planned?

- Were research and invention well conducted?
- How did drafting, editing, proofreading go?
- Was collaboration successful?

The following is a general description of expectations for assignments for each grade:

A
Your project is of impeccable (or almost impeccable) quality in both content and format design, with no major weaknesses in any area. It provides adequate information that users need and effectively fulfills the intended purposes. Presentation is of professional quality. There're few to no mechanical errors.

B
Your project is of high quality in most of the major areas. It fulfills the user's needs and your intended purposes quite effectively. Presentation is quite professional. There're only a few mechanical errors.

C
Your project is of reasonable quality in most areas. It fulfills the user's needs and your intended purposes to a large extent, although major deficiencies are observable. Presentation is of semi-professional quality. There're some mechanical errors, but not to the extent of seriously affecting readers' comprehension.

D
Your project is of acceptable quality in most areas. It fulfills the user's needs and your intended purposes to some extent, but major deficiencies exist in several areas. Presentation quality is acceptable but low. There're quite some mechanical errors.

F
Your project is unacceptable in quality. It does not fulfill the user's needs or your intended purposes. Major deficiencies are observed in most areas. Presentation quality is poor, and there're too many mechanical errors.

Business Writing Course Schedule

商务英语写作日程安排

Modes of teaching: lecture, discussions, group work, Q&A, presentations, etc.
Assignments: 1)business memo (20%) 2) resume and cover letter

(30%) 3) promotional brochure (40%) 4) oral presentation (10%)

Day 1/第 1 天（3 小时）

In-Class Activities 授课内容	**Homework 课外作业**
• Instructor and studentself introductions • Course introduction • What is business writing • Memo writing • Audience, purpose, medium, and context • Sample memo analysis • Memo writing practice • Basic design principles: alignment, proximity • Writing tips: style	• Study sample memos • Revise memo written in class

Day 2/第 2 天（3 小时）

In-Class Activities 授课内容	**Homework 课外作业**
• Peer critique of memo design • Sample student memo analysis and discussion • Resume content design • Resume format design • Sample resume analysis • Individual work on resume design	• Resume design • Cover letter design

• Basic design principles: contrast, repetition • Cover letter content design • Cover letter format design • Sample cover letter analysis •	

Day 3/第 3 天（3 小时）

In-Class Activities 授课内容	**Homework 课外作业**
• Peer critique of resume and cover letter design • Sample student resume and cover letter analysis and discussion • *Introduction to the brochure design project* • Brochure groups (4 people each group) • Brochure content design • Sample brochure analysis • Group work: brainstorming, card sorting	• Brochure prototype

Day 4/第 4 天（3 小时）

In-Class Activities 授课内容	**Homework 课外作业**
• Peer critique of brochure front panel design • Brochure front panel design analysis • Brochure format design: layout and typography	• Brochure and oral presentation design

• Writing tips: persuasive writing • Brochure format design: colors and graphics • Peer critique of brochure design • *Introduction to oral presentation project* • Oral presentation design • Group work on brochure design	

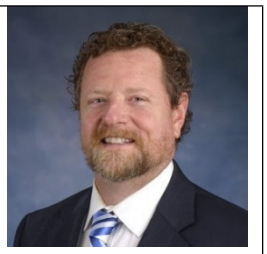
Day 5 /第 5 天（4 小时）

In-Class Activities 授课内容	**Homework 课外作业**
• Oral presentations and instructor comments (10-15 group presentations depending on the actual number of students, 10-15 minutes each) • Course wrap-up	• Brochure due

RHETORIC AND PERSUASIVE WRITING

修辞学和议论文写作

开课学院：外语系

<table>
<tr><td rowspan="5">任课教师 Instructor's Information</td><td>姓　　名 Name</td><td colspan="2">Dr. George Pullman</td><td rowspan="2">  </td></tr>
<tr><td>性　　别 Gender</td><td colspan="2">Male</td></tr>
<tr><td>国　　籍 Nationality</td><td colspan="2">American</td><td></td></tr>
<tr><td>职称/职务 Title</td><td>Professor</td><td>邮箱地址 Email</td><td>gpullman@gsu.edu</td></tr>
<tr><td>最终学位 Degree</td><td>Ph.D</td><td>任职单位 Work Place</td><td>Georgia State University 佐治亚州立大学</td></tr>
<tr><td rowspan="3">课程信息 Course Information</td><td colspan="2">课程名称(中英文对照) Course Name</td><td colspan="2">Rhetoric and Persuasive Writing</td></tr>
<tr><td>授课对象 Open to</td><td>All students</td><td>学 时 Class Hour</td><td>16</td></tr>
<tr><td>授课时间 Lecture Schedule</td><td>See syllabus</td><td>考核方式 Assessment Method</td><td>3 online quizzes
2 written assignments</td></tr>
</table>

Resume of Instructor

Professional Experience

2016 - Professor of Rhetoric

2011 - 2105 Director of the Center for Instructional Innovation
2007 - Director of Critical Thinking through Writing (GSU's QEP)
2004 - Director of Writing Across the Curriculum
1997 - Associate Professor, Georgia State University
1990 - 1997 Assistant Professor, Georgia State University, history and theory of rhetoric; electronic writing
1987 - 1990 Graduate Assistant, Rensselaer Polytechnic Institute
1985 - 1987 Teaching Assistant, University of British Columbia

Monographs

- *Writing Online: Rhetoric of the Digital Age*, Hackett, Indianapolis/Cambridge. 2016
- *A Rule Book for Decision Making*, Hackett, Indianapolis/Cambridge. 2014
- *Persuasion: History, Theory, Practice*, Hackett, Indianapolis/Cambridge. 2013

Edited Collections

- *Designing Web-Based Applications for 21st Century Writing Classrooms*. George Pullman and Baotong Gu. Eds. Amityville, NY: Baywood Press. 2012.
- *Content Management: Bridging the gap between theory and practice*. George Pullman and Baotong Gu. Eds. Amityville, NY: Baywood Press. 2008.

Course Description

This is a quick but thorough introduction to rhetoric and persuasive writing emphasizing clear and effective written English. The goal is to familiarize students with the best practices of persuasive writing.

Syllabus

Methods of Instruction

One hour lecture followed by one hour group activity involving discussion and writing assignment and one hour of assessment and reflection.

Methods of Assessment

2 In-class writing assignments
3 quizzes

Day 1

Introducing the presenter

A very little bit of information about Professor Pullman, education and noteworthy publications (vita)

Introducing the subject

Aristotle and Greek rhetoric – World scholars are only slowly becoming more aware of the mutual influence of East/West trade and interaction
Paradigm of Gk rhetoric is speech presented for approval to fellow male citizens of equal standing with equal power – one man one vote. The method of delivery, speech, and the context, an open air forum with perhaps as many as 6000 voting attendees, influenced what was valued. Easy to understand, easy to

remember, easily repeated, vivid, unambiguous, repetitive.

