Washington State University
MAJOR CURRICULAR CHANGE FORM - - COURSE
(Submit original signed form and ten copies to the Registrar's Office, zip 1035.)

<table>
<thead>
<tr>
<th>Future Effective Date: 08/01/2012</th>
<th>☐ New course ☐ Temporary course ☐ Drop service course</th>
</tr>
</thead>
<tbody>
<tr>
<td>(effective date cannot be retroactive)</td>
<td>☐ There is a course fee associated with this course (see instructions)</td>
</tr>
<tr>
<td>☐ Variable credit _______________</td>
<td>☐ Repeat credit (cumulative maximum _______ hours)</td>
</tr>
<tr>
<td>☐ Increase credit (former credit _______)</td>
<td>☐ Lecture-lab ratio (former ratio ______________)</td>
</tr>
<tr>
<td>☐ Number (former number ________)</td>
<td>☐ Prefix (former prefix _________________)</td>
</tr>
<tr>
<td>☐ Crosslisting (between WSU departments) (Must have both departmental signatures)</td>
<td>☐ Cooperative listing (UI prefix and number ___________)</td>
</tr>
<tr>
<td>☐ Conjoint listing (400-500)</td>
<td>taught by: WSU ☐ UI ☐ jointly taught ☐</td>
</tr>
<tr>
<td>☐ Request to meet Writing in the Major [M] requirement (Must have All-University Writing Committee Approval)</td>
<td></td>
</tr>
<tr>
<td>☐ Request to meet GER in ________ (Must have GenEd Committee Approval) ☐ Fulfills GER lab (L) requirement</td>
<td></td>
</tr>
<tr>
<td>☐ Professional course (Pharmacy &amp; Vet Med only) ☐ Graduate credit (professional programs only)</td>
<td></td>
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<tr>
<td>☐ Other (please list request)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>PharS/NEP course prefix</th>
<th>578/578 Biomedical Statistics</th>
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<tbody>
<tr>
<td>course no.</td>
<td>title</td>
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<table>
<thead>
<tr>
<th>3</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>credit</td>
<td>lecture hrs per week</td>
<td>lab hrs per week</td>
</tr>
</tbody>
</table>

Description (20 words or less) SEE ATTACHED

Instructor: Dr. David Sclar
Contact: Deb Howe
Campus Zip Code: 6510
Phone number: 358-7609
Phone number: 335-2227
Email: dsclar@wsu.edu
Email: drhowe@wsu.edu

- Please attach rationale for your request, a current and complete syllabus, and explain how this impacts other units in Pullman and other branches (if applicable).
- Secure all required signatures and provide 10 copies to the Registrar's Office.

Chair/date: Mary A. Meyers 9/10/11
Dean/date: 9/12/11
General Education Com/date:

Chair (if crosslisted/interdisciplinary)*
Dean (if crosslisted/interdisciplinary) *
Graduate Studies Com/date:

All-University Writing Com/date
Academic Affairs Com/date
Senate/date

*If the proposed change impacts or involves collaboration with other units, use the additional signature lines provided for each impacted unit and college.
This course introduces entering graduate students to the research process; learn techniques for conducting health services research and evaluation, critique published health services research and collect, utilize, and evaluate primary and secondary data.
Course Logistics

Course Title: Biomedical Statistics  
Course Number: 578

Credits: Three [3]

Pre-requisites: Admission to the Graduate Program in Pharmaceutical Sciences

Instructor of Record (See last two pages of the syllabus for Biographical Summary):

David Alexander Sclar, B.Pharm., Ph.D.
Boeing Distinguished Professor of Health Policy and Administration
Professor of Pharmacotherapy; Marketing; and Statistics
Boehringer Ingelheim Scholar in Pharmaceutical Economics
Director, Pharmaco economics and Pharmacoepidemiology Research Unit
Washington State University
Spokane, WA 99210-1495 USA
Telephone: (509) 335-8039
FAX: (509) 335-0162
E-Mail: sclar@mail.wsu.edu

Course Communication:

All readings (PDFs) and supporting documentation will be forwarded via e-mail by the Instructor-of-Record via the PharS 512 list-serve (be sure your e-mail address is included).

Course Time and Location:

Mondays and specified Wednesdays 3:10 p.m. to 4:20 p.m. in CUE 202; and specified Mondays 1:10 p.m. to 2:30 p.m. in Wegner 70.

Course Objective:

At the end of this course, students will be able to:

1. Understand the research process;
2. Utilize selected techniques for conducting health services research and evaluation;
3. Critique published health services research;
   Collect, utilize, and evaluate primary and secondary data.

