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PHAR 362.01: Pharmaceutical Sciences Laboratory

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Instructors: Todd Cochran (Coordinator), Howard Beall, Vernon Grund, Craig Johnston, Keith Parker, Charles Thompson

Teaching Assistants: Jared Brown (Head TA), Shailesh Agarwal, Adele Blackler, C.K. Chao, David Cox, Mary Hassani, Wenjie He, David Holley, Scott Larson, Mark Lester, Francisco Leyva, Flavia Pereira, Ava-Gaye Rule, Todd Seib, Lee Slater, Wes Smith, Melodie Weller.

Co-requisites: Phar 331 Pharmaceutics; Phar 342 Anatomy & Physiology

Time & Place: One 2 to 3 hour laboratory per week; T, W or Th 1:10-4 pm SB 230

Materials: Laboratory Manual and Handouts

References: *Pharmaceutical Calculations*, Stoklosa & Ansel
Pharmaceutical Dosage Forms, Ansel, Popovich & Allen
United States Pharmacopeia/National Formulary (USP/NF)
Remington: The Science and Practice of Pharmacy

Organization:

The laboratory parallels the coverage of material in the pharmaceutical sciences courses.

Course Objectives:

1. To demonstrate principles of pharmaceutics, medicinal chemistry, and physiology.
2. To provide experience in the techniques used in compounding of pharmaceuticals, in problem solving and critical thinking in the laboratory setting, and in written professional communication.

Grading:

Each laboratory session is worth approximately 10 points for a total of 120 points for the semester. Graded assignments will be in the form of quizzes, lab reports, and compounded preparations.

Laboratory attendance is mandatory: Students who do not attend a lab session will receive zero points for that session. Approximate Grading Scale: A = 92%, B = 85%, C = 75%, D = 65%

Laboratory Schedule:

<u>Lab</u>	<u>Date</u>	<u>Instructor</u>	<u>Topic</u>
	Jan 28-30	<i>No Laboratory</i>	
1	Feb 4-6	Cochran	Check-in, Prescription Balance
2	Feb 11-13	Beall, Thompson	Acids, Bases, Buffers
3	Feb 18-20	Beall, Thompson	Solubility, Partition Coefficient
	Feb 25-27	<i>No Laboratory</i>	
4	Mar 4-6	Cochran	Aliquot Method
5	Mar 11-13	Cochran	Pharmaceutical Solutions
6	Mar 18-19	Grund, Johnston	Blood Lipids and Glucose
	Mar 25-27	<i>Spring Break</i>	
7	Apr 1-3	Parker	Respiration
8	Apr 8-10	Cochran	Capsules; Dissolution
9	Apr 15-17	Beall	Suspensions & Emulsions
10	Apr 22-24	Cochran	Ointments 1 - Preparation of bases
11	Apr 29-May1	Cochran	Ointments 2 - Incorporation of drugs
12	May 6-8	Cochran	Suppositories; Check-out

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