In a contemporary business setting we are talking about "the pitch," a relatively brief presentation often accompanied by slides that proves that the product or service being offered will solve the potential client's problems in the right way at the right price. The tendency among scientific and technical specialists is to focus on the product and its features. Persuasion requires focusing on the benefits of the product or service and the people involved.

Overriding principle, let audience draw conclusions by inference from evidence presented. Show don't tell, as the creative writers say. People are more committed to self-drawn conclusions because they feel as though they own them, they feel smart in arriving at them. While people will accept orders if they find themselves in a hierarchical settings or if they accept the goals of the leaders, they prefer to draw their own conclusions when making their own decisions. Leadership often entails creating intellectual and in some cases physical conditions that will lead people to draw the desired conclusion.

In a business setting these ideas lead to a specific method for being persuasive:

Look right – appearance but also examples of previous success

Feel right – Know what others are feeling, know how to alter feelings

Sound right – know the questions and the answers in advance. When an unexpected question is asked, have an effective response

Assignment

On your own for a moment, think of a recent experience when you were persuaded to do or think something, moments when you changed your mind or made up your mind. Explain what happened and why you think it happened. Now present your thoughts to the group you've been assignment to.

Day 2

Ethos – representation of self, knowledge, goodwill, efficacy

Succeeds	Fails
Knows what is good for those he's advising	means well, works hard, clueless
Wants what is good for those he's advising	knows what's needed but refuses to do it or pretends to do it, or does it so slowly as to never finish, not because incompetent but because he resents, fears, or otherwise harbors ill will
Does what he says he will	fails intentionally or unintentionally

Assignment

Write a 200 hundred word introduction to yourself that attempts to create a positive ethos. Share what you wrote with one or two others in the class. Read what they wrote. Offer and receive advice about how to create a positive ethos.

Day 3

Pathos – how emotions alter inferences and decisions

Temporary states leading to decisions found wanting in some way when emotions change

Assignment

Write a 200 word explanation of a decision you made that you now realize is one you made on the basis of a strong emotion. What was the circumstance? What were you feeling? What did you do? How do you feel about it now? When you are finished, if you feel like it, share it with someone else in the class and talk in general terms how feelings lead to decisions.

Logos – evidence and arguments

Topics

In the field of rhetoric, a topic is a pattern of thought that allows you to compare two or more competing things and find the better option. The practice is to try out all of the various possibilities to see which ones offer the most compelling arguments. In any given instance, some won't work at all and others will be unconvincing, but others will work well and a few might work extremely well. The rhetorical art is in quickly identifying those that will work well and building an argument from them.

- General patterns of persuasive thought

Assignment

On your own, using as many of the general topics as possible, create a list of arguments for why Nanjing Agricultural University is the best place to get a university degree. Join the other members of your group and see if you can extend the list. Choose a spokes-person and share with the rest of the class what your group came up with.

Logos – evidence and arguments continued

Enthymemes

An enthymeme is basically a debate-worthy assertion followed by some reason to believe it is true. Often the reason rests on a further reason readily supplied by the audience and left unsaid by the speaker so that he or she isn't perceived as tedious or too precise and so that the audience can feel smart because it can fill in the gaps on its own and by doing so it is owning the argument, participating directly in it, and therefore starting to believe it.

E.G.:

Assertion: **A graduate degree is more valuable** (a greater good) **than an undergraduate degree**

Reason: **because undergraduate degrees are more common** [a less tricky assertion would be, because graduate degrees are less common, but by inverting it we make the audience think of a second without running much of a risk of them getting confused or losing the train of thought.]

Unspoken reason: and what is rarer is better than what is more common

We could add weight by adding topics. What is harder to achieve is more rare; what takes a great deal of time and money is more rare; what is possessed by a small group of select people is more rare; etc. The more ways in which something is rare, the more rare people will tend to think it is and thus the closer to unique. And people think that what is unique is more valuable, especially if it is unique to them. That's why your dog is a family member and other people's dogs are dogs.

Assignment
Create an enthymeme for each of the following topics or substitute others from chapter 6, book one. For those that are already enthymemes, like number 3 below, extend it enthymeme.

1. That is good of which the contrary is bad
2. That which is greater than it should be is bad
3. That also is good on which much labor or money has been spent; the mere fact of this makes it seem good, and such a good is assumed to be an end -- an end reached through a long chain of means; and any end is a good.
4. Any end is good.
5. Good, too, are things that are a man's very own, possessed by no one else, exceptional; for this increases the credit of having them
6. Good also are the things by which we shall gratify our friends or annoy our enemies;
7. and the things chosen by those whom we admire.
8. [We value those things] for which we are fitted by nature or experience, since we think we shall succeed more easily in these.

Day 4

Arrangement – Coherent and persuasive structures

Explanation of the Concept

When we draft, we tend to put the sentences down as they occur to us, which isn't always the best order to read them in.

There's an exchange in a famous dialogue by Plato, called *Phaedrus*, during which this idea is discussed. I've paraphrased it below.

> **Soc.** Lysias appears to have jumbled his sentences, begun at the end instead of the beginning. Don't you think, Phaedrus?
> **Phaedr.** Yes, indeed, Socrates; he begins at the end.
> **Soc.** There's no logical order to the sentences. He seems to have written them down as they occurred to him. Every discourse ought to be a living creature, having a body of its own and a head and feet; there should be a beginning, a middle, and an end, adapted to one another and to the whole?
> **Phaedr.** Certainly.
> **Soc.** Consider the following poem:
>
> I am a maiden of bronze and lie on the tomb of Midas.
> So long as water flows and tall trees grow.
> So long here on this spot by his sad tomb abiding.
> I shall declare to passers-by that Midas sleeps below.
>
> **Soc.** In this rhyme whether a line comes first or comes last makes no difference.
> **Phaedr.** Indeed.

The point: If the order of a paragraph's sentences can be shuffled with no loss of meaning, the paragraph is unnecessarily hard to read.

Common Patterns

1. Given / New
2. General to specific – the funnel
3. Spatial – contiguity (side by side), perspective (vanishing point)
4. Logical – if/then; when/do
5. Chronological
6. Narrative (drama, suspense)

Resource

- arrangement

Assignment

Correct the structure of each of the following paragraphs. Compare your answers with others in your group.

Day 5

Style – Effective English prose composition: Brevity and clarity

- sentence revision
- practice revising sentences

Assignment

Revise 20 sentences from the database at random.