Required and Optional Textbooks, References and other resources

The following are required textbooks:
WSU College of Pharmacy Graduate Program in Pharmaceutical Sciences
Syllabus (Fall Semester 2011)

1. *Elementary Statistics Using SAS*

The following are **optional** textbooks for those interested in more detailed information:

2. *Study Guide to Epidemiology and Biostatistics*

**Class Format and Schedule**

This course utilizes **Socratic** discourse in both the lecture and Laboratory/Recitation sessions.

Each lecture period is divided into the following five sections: (i) Orientation; (ii) Review; (iii) New Material; (iv) Q&A; (v) Commentary.

Readings (PDF) = R (Assigned [forwarded] via e-mail by Dr. Sclar)

*Pharmacotherapy* = P

*Elementary Statistics Using SAS* = SAS

**Course Time and Location:**

**Mondays and specified Wednesdays 3:10 p.m. to 4:20 p.m. in CUE 202; and specified Mondays 1:10 p.m. to 2:30 p.m. in Wegner 70.**

<table>
<thead>
<tr>
<th>Calendar</th>
<th>Content</th>
<th>Location/Day of Week</th>
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</thead>
<tbody>
<tr>
<td><strong>Week 1:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/22/10</td>
<td>SAS Chapter 5</td>
<td>Wegner 70 M</td>
</tr>
<tr>
<td>8/24/10</td>
<td>P Chapters 2,3,9</td>
<td>CUE 202 M, W</td>
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<tr>
<td><strong>Week 2:</strong></td>
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<tr>
<td><strong>No Class</strong> 8/29/10 (PCL)</td>
<td>SAS Chapters 1,2,3,4</td>
<td>CUE 202 W</td>
</tr>
<tr>
<td>8/31/11</td>
<td>P Chapters 2,4</td>
<td></td>
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<tr>
<td><strong>Week 3:</strong></td>
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<td></td>
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<tr>
<td><strong>No Class</strong> 9/5/10 (Labor Day)</td>
<td>SAS Chapters 6,7,8</td>
<td>CUE 202 W</td>
</tr>
<tr>
<td>9/7/10</td>
<td>P Chapters 61,62,77</td>
<td></td>
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<tr>
<td><strong>Week 4:</strong></td>
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<tr>
<td>9/12/10</td>
<td>SAS Chapters 6,7,8</td>
<td>Wegner 70 M</td>
</tr>
<tr>
<td>9/14/10</td>
<td>P Chapters 61,62,77</td>
<td>CUE 202 M</td>
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<tr>
<td><strong>Week 5:</strong></td>
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<tr>
<td>9/19/10</td>
<td><em>Examination I</em> (Part I and Part II)</td>
<td>CUE 202 M</td>
</tr>
<tr>
<td>9/21/10</td>
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<td><strong>Week 6:</strong></td>
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<tr>
<td>9/26/10</td>
<td>SAS Chapters 9,10</td>
<td>Wegner 70 M</td>
</tr>
<tr>
<td>9/28/10</td>
<td>P Chapter 71,72,73,74,75</td>
<td>CUE 202 M</td>
</tr>
</tbody>
</table>

1. *Research Memorandum*
Week 7:
10/3/10
10/5/10
SAS Chapters 9,10
P Chapter 71,72,73,74,75
CUE 202 M,W

Week 8: NCPA 8-12
10/10/10
10/12/10
Research Memorandum¹
Self-Directed Research
Self-Directed Research

Week 9:
10/17/10
10/19/10
Examination II
(Part I and Part II)
Wegner 70 M
CUE 202 M

Week 10:
10/24/10
10/26/10
SAS Handout
P Chapter 70
Research Memorandum¹
Wegner 70 M
CUE 202 M

Week 11:
10/31/11
11/2/10
SAS Handout
P Chapter 70
CUE 202 M,W

Week 12:
11/7/10
11/9/10
Examination III
(Part I and Part II)
Wegner 70 M
CUE 202 M

Week 13:
11/14/10 Required Attendance
Required Attendance on
11/14/11
Research Memorandum¹
Wegner 70 M
CUE 202 M

¹ Details to be provided.

Course Expectations

The “contract” between the Instructor-of-Record and the student implies that both will be prepared for all course activities. Thus, students must be fully prepared ahead of all course activities (i.e. students are to have read the materials in advance per the class schedule above).