AMERICAN WESTWARD MOVEMENT AND FRONTIER HISTOYR

美国西进运动及拓边史

开课学院：外语系

<table>
<tr><td rowspan="5">任课教师 Instructor's Information</td><td>姓　　名 Name</td><td colspan="2">Frank Michael Chua</td><td rowspan="3">  </td></tr>
<tr><td>性　　别 Gender</td><td colspan="2">Male</td></tr>
<tr><td>国　　籍 Nationality</td><td colspan="2">American</td></tr>
<tr><td>职称/职务 Title</td><td>Associate Professor of History</td><td>邮箱地址 Email</td><td>fchua@mansfield.edu</td></tr>
<tr><td>最终学位 Degree</td><td>Ph.D</td><td>任职单位 Work Place</td><td>Mansfield University of Pennsylvania, USA</td></tr>
<tr><td rowspan="3">课程信息 Course Information</td><td colspan="2">课程名称(中英文对照) Course Name</td><td colspan="2">American Westward Movement and Frontier History</td></tr>
<tr><td>授课对象 Open to</td><td>undergraduates</td><td>学 时 Class Hour</td><td>24 hours</td></tr>
<tr><td>授课时间 Lecture Schedule</td><td>July 7-13</td><td>考核方式 Assessment Method</td><td>Quizzes, presentations, writing assignments</td></tr>
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Resume of Instructor

Associate Professor of History at Mansfield University from 1999-present. Teaches American History and Asian History courses. Ph.D History (Pennsylvania State University)

Course Description

Frontier History of American Westward Movement since Colonial Period to 20th Century. Examines the roots of American individualism and commercial enterprise as a result of the frontier westward initiative.

Syllabus

Course Objectives

The American Frontier West often conjures images as dictated by popular culture: John Wayne movies, Custer's Last Stand, gun duels, mining frontier towns, cowboys and their cattle drives, and of course, marauding Indians with

their ubiquitous bows and arrows. However, these all too familiar images are only minute and often misleading visuals of the Frontier West. The Frontier West is as complex and diverse as the North American continent itself. In fact, the concept of the Frontier or the West has shifted and evolved over time; from the lush East as witnessed by the early European settlers to the arid West as depicted in 19th Century American history. This course will address some of the more varied voices and contrasting cultures and sub-cultures that made up the American West. Although not exhaustive, this introductory course will assist students in having a better understanding of the American West as it survives today in western and mid-western industries or even in the rugged individual or self-made entrepreneur that is very much a part of the American identity.
In the context of this course, it is also important that differences in histories and societies between China and America will be highlighted. Students will understand the differences while also finding common ground in values and aspirations between American and Chinese cultures.

There are no books for this class but I will assign readings and visual aids such as film documentaries.

Course Assessments
Quizzes, Writing Assignments, Presentations.

Topics and Lectures Schedule

Jul 7

Lesson 1Course Introduction and student/faculty introductions

Lesson 2 Age of Discovery and Atlantic Crossings

Lesson 3Early Frontier Jamestown and Virginia

Jul 8

Lesson 4 French and Indian War over Ohio Valley

Lesson 5The American Revolution

Lesson 6The Lewis And Clark Expedition

Jul 9

Lesson 7 Manifest Destiny and Texas Revolution

Lesson 8 Mexican American War and Treaty of Gualdalupe Hidalgo

Lesson 9 California Gold Rush, Mormon and Oregon Trails

Quiz One

Jul 10

Lesson 10 Destruction of the Bison

Lesson 11 Mining the West

Lesson 12 Indian Wars 1860s-1880s

Jul 11

Lesson 13 The Battle of Little Big Horn (Custer's Last Stand)

Lesson 14 Cattle Drives, Ranches, and the American Cowboy

Lesson 15 Federal Land Grants and Westward Settlement

Lesson 16 Western Railroad Expansion

Quiz Two

Jul 12

Lesson 17 *The Significance of the Frontier in American History* by Frederick J. Turner

Lesson 18 Early Western Conservation and Public Projects

Lesson 19 Industrializing the West

Lesson 20 The West in Movies/TV Shows

Group Presentation/Discussion

Jul 13

Lesson 21 *Magnificent Seven*

Lesson22 Selling the West

Lesson 23Modern Western Industries and the Pacific Rim Connection

Lesson 24 Frontier Identity in American Politics and Culture

Quiz Three

Group Presentation/Discussion

DICTIONARY LEARNING BASED MEDICAL IMAGE FUSION

基于字典学习的医学图像融合

开课学院：外语系

<table>
<tr><td rowspan="6">任课教师 Instructor's Information</td><td>姓　　名
Name</td><td colspan="2">Guanqiu Qi</td><td rowspan="3"></td></tr>
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Gender</td><td colspan="2">Male</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">Chinese</td></tr>
<tr><td>职称/职务
Title</td><td>Assistant Professor</td><td>邮箱地址
Email</td><td>gqi@mansfield.edu</td></tr>
<tr><td>最终学位
Degree</td><td>Ph.D.</td><td>任职单位
Work Place</td><td>Mansfield University of Pennsylvania, USA</td></tr>
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<tr><td rowspan="3">课程信息 Course Information</td><td colspan="2">课程名称(中英文对照)
Course Name</td><td colspan="2">Dictionary learning based medical image fusion
基于字典学习的医学图像融合</td></tr>
<tr><td>授课对象
Open to</td><td>undergraduates</td><td>学 时
Class Hour</td><td>24 lessons</td></tr>
<tr><td>授课时间
Lecture Schedule</td><td>Jul. 7–13, 2019</td><td>考核方式
Assessment Method</td><td>Coding exercises</td></tr>
</table>

Resume of Instructor

EMPLOYMENT

- Aug. 2018 – Now Assistant Professor Mansfield University of Pennsylvania

EDUCATION

- Aug.2008 – Nov.2014 Ph.D. in Computer Science Arizona State University

SELECTED JOURNAL ARTICLE

1. Z. Zhu, M. Zheng, **G. Qi**, D. Wang, and Y. Xiang, *"A Phase Congruency and Local Laplacian Energy based Multi-modality Medical Image Fusion Method in NSCT Domain"*, IEEE Access, to be published
2. **G. Qi**, M. Zheng, Z. Zhu, and R. Yuan, *"A DT-CWT based Infrared-visible Image Fusion Method for Smart City"*, International Journal of Simulation and Process Modelling, to be published
3. Y. Li, Y. Sun, M. Zheng, X. Huang, **G. Qi**, H. Hu, and Z. Zhu, *"A Novel Multi-Exposure Image Fusion Method Based on Adaptive Patch Structure"*,