Academic Honesty, Conduct, and Behavior

Students are reminded that they must adhere to the policies agreed to in writing when entering the College of Pharmacy. These are detailed in the Pharmacy Student Handbook under PHARMACY CODE OF PROFESSIONALISM. Departures from this CODE may have serious consequences for academic standing in the class and/or continued enrollment in the College of Pharmacy. Sanctions for violation of the CODE will depend upon the seriousness of the infraction. Furthermore, depending on the nature of the CODE violation, students will be referred to the Student Progress Committee, Associate Dean of Student Services or the WSU Office of Student Conduct (www.conduct.wsu.edu). Any CODE violations that constitute an alleged violation in Washington State University's academic integrity standards will be handled directly by the Office of Student Conduct as set forth in “Procedure for academic integrity violations” (WAC 504-26-404). For detailed information on Academic Dishonesty definitions and procedures, see: http://www.conduct.wsu.edu/default.asp?PageID=343. To learn more about what might be considered plagiarism please see: http://www.wsulibs.wsu.edu/plagiarism/main.html
Academic integrity will be strongly enforced in this course. Any student caught cheating on any assignment will be given an F for the course and will be referred to the Office of Student Conduct.

**Course Grading Criteria and Grading Scale**

Action Memorandum = 30 points  
Examination I = 80 points (Parts I and II)  
Examination II = 80 points (Parts I and II)  
Examination III = 80 points (Parts I and II)  
**Required Attendance** 11/16/10 = 30 points

Total Maximum Course Points = 300

A "Blue Book" will be required for each examination.

Per the College of Pharmacy Student Handbook:

A  \[ \geq 94\% \]  
A-  90.0-93.9\%  
B+  87.0-89.9\%  
B  84.0-86.9\%  
B-  80.0-83.9\%  
C+  77.0-79.9\%  
C  74.0-76.9\%  
C-  70.0-73.9\%  
D  65.0-69.9\%  
F  <65.00\%

If for any reason a student can not attend a lecture, recitation/laboratory session, or examination, said student **must** inform Dr. Sclar via e-mail or telephone **prior to** the start of the course component.

**Course Evaluations**

Course Evaluations, Academic Dishonesty and Students with Disabilities: Please refer to our website for details regarding these important topics.  
[http://www.pharmacy.wsu.edu/currentstudents/syllabus.addendum.pdf](http://www.pharmacy.wsu.edu/currentstudents/syllabus.addendum.pdf)

Student evaluations of courses/course modules and faculty effectiveness are a valuable and important component of the College’s commitment to provide quality learning experiences and contribute to our efforts to assure that students achieve the objectives of our professional degree program. Thus, all evaluations are given serious consideration as part of the assessment process and are read first by the Department Chair and Director of Assessment, Teaching and Learning before they are processed, analyzed, and given to the faculty. Because the most effective way to impact positive changes is through constructive comments, we encourage you to provide
feedback as you would wish to receive it. This will allow the faculty member to focus on improvements or affirm students’ perspective on effective elements of the course.

**Students with Disabilities Statement**

All students requesting reasonable accommodation must meet with the instructor prior to or during the first week of the course to review all proposed accommodations in relation to course content and requirements. Please note that written evaluations can be accommodated but performance evaluations are considered analogous to job skill performance, therefore expectations will not be adjusted.

Reasonable accommodations are available for students with a documented disability. If you have a disability and may need accommodations to fully participate in this class, please visit the Disability Resource Center (DRC). All accommodations MUST be approved through the DRC (Washington Bldg. 217). Please stop by or call 509-335-3417 to make an appointment with a disability specialist.

**Safety on Campus**

The WSU Campus Safety Plan, which can be found at [http://safetyplan.wsu.edu](http://safetyplan.wsu.edu), contains a comprehensive listing of university policies, procedures, statistics, and information relating to campus safety, emergency management, and the health and welfare of the campus community. Please visit this web site as well as the University emergency management web site at [http://pem.wsu.edu/Emergencies](http://pem.wsu.edu/Emergencies) to become familiar with the campus safety and emergency information provided. Everyone should also become familiar with the WSU ALERT site ([http://alert.wsu.edu](http://alert.wsu.edu)) where information about emergencies and other issues affecting WSU will be found. This site also provides information on the communication resources WSU will use to provide warning and notification during emergencies. It should be bookmarked on computers. Finally, please go to the myWSU portal at [http://my.wsu.edu](http://my.wsu.edu) and register your emergency contact information for the Crisis Communication System (CCS). Enter your network ID and password and you will be taken to the myWSU main webpage. Look for the Emergency Notification box on the right side of the page and click on Register to be taken to the registration page where you can enter your cell, landline, and email contact information.