Special Issue on Entropy in Image Analysis, Entropy, 20(12):935, 2018

4. **G. Qi**, Z. Zhu, Y. Chen, J. Wang, Q. Zhang, and F. Zeng, *"Morphology-based Visible-Infrared Image Fusion Framework for Smart City"*, International Journal of Simulation and Process Modelling, Special Issue on Computational Thinking and the Development of Complex Systems, 13(6):523-536, 2018
5. Y. Li, Y. Sun, X. Huang, **G. Qi**, M. Zheng, and Z. Zhu, *"An Image Fusion Method Based on Sparse Representation and Sum Modified-Laplacian in NSCT Domain"*, Special Issue on Women in Information Theory 2018, Entropy, 20(7):522, 2018
6. **G. Qi**, Q. Zhang, F. Zeng, J. Wang, and Z. Zhu, *"Multi-focus Image Fusion via Morphological Similarity Based Dictionary Construction and Sparse Representation"*, Special Issue on Internet of Things and Intelligent Devices and Services, CAAI Transactions on Intelligence Technology, 3(2):83-94, 2018
7. Z. Zhu, **G. Qi**, Y. Chai, H. Yin, and J. Sun, *"A Novel Visible-Infrared Image Fusion Framework for Smart City"*, International Journal of Simulation and Process Modelling, 13(2):144-155, 2018
8. Z. Zhu, H. Yin, Y. Chai, Y. Li, and **G. Qi**, *"A Novel Multi-modality Image Fusion Method Based on Image Decomposition and Sparse Representation"*, Information Sciences, 432:516-529, 2018
9. **G. Qi**, J. Wang, Q. Zhang, F. Zeng and Z. Zhu, *"An Integrated Dictionary-Learning Entropy-Based Medical Image Fusion Framework"*, Future Internet, 9(4):61, 2017
10. K. Wang, **G. Qi**, Z. Zhu, and Y. Chai, *"A Novel Geometric Dictionary Construction Approach for Sparse Representation Based Image Fusion"*, Special Issue on Information Theory in Machine Learning and Data Science, Entropy, 19(7):306, 2017
11. Z. Zhu, **G. Qi**, Y. Chai, and P. Li, *"A Geometric Dictionary Learning Based Approach for Fluorescence Spectroscopy Image Fusion"*, Special Issue on Optics and Spectroscopy for Fluid Characterization, Applied Sciences, 7(2):161, 2017
12. Z. Zhu, **G. Qi**, Y. Chai, and Y. Chen, *"A Novel Multi-focus Image Fusion Method Based on Stochastic Coordinate Coding and Local Density Peaks Clustering"*, Special Issue on Future Intelligent Systems and Networks, Future Internet, 8(4):53, 2016

BOOK

1. W. Tsai,and **G. Qi**,*"Combinatorial Testing in Cloud Computing"*, SpringerBriefs in Computer Science, Springer, Nov., 2017
2. A. Anvari-Moghaddam, J. Guerrero, Z. Zhu, **G. Qi**, and etc, *"Advances in Integrated Energy Systems Design, Control and Optimization"*, Multidisciplinary Digital Publishing Institute (MDPI), Aug., 2017

SCHOLAR ACTIVITY

1. Program Committee, The International Workshop on Blockchain in Autonomous Decentralized Systems (BcADS 2019), in conjunction with the 14th International Symposium on Autonomous Decentralized Systems (ISADS 2019), Apr.8-10, 2019, Utrecht, Netherlands
2. Guest Editor, International Journal of Simulation and Process Modelling, Special Issue on ”Internet of Things and Smart City Technologies”, 2018

Special Session Program Chair, 2018 International Symposium on Simulation and Process Modelling (ISSPM), Special Session on Internet of Things and Smart City Technologies (IoTSCT 2018), Jul.21-22, 2018, Shenyang, Liaoning, China

Course Description

1. Basic concepts of dictionary learning, image fusion
2. Existing dictionary learning based image fusion methods and related techniques
3. Programmig of dictionary learning based image fusion
4. Analysis of fused medical image
5. Related programming exercises

1. 字典学习和图像融合的基本概念
2. 当下的基于字典学习的图像融合方法及其相关技术
3. 基于字典学习的编程
4. 融合的医学图像分析
5. 相关的编程练习

Syllabus

1. 3 lessons: Basic concepts of dictionary learning, image fusion
2. 10 lessons: Existing dictionary learning based image fusion methods and related techinques
3. 4 lessons: Programmig of dictionary learning based image fusion
4. 3 lessons: Analysis of fused medical image
5. 4 lessons: Related programming exercises

INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (GIS)

地理信息系统概论

开课学院：外语系

任课教师 Instructor's Information	姓　　名 Name	Scott Roger Zubek		
	性　　别 Gender	Male		
	国　　籍 Nationality	USA		
	职称/职务 Title	Adjunct Professor, Geosciences Dept.	邮箱地址 Email	szubek@mansfield.edu
	最终学位 Degree	Geographic Information Science (M.A.)	任职单位 Work Place	Mansfield University of Pennsylvania, USA
课程信息 Course Information	课程名称(中英文对照) Course Name	Introduction to Geographic Information Systems (GIS) 地理信息系统概论		
	授课对象 Open to	All Students	学 时 Class Hour	24
	授课时间 Lecture Schedule	Sunday (7th) thru Friday (12th), 10am–12pm/1pm–3pm	考核方式 Assessment Method	Formative daily assessments to evaluate progress – 1 (one) summative assessment at conclusion of course

Resume of Instructor

March 2012 – Present (Wellsboro/Tioga County, Pennsylvania)
Director of Geographic Information Systems (GIS) Services Department: Tioga County (Pennsylvania) Board of Commissioners

- Responsible for reporting directly to the Chief County Clerk, under whose general supervision performs supervisory and technical GIS administrative work in managing and directing all GIS activities for Tioga County, Pennsylvania.

August 2012 – April 2013 / August 2017 – Present (Mansfield/Tioga County, Pennsylvania)
Adjunct Professor, Geogrpahic Infromation Systems (GIS) Technology & Computer Aided Design (CAD) : Mansfield University of Pennsylvania

Instruction of 3-4 credit undergraduate-level courses in GIS/GPS and CAD related technologies.

Course Description

A contemporary Geographic Information System (GIS) is a system of computer hardware, software, and procedures designed to support the capture, management, manipulation, analysis, modeling and display of spatially referenced data for solving complex planning and management problems. GIS applications utilize geospatially produced information in the form of tabular data, databases, and many other digital sources to produce analytical products such as maps & reports.