**Information re: Course Instructor**

**BIOGRAPHICAL SUMMARY**

**David Alexander Sclar, B.Pharm., Ph.D.**

**David Alexander Sclar, B.Pharm., Ph.D.** is Boeing Distinguished Professor of Health Policy & Administration, Professor of Pharmacotherapy, Boehringer Ingelheim Scholar in Pharmaceutical Economics, and Director, Pharmacoeconomics & Pharmacoepidemiology Research Unit, College of Pharmacy, Washington State University; a member of the Graduate Faculty, Department of Marketing (Professor of Marketing), College of Business, Washington State University; a member of the Graduate Faculty, Department of Statistics (Professor of Statistics), College of Science,
WSU College of Pharmacy Graduate Program in Pharmaceutical Sciences
Syllabus (Fall Semester 2011)

Washington State University; a member of the Graduate Faculty (Research Professor), Washington Institute for Mental Health Research & Training; a member of the Graduate Faculty (Research Professor), Pharmacoeconomics & Pharmacoepidemiology Research Unit, College of Medicine and College of Pharmacy, Dalhousie University; and Queen's Trust Visiting Professor, Institute of Psychiatry, King's College School of Medicine, University of London.

In 2009, Dr. Sclar served as Interim Chair, Department of Health Policy & Administration, College of Pharmacy, Washington State University. From 2000, to 2002, Dr. Sclar served as Interim Chair of faculty comprising the Department of Health Policy & Administration, and the Department of Pharmacotherapy, College of Pharmacy, Washington State University. In addition to his academic duties, Dr. Sclar served as Director of the Center for Health Services Research & Policy, and Chair of the Pharmacy & Therapeutics Committee, Wellpoint Health Plan of Washington, Inc., Inland Northwest Division, from 1993, to 1999.

Dr. Sclar received a Bachelor of Pharmacy, cum laude, with a minor in Anthropology from Washington State University in 1985, a Doctor of Philosophy in Business Administration & Pharmacy from the University of South Carolina in 1988, where he was a research fellow in pharmaceutical marketing in the Center for Pharmaceutical Economics & Policy, and post-graduate training at the Cornell University Administrative Management Institute for Higher Education in 1999, and the University of British Columbia Center for Management Development in 2001. Dr. Sclar is listed in Who’s Who in America, and Who’s Who in the World.

Prior to returning to his alma mater in 1991, Dr. Sclar served on the faculty of the University of Southern California School of Pharmacy, in the Department of Pharmaceutical Economics & Policy. Dr. Sclar was the recipient of the United States Department of Health and Human Services National Quality Scholar Award in 1991, the American Society of Health-System Pharmacists Research & Education Foundation Pharmacotherapy Research Award in 1995, the American Society of Health-System Pharmacists Research & Education Foundation Pharmacy Practice Research Award in 1995, the inaugural Washington State University College of Pharmacy Faculty Excellence Award for Research in 2009, the University of Southern California School of Pharmacy Teacher of the Year Award in 1990, and 1991, and the Washington State University College of Pharmacy Teacher of the Year Award in 1998, and 2011. Dr. Sclar's research interests focus on issues involving pharmacoeconomics, pharmacoepidemiology, and health policy, and have been supported by over $12 million ($6.7 million as Principal Investigator) in grants from government agencies, foundations, and the biomedical/pharmaceutical industry.

Dr. Sclar's research and reviews (over 160 publications) have appeared in numerous journals including American Journal of Medicine, New England Journal of Medicine, Medical Care, PharmacoEconomics, Journal of Occupational & Environmental Medicine, American Journal of Health-Systems Pharmacy, Journal of Clinical Psychopharmacology, Journal of Managerial Issues, American Journal of Cardiology, Journal of International Medical Research, Journal of Clinical Psychiatry,

Dr. Sclar has served as an advisor to the United States Presidential Commission on Health Care Reform, United States Food & Drug Administration, United States Senate Select Committee on Aging, United States Veterans Administration, Canada Ministry of Health, Republic of China Bureau of Drugs & Biologicals, New Zealand Ministry of Health, Republic of South Africa Ministry of Health, United Kingdom National Health Service, World Health Organization, 3M, Allergan, Alza, Amgen, AstraZeneca, Aventis, Axcan, Baxter Bioscience, Bayer, Boehringer Ingelheim, Bristol-Myers Squibb, Eli Lilly and Company, Forest Laboratories, Gambro, Genzyme, GlaxoSmithKline, Johnson & Johnson, Novartis, Pfizer, Teva, and Wyeth.

Contact Information:

David Alexander Sclar, B.Pharm., Ph.D.
Boeing Distinguished Professor of Health Policy & Administration
Pharmacoeconomics & Pharmacoepidemiology Research Unit
Department of Health Policy and Administration
Washington State University
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Spokane, WA 99210-1495 USA

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FAX: (509) 358-7744
E-Mail: sclar@mail.wsu.edu

August 1, 2011.