In this course, students will relate underlying geographic concepts such as world coordinate systems and projections to advanced GIS technical concepts such as vector data creation & editing; topology; data storage and exchange formats; geoprocessing applications; and map layouts in both hard-copy (paper or PDF generation) and web map/app format. Students will learn the technology via the latest version of the world's leading GIS software systems (ArcGIS Desktop v.10.6.1 & ArcGIS Pro v.2.x) produced by the Environmental Systems Research Institute (ESRI) in order to complete most exercises and assignments.

This course will also focus on several higher order GIS concepts.

- Mobile-based Global Positioning Systems (GPS) solutions & data collection methodologies utilizing software such as ESRI's Collector for ArcGIS system, commonly referred to as "Collector-App."
- Producing web maps and apps via ESRI's ArcGIS Online mapping platform.
- Mapping and analyzing elevation and topographic data in the 3D environment.

Syllabus

Day 1: Course Introduction & Syllabus Review
-History/Concepts/Nomenclature of GIS
-Familiarization with ESRI software – The ArcGIS Platform
-External data storage/file management/ArcGIS Pro project files

Day 2: Working with Spatial Data and Building (File) Geodatabases
-Creating GIS data sources and working with attribute tables
-Working with projections & processing data from external sources

Day 3: GIS Map Design and GIS Outputs Associated with Projects
-Working with layers – symbolizing and labeling with ArcMap/ArcGIS Pro
-Building map layouts for plotting/export and creating web maps/apps

Day 4: Geoprocessing and Digitizing
-Understanding automated/mass-editing tools and processes
-Understanding the tools, creation, & editing processes for vector & raster data

Day 5: Geocoding Processes and Spatial Analysis
-Geocoding processes using zip codes and streets
-Working with proximity and network analysis tools

Day 6: Raster GIS and 3D GIS
-Symbolizing raster maps and creating hill-shades
-Working with 3D scenes and 3D features (buildings, bridges, etc.)

WONDER IN LIFE SCIENCES

生命科學的奇蹟

开课学院：中药学院

<table>
<tr><td rowspan="5">任课教师
Instructor's Information</td><td>姓　　名
Name</td><td colspan="2">陳新</td><td rowspan="2">  </td></tr>
<tr><td>性　　别
Gender</td><td colspan="2">男</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">美國</td><td></td></tr>
<tr><td>职称/职务
Title</td><td>教授</td><td>邮箱地址
Email</td><td>xchen@umac.mo</td></tr>
<tr><td>最终学位
Degree</td><td>中醫學博士
免疫學博士</td><td>任职单位
Work Place</td><td>澳門大學
中華醫藥研究院</td></tr>
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Wonder in Life Sciences</td></tr>
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Class Hour</td><td>24 學時</td></tr>
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Lecture Schedule</td><td>3</td><td>考核方式
Assessment Method</td><td>Presentation and test</td></tr>
</table>

Resume of Instructor

陳新博士于1984年及1987年在湖北中医药大学获得中医学士及硕士学位，1991 年在廣州中醫藥大學獲得中醫學博士學位，其後他從荷蘭.内梅亭大學獲得免疫學博士學位。陳新博士從 1991 年到 1998 年在深圳市中西醫結合研究所/深圳市第二人民醫院從事臨床及科研工作。其後，陳新博士在英國朴茨茅斯大學藥學及生物醫學學院接受博士後訓練。他於 1999 年加入美國國家癌症研究所(NCI)/美國國立衛生研究院(NIH)的分子免疫調節實驗室(LMI)，先後擔任科學家 II 及高級科學家。2003 年至 2014 年，陳新博士還兼職在 NIH FAES 研究生院從事教學工作。自 2014 年 10 月起，他任職於澳門大學，現為該校中藥質量研究國家重點實驗室及中華醫藥研究院的生物醫學教授，同時也是美國國家腫瘤研究所客座研究員。自 2000 年以來，陳新博士發表 SCI 論文 80 多篇，現擔任 Journal of Leukocyte

Biology, Cellular and Molecular Immunology, Chinese Medicine 等雜誌編委以及 Frontiers in Immunology 客座副主編，并作為特約審稿人為 60 多個國際學術刊物審閱稿件，他是 10 多個國際科研基金評審人。陳博士現爲美國免疫學會會員、白細胞生物學會會員。

Course Description

This course will address some of the most exciting areas in life sciences, including Chinese medicine/acupuncture, basic immunology, cell biology, cytokine/chemokine, cancer immunology and immunotherapy. Successful completion of the course will provide students with broad fundamental knowledge in life sciences, especially in immunology.

本課程將介紹生命科學中的一些最令人興奮的領域，包括中醫/針灸，基礎免疫學，細胞生物學，細胞因子/趨化因子，癌症免疫學和免疫療法。成功完成課程將為學生提供生命科學方面的廣泛基礎知識，特別是免疫學方面的知識。

Syllabus

1. Chinese Medicine and Acupuncture: a real Science or a Voodoo Science?

   中醫和針灸：真正的科學還是偽科學?

2. Health and Illness: East vs West View

   健康與疾病：東西方的觀點

3. Our Immune System: A Wonderful World

   我們的免疫系統：一個奇妙的世界

4. The Receptor that Control the “Wandering Cells”: Bright-side and Dark-side

   控制“流浪細胞”的受體：光明面和黑暗面

5. Tumor Necrosis Factor is a Tumor Promoting Factor: it is a question

   腫瘤壞死因子還是是腫瘤促進因子：這是一個問題

6. How to Educate Your Immune Cells to Be a Tumor Killer

   如何教育你的免疫細胞成為腫瘤殺手

ESSENTIAL IMMUNOLOGY

免疫学基础

开课学院：中药学院

<table>
<tr><td rowspan="5">任课教师 Instructor's Information</td><td>姓　　名 Name</td><td colspan="2">Rong L. He</td><td rowspan="3"></td></tr>
<tr><td>性　　别 Gender</td><td colspan="2">Female</td></tr>
<tr><td>国　　籍 Nationality</td><td colspan="2">USA</td></tr>
<tr><td>职称/职务 Title</td><td>Associate Professor</td><td>邮箱地址 Email</td><td>rhe@csu.edu</td></tr>
<tr><td>最终学位 Degree</td><td>Ph.D</td><td>任职单位 Work Place</td><td>Chicago State University</td></tr>
<tr><td rowspan="3">课程信息 Course Information</td><td colspan="2">课程名称(中英文对照) Course Name</td><td colspan="2">Essential Immunology 免疫学基础</td></tr>
<tr><td>授课对象 Open to</td><td>All CPU undergraduates</td><td>学 时 Class Hour</td><td>24</td></tr>
<tr><td>授课时间 Lecture Schedule</td><td>July 7–12th, 6 4 h lectures</td><td>考核方式 Assessment Method</td><td>Student Presentation</td></tr>
</table>

Resume of Instructor

Dr. Rong L. He is an Associated Professor in the Dept. of Biological Sciences at Chicago State University. Dr. He has about 20 years of research and teaching experience on immunology with about 40 publications. Her research is focusing on the understanding the mechanisms of immune cell activation and inactivation. She is also working on classification of virus and bacterial to predict pathogens using bioinformatics tool. She has awarded NIH, NSF and AHA grants.

Course Description

This course summaries the essential knowledge of how organisms define and defend themselves from various pathogens. It provides a background to the functions of innate and adaptive immunity with respect to the organs, cells and predominant molecules of the immune system. These principles build a platform for understanding the mechanisms of normal immune function. The course requires students to read, present and discuss the scientific research papers. There will be a student debate on the last day which is required for everyone to participate.

Syllabus

7 月 7 (3 h)	Important concepts for understanding the mammalian immune response
7 月 8 (3 h)	Cells, organs, and microenvironments of the immune system
7 月 9 (3 h)	The organization and expression of lymphocyte receptor genes
7 月 10 (3 h)	Innate immunity related paper presentation and discussion
7 月 11 (3 h)	Immune receptor signaling system related paper presentation and discussion
7 月 12 (3 h)	Lymphocyte receptor generation related paper presentation and discussion; Infectious diseases and vaccines (student debate)

NEUROPHRAMACOLOGY

神经药理学

开课学院：中药学院

<table>
<tr><td rowspan="5">任课教师
Instructor's
Information</td><td>姓　　名
Name</td><td colspan="2">Michael X.Zhu</td><td rowspan="2">  </td></tr>
<tr><td>性　　别
Gender</td><td colspan="2">男</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">美国</td><td></td></tr>
<tr><td>职称/职务
Title</td><td>教授</td><td>邮箱地址
Email</td><td>michael.x.zhu@uth.tmc.edu</td></tr>
<tr><td>最终学位
Degree</td><td>博士</td><td>任职单位
Work Place</td><td>德克萨斯大学健康科学中心</td></tr>
<tr><td rowspan="3">课程信息
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Course Name</td><td colspan="2">Neuropharmacology
神经药理学</td></tr>
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Class Hour</td><td>24</td></tr>
<tr><td>授课时间
Lecture
Schedule</td><td>2019.07.07–
2019.07.12</td><td>考核方式
Assessment
Method</td><td>课堂Presentation（60%），课堂问答（40%）</td></tr>
</table>

Resume of Instructor

Michael X. Zhu（朱曦），1984 年毕业于复旦大学生物学专业获学士学位， 1991 年毕业于美国德克萨斯大学休斯顿分校获生物化学博士学位，1991 年至 1994 年在美国德克萨斯大学休斯顿分校贝勒医学院从事博士后研究。1994 年至 1997 年在加州大学洛杉矶分校做助理研究员。1997 年至 2003 年被美国俄亥俄州立大学聘为助理教授，2003 年被聘为副教授。2010 年至今被德克萨斯大学健康科学中心聘为教授。2010 年被聘为中科院上海药物所特聘研究员。朱曦教授是许多国际知名期刊的审稿人，并且是 Journal of Cellular Physiology 的副主编和 Molecular Pharmacology 的编委。

朱曦教授长期从事离子通道与受体的调控和生理病理功能的研究，主要研究对象为 TRP 离子通道，NAADP 溶酶体钙释放受体，电压门控钙离子

通道和 G 蛋白偶联受体。在全世界首先克隆 TRPC 离子通道并实现其功能表达。朱曦教授团队在 Cell, Nature, Nat. Neurosci., PNAS, J. Biol. Chem. 等具有重要影响力的期刊发表上百篇研究论文。

Course Description

本课程将涵盖细胞信号传导的基本原理，主要介绍现代药理学中膜蛋白受体，离子通道，细胞内信使和电信号产生和作用机理，以身体主要感知系统：如视觉，嗅觉，味觉，以及痛和痒为例调动学生对生物医学研究和新药研发的兴趣。本门课程同时重点介绍如何从事科研，从课题设计到执行，口头与书面交流的能力，以及基金申请和论文写作与发表进行完整系统的阐述。希望学生对科研的概念及实践能有初步认识，建立正确的思考与解决问题的方法，为将来从事科研打下较好的基础。

Syllabus

2019-7-7 Lecture 1: Basic principle of cell signaling – receptors and channels （4 小时）

2019-7-8 Lecture 2: Basic principle of cell signaling – Intracellular messengers （4 小时）

2019-7-9 Lecture 3: Electric signaling – Communications between neurons, major sensation of the body（4 小时）

2019-7-10 Lecture 4: Research design and execution, Project development-Testable hypothesis – The story of capsaicin receptor (TRPV1), discovery, function and drug development （4 小时）

2019-7-11 Lecture 5: Research strategies, literature, and presentation (2 小时). Student presentations (first two groups, 2 小时): students will be divided in 6 groups each given specific topics on research design, paper writing and presentation skills on the first day of the class. Each student will be required to give a short oral presentation on the chosen topic and will be graded based on their presentation.

2019-7-12 Student presentation (remaining four groups, 4 小时）.

UTILIZATION OF NATURAL RESOURCESAS BIOACTIVE INGREDIENT FOR MEDICINE, COSMETICS, FUNCTIONAL FOODS AND AROMA

天然功能性成分在药物、化妆品、功能食品的应用及植物芳香成分研究

开课学院：中药学院

<table>
<tr><td rowspan="5">任课教师
Instructor's
Information</td><td>姓　　名
Name</td><td colspan="2">Kuniyoshi Shimizu</td><td rowspan="3"></td></tr>
<tr><td>性　　别
Gender</td><td colspan="2">男 male</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">日本
Japanese</td></tr>
<tr><td>职称/职务
Title</td><td>副教授
Associate Professor</td><td>邮箱地址
Email</td><td>shimizu@agr.kyushu-u.ac.jp</td></tr>
<tr><td>最终学位
Degree</td><td>博士
PhD
(Agriculture)</td><td>任职单位
Work Place</td><td>九州大学
Kyushu University, Japan</td></tr>
<tr><td rowspan="3">课程信息
Course
Information</td><td colspan="2">课程名称(中英文对照)
Course Name</td><td colspan="2">Utilization of natural resourcesas bioactive ingredient for medicine, cosmetics, functional foods and aroma
天然功能性成分在药物、化妆品、功能食品的应用及植物芳香成分研究</td></tr>
<tr><td>授课对象
Open to</td><td>中药学院学生
The TCM colledge</td><td>学 时
Class Hour</td><td>16</td></tr>
<tr><td>授课时间
Lecture Schedule</td><td>7.7-7.11</td><td>考核方式
Assessment Method</td><td>综述
Review</td></tr>
</table>

Resume of Instructor

Kuniyoshi Shimizu, Ph. D, male, natural product chemist, graduated from Faculty of Agriculture, Kyushu University in 2000. Then, he worked in Venture Business Laboratory, Kyushu University as a postdoctoral fellow (2000-2002). In 2002, he returned to Faculty of Agriculture, Kyushu University as an assistant professor. Then, in 2014, he got prompt to an associated professor. He has focused on the development of biologically natural products from plants and mushrooms. He got The Japan Wood Research Society Progress Award in 2006 and The Japan Wood Research Society Award in 2014. Now he has published more than 140 papers.

Course Description

对药物植物、化妆品、功能食品等多个方面以及植物芳香成分的研究进展进行介绍，其中以本部门深入研究的灵芝、植物及其香性成分研究进展为具体实例进行阐述。

Utilization of natural resources is getting expanding for several areas such as natural medicine, cosmetics, functional foods, aroma et al. In this course, some introductory research topic (mushroom, natural plants, aroma et al) are illustrated for understanding how to utilize natural resources.

Syllabus

1. 灵芝功能食品的研究进展 （6 学时，2 天）

2. 植物芳香性成分对人体生理及心理的影响（10 学时，3 天）

1: **Utilization of mushroom (Ganoderma) as a functional food.**
2018.7.7 The progression of chemical components from Ganoderma(3 school hours)
2018.7.8 Progression of pharmacological study about Ganoderma(3 school hours)
2**: Utilization of aroma based on its physiological and psychological function to human.**
2019.7.9 The progression of aroma from natural resource(4 school hours)
2019.7.10 Physiological functionsof aroma components (4 school hours)
2019.7.11 Psychological function of aroma compounds (2 school hours)

TRANSDERMAL DELIVERY AND COSMETIC APPLICATIONS
经皮给药和化妆品应用

开课学院：药学院

<table>
<tr><td rowspan="5">任课教师
Instructor's Information</td><td>姓　　名
Name</td><td colspan="2">顾晓晨</td><td rowspan="3">  </td></tr>
<tr><td>性　　别
Gender</td><td colspan="2">男</td></tr>
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Nationality</td><td colspan="2">加拿大</td></tr>
<tr><td>职称/职务
Title</td><td>教授（终身）</td><td>邮箱地址
Email</td><td>Xiaochen.Gu@umanitoba.ca</td></tr>
<tr><td>最终学位
Degree</td><td>博士</td><td>任职单位
Work Place</td><td>加拿大曼尼托巴大学药学院</td></tr>
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Course Information</td><td colspan="2">课程名称(中英文对照)
Course Name</td><td colspan="3">经皮给药和化妆品应用
Transdermal Delivery and Cosmetic Applications</td></tr>
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Class Hour</td><td>16</td></tr>
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Lecture Schedule</td><td>2019.7.8-7.11</td><td>考核方式
Assessment Method</td><td>课堂讨论
文献综述</td></tr>
</table>

Resume of Instructor

顾晓晨，加拿大曼尼托巴院长、教授、博士生导师，教育部海外名师。于 1990 年获得中国药科大学药学院博士学位，1996 年加入加拿大曼尼托巴大学，已拥有二十年丰富的教学和科研经历。科研方向为新型药物制剂的研发，在药物透皮吸收、肾上腺素舌下给药、靶向给药新剂型等研究领域都有独特贡献。其研究得到了加拿大卫生研究所(CIHR)、加拿大创新基金会(CFI)、曼尼托巴卫生研究委员会(MHRC)和制药业的支持。他还在加拿大、美国、中国和巴西建立了大量的国际研究合作关系，是 Elsevier 和开放皮肤学（The Open Dermatology）的编辑委员会成员。顾晓晨教授是药剂学领域名师、专家，一直致力于药剂学专业的教育、药物制剂产品设计研发以及药剂学领域的基础研究中，拥有独到研究特长和技术领域，并已

在该研究领域中建立了自己的地位，是药剂学领域的技术和学术权威。顾晓晨教授已和中国药科大学建立了广泛的合作交流关系，他已和药剂教研室多位教授共同发表高质量研究论文 7 篇，并已在研究生院开设国际化公开课两次。

Course Description

课程目的：通过暑期国际课程（强化课程）的学习，学生将了解各种剂型的概念，药物输送，药物剂型与递送优化之间的临床相关性和结果。课程的主题将重点关注皮肤和化妆品的局部应用，经皮和透皮递送方法，药物制剂中的新方法和成分，并提供皮肤增强和化妆品应用的最新发展。

Upon successful completion of this intensive course, the students will understand the concepts of various dosage forms, drug delivery, and the clinical relevance and outcome between dosage forms and delivery optimization. The summer course will focus on various subjects of topical, percutaneous and transdermal delivery methods for skin and cosmetic applications, discuss on new approaches and ingredients in pharmacosmetical preparations, and provide latest development in skin enhancement and cosmetic applications.

Syllabus

1) Topical and transdermal drug delivery;
2) Skin permeation enhancement approaches;
3) Pharmaceutical and pharmacosmetical use of topical delivery;
4) Natural and herbal ingredients in cosmetic applications;
5) Nanotechnology and cosmetics
6) Physical methods for skin enhancement

ADVANCED DRUG DELIVERY SYSTEM

高端药物递送系统

开课学院：药学院

<table>
<tr><td rowspan="5">任课教师
Instructor's Information</td><td>姓　　名
Name</td><td colspan="2">Richard A Gemeinhart</td><td rowspan="3">  </td></tr>
<tr><td>性　　别
Gender</td><td colspan="2">男</td></tr>
<tr><td>国　　籍
Nationality</td><td colspan="2">美国</td></tr>
<tr><td>职称/职务
Title</td><td>教授</td><td>邮箱地址
Email</td><td>rag@uic.edu</td></tr>
<tr><td>最终学位
Degree</td><td>Ph.D.</td><td>任职单位
Work Place</td><td>The University of Illinois at Chicago</td></tr>
<tr><td rowspan="3">课程信息
Course Information</td><td colspan="2">课程名称(中英文对照)
Course Name</td><td colspan="2">高端药物递送系统
Advanced Drug Delivery System</td></tr>
<tr><td>授课对象
Open to</td><td>15级临药，16-17级药学（包括生科基地、理科基地）、药物化学、药物分析、药物制剂、制药工程、食品质量与安全、临床药学、生物制药、生物工程、生物技术、海洋药学、中药学、中药资源与开发、中药制药</td><td>学 时
Class Hour</td><td>24</td></tr>
<tr><td>授课时间
Lecture Schedule</td><td>4 hrs × 6</td><td>考核方式
Assessment Method</td><td>Group Presentations + Exam</td></tr>
</table>

Resume of Instructor

Gemeinhart, Richard A.

1.Purdue University（PhD）

2.Departments of Biopharmaceutical Sciences, Bioengineering, Chemical Engineering, and Ophthalmology and Visual Sciences

The University of Illinois at Chicago
Professor of Pharmaceutics and Bioengineering, Director of Graduate Studies, and UIC Research Integrity Officer

Course Description

This course deals with the science of delivery of drugs to the body and the dosage forms that enable drug delivery. Material to be covered will include selected properties of drug substances that have a critical impact on the delivery of drugs to the human body, the dosage forms available for drug administration, and the therapeutic effect with respect to physical and chemical properties of drugs. These topics will provide the knowledge base upon which a pharmaceutical scientist will depend to make rational decisions about drug product development. The objective of this course consists of (1) to understand the relationship between dosage forms and drug delivery and the physicochemical properties and structures of drug molecules; (2) to comprehend the underlying principles of drug product development and be able to apply them to engage in critical thinking of drug stability, formulation and delivery; (3) to identify the relevant information from literature regarding a drug or drug product in order to solve specific questions; and (4) to build up the knowledge in drug development and delivery and develop problem-solving skills. In particular, this short course will achieve the teaching objectives through discussion of drug products. Students will be encouraged to discuss the material throughout the sessions.

Syllabus

Day 1 Morning

1. Introduction

The course will be introduced. I will describe the format, lectures, discussion, and presentations. I will also describe my desire for the students to participate by communicating with me in the discussions and between class sessions.

2. General Description of Controlled Drug Delivery

First, I will define the terms necessary to understand controlled drug delivery. I will describe the ideas of conventional, immediate release dosage forms and contrast these ideas with controlled drug delivery.

3. Mechanisms and Components of Controlled Drug Delivery Systems

I will describe the components of a controlled delivery system, e.g. rate controller, energy source, and how these are need in a dosage form. In addition, I will describe the fact that each is not necessary serving a single function. Then, I will discuss the different mechanisms of controlled release, specifically diffusion and dissolution-based systems.

Day 2 Morning

4. Review of Anatomy and Physiology and impact in Drug Delivery

I will review, for important points, the anatomy of the human body and

describe the specific aspects that relate to controlled drug delivery. Much focus will be placed gastrointestinal anatomy and how this relates to peroral drug delivery.

5. Review of Polymers

I will review polymer science and how the properties of polymers can influence the drug release from a dosage form. I will review molecular weight, pendant groups, size of polymers, and how polymers can influence diffusion.

6. Discussion and Preparation of Group Presentations

I will describe the group presentation in detail and describe the rubric that I will use to grade the presentations. I will go through examples of what should and shouldn't be included in the presentations and how the students can prepare for giving a presentation.

Day 2 Afternoon

7. Searching Pharmaceutical Literature

I will review how I am able to do a literature and pharmaceutical search for information described in the scientific literature for a given dosage form and/or active ingredient. I will do a search in Pubmed and a patent search based on information that can be readily found on the US FDA website.

8. Group Research and Discussion

Students will conduct research and we will discuss methods that can be used and information that can be identified in the scientific literature.

Day 3 Morning

9. Review of Pharmacokinetics

I will review the ideas of pharmacokinetics and the factors that impact the adsorption, distribution, and metabolism of active ingredients. I will also discuss the mathematic treatment of immediate release and modified release dosage form pharmacokinetics.

10. Case 1: Enteric Coated Particle

I will discuss a single case: Protonix®. This drug is acid unstable in stomach acid, but stable in gastrointestinal fluid. I will describe how a polymer can be used to inhibit the release and water penetration into a dosage form. The pharmacokinetics of the system will also be discussed.

11. Case 2: Bilayer Tablet

I will discuss a single case: Mucinex®. This over the counter medication has an immediate release layer and a controlled release layer. I will discuss how a bilayer tablet can be formed as well as the pharmacokinetic treatment of the two layered system.

Day 4 Morning

12. Case 3: Oros

I will discuss a single case: Procardia®. This drug is an oral osmotically controlled dosage form. The theory behind osmotically controlled dosage forms will be discussed and the resultant pharmacokinetics evaluated. The case will be compared with other dosage forms for the same therapeutic.

13. Case 4: Nanocrystal

I will discuss a single case: Rapammune®. I will discuss how the solubility of the active ingredient has made formulation of an immediate release dosage form difficult and that the technology to create nanoparticles of the active have allowed improved bioavailability for the active.

14. Review of Solid State

A basic review will be completed for the solid state system. We will discuss crystal forms and the amorphous state. The implications of these states on the release and activity of an active ingredient will be discussed.

Day 4 Afternoon

15. Group Research

Students will be given time to conduct online literature searches. I will work with groups and discuss how to improve searches.

16. Discussion of how to analyze the literature

Students will be required to submit questions to me about how to conduct. We will discuss this as a group and in smaller groups to improve the ability of the students to evaluate the literature.

Day 5 Morning

17. Case 5: Solid Depot

I will discuss a single case: Zoladex®. This injectable system is biodegradable and treats different tumor types. The system is injected for systemic activity and the pharmacokinetics will be discussed.

18. Case 6: Biopharmaceutical System

I will discuss a single case: Adagen®. The challenges of intravenous protein administration will be discussed along with the novel method for addressing these challenges. The chemistry of bioconjugation will be discussed along with the pharmacokinetic implications of the polymer-modification

19. Case 7: Injectable

I will discuss a single case: Doxil®. This injectable system is liposomal in nature and used to solubilize the hydrophobic drug. The structure of liposomes will be discussed along with the challenges of forming and releasing an active from liposomes. The pharmacokinetic implications of liposomes will be emphasized.

20. Case 8: Transdermal

I will discuss a single case: Catapres TTS. The structure and function of the system will be presented. The anatomy of skin will be emphasized and how the structure of a transdermal patch has changed will be discussed. The pharmacokinetic implications of transdermal will be emphasized.

Day 6 Morning & Afternoon

21. Exam

Students will be asked to complete a one-hour exam over materials covered in the exam. The exam will include materials from the review sections as well as the discussions of specific approved drugs and dosage forms.

22. (through 24) Group Presentations

Each student will be assigned a group (14 groups: 3-4/group) and a specific US FDA approved drug to research on the 2nd day of class (see above). Each group will present the basics of the disease, pharmacokinetic properties of the active ingredient, the materials used to modify release, and the mechanism of release. Each group will be graded based on the rubric presented to them and are required to cite relavent literature during the presentation to support their understanding of the drug.