

Non-Thesis MS in Pharmaceutics (01235)
Fall 2009 Schedule of Classes
Updated Sept 18, 2009

The following sections are open only to students in the Non-Thesis MS in Pharmaceutics program. Generally this curriculum require a very strong science background which includes a minimum of 2 years of general chemistry, including organic and one analytical chemistry course. For more information on the Non-Thesis MS in Pharmaceutics, go to http://www.temple.edu/pharmacy_qara/pharmaceutics.htm

Special note: Biotechnology and Physical Pharmacy will be offered in Spring 2010.

5451. Statistical Quality Control (101) 102-824

8:30 am – 5:00 pm Sundays: Sept 13, 27, Oct 11, Nov 8, 22 Make-up Dec 13, if needed. Meets 5 times.

Faculty: Ronald D. Snee

Required text: *Introduction to Statistical Quality Control*, Montgomery, Wiley, 6th ed, (ISBN: 978-0-470-16992-6).

Formerly Pharmaceutics 451. Not open to students who have taken Pharmaceutics 451.

5469. Pharmaceutical Laboratory Quality Systems and Operations (101) 102-687

Suggested prerequisite: strong science background, preferably with lab experience.

6:00 pm – 9:30 pm Thursdays: Sept 10, 17, 24, Oct 1, 8, 15, 22, 29, Nov 5, 12. Make-ups, if needed, Nov 19 or Dec 3. Meets 10 times plus final exam.

Faculty: George Pyramides and Frank Diana

Required text: will be provided by instructors (21 CFR Part 11, 21 CFR 210 & 211, 21 CFR 820 (Quality Systems Regulations) and ICH Q7A).

Formerly Pharmaceutics 489. Not open to students who have taken Pharmaceutics 489.

Offered through Adobe Connect, an on-line real-time course platform. Registration is by fax only, and students must agree in writing to “Expectations of Adobe Connect Students” before being allowed to register: www.temple.edu/pharmacy_qara/pdf/Connect_Expectations09.pdf

8484. Process Validation (990) 105-936

Prerequisites: BS in Pharmacy, Chemistry, Biology or Engineering, and strong science background, including familiarity with chemistry, biology, and physics. Students should also have a basic understanding of pharmaceutical manufacturing processes.

6:00 pm – 9:00 pm Mondays: Sept 14, 21, 28 (Yom Kippur), Oct 5, 12 (Columbus Day), 19, 26, Nov 2, 9, 16, 23, 30. Make-up, if needed, Dec 7 or 14. Meets 12 times plus final exam.

Faculty: John Murtha

Required text: *Pharmaceutical Process Validation*, R. Nash & A. Wachter, Marcel Dekker, (intern’l 3rd ed), 2003, (ISBN: 0824708385).

Formerly Pharmaceutics 484. Not open to students who have taken Pharmaceutics 484.

5477. Good Manufacturing Practices (101) 077-691

8:30 am – 3:00 pm (1/2 hour lunch) Sundays: Sept 20, Oct 4, 18, Nov 1, 15, Dec 6. Make-up, if needed, Dec 13 or 20. Meets 6 times.

Faculty: Frank Stevenson

Recommended text: *Good Manufacturing Practices for Pharmaceuticals*, 6th ed, Nally (ISBN: 0-8493-3972-3).

Formerly Pharmaceutics 487. Not open to students who have taken Pharmaceutics 487.

5576. Global CMC Issues and Regulatory Dossiers (101) 074-813

8:30 am – 3:00 pm (1/2 hour lunch) Saturdays: Sept 19 (Rosh Hashanah), Oct 3, 17, 31, Nov 14, Dec 5. Make-up if needed Dec 12 or 19. Meets 6 times.

Faculty: Roger Kates

No required text.

Formerly *Pharmaceutics 586*. Not open to students who have taken *Pharmaceutics 586*.

5622. Unit Operations (101) 076-506

Note: this course is listed under the QA/RA department (01234)

Prerequisite: Strong science background, including a BS in Pharmacy, Chemistry, Biology, or Engineering and familiarity with chemistry, biology, and physics. Students should also have a basic understanding of pharmaceutical manufacturing processes.

Live classes: 8:30 am – 3:30 pm Saturdays: Sept 19, Oct 31, Nov 14, Dec 12.

Note: the Oct 31 and Nov 14 classes will be held at Emerson Resources, 600 Markley St, Norristown, PA 19401, where students will practice milling, mixing, tableting and coating.

Other lectures will be posted on the Internet on a weekly basis, which students may view at their convenience.

Faculty: David Lebo, et al

Required text: *Pharmaceutical Process Engineering*, Anthony J. Hickey.

8002. Pharmaceutical Analysis (101) 077-409

Prerequisite: strong science background required. Special permission of Dr. Canney required. Fax resume to 215.707.5620.

5:15 – 8:15 pm Mondays: Sept 14, 21, 28 (Yom Kippur), Oct 5, 12 (Columbus Day), 19, 26, Nov 2, 9, 16, 23, 30. Final exam on Dec 7, unless make-up class is needed (then the exam moves to Dec 14). Class meets 12 times plus final exam.

Faculty: Daniel Canney, Timothy Gilmor, Andrew Kuzmission

No required text.

8003. Pharmaceutical Manufacturing I: Preformulation/Formulation (102) 040-272

Note: this course will not be scheduled again until Fall 2010.

8:30 am – 4:30 pm (1/2 hr lunch) Saturdays: Sept 19 (Rosh Hashanah), Oct 3, 17, 31, Nov 14. Make up, if needed, Dec 5. Meets 5 times.

Faculty: Thomas Schultz

Required text: *Pharmaceutics: The Design and Manufacture of Medicines*, 2007, Aulton, ed, (ISBN-13: 978-0-443-10108-3 or ISBN-10: 0-443-10108-6).

Recommended: Download the *FMC Problem Solver* from:

http://www.fmcbiopolymer.com/Biopolymer/V2/Problem_Solver/.

Offered through Adobe Connect, an on-line, real-time course platform. Registration is by fax only, and students must agree in writing to “Expectations of Adobe Connect Students” before being allowed to register: www.temple.edu/pharmacy_gara/pdf/Connect_Expectations09.pdf

8004. Pharmaceutical Manufacturing II (990) 105-920

Prerequisite: science and basic math background. There will be no review of basic science concepts; it will be assumed that students are familiar with them. Completion of Pharmaceutical Manufacturing I is helpful but not required.

7:00 pm – 10:00 pm Tuesdays: Sept 8, 15, 22, 29, Oct 6, 13, 20, 27, Nov 3, 10, 17, 24. Make-ups, if needed, Dec 1 or 8. Class meets 12 times plus final exam.

Faculty: Karen Zimm

Recommended text: *Aulton's Pharmaceutics: The Design & Manufacture of Medicines*, 2007, Aulton, ed, (ISBN 044-31-01086). Students must also download the FMC Problem

Solver from www.fmcbiopolymer.com (Pharmaceutics, ToolKit).

8111. Introduction to Toxicology (101) 040-715 425 Bldg, Room 4

6:00 pm – 9:00 pm Tuesdays: Sept 8, 22, 29, Oct 6, 13, 20, 27, Nov 3, 10, 17, 24, Dec 1. Final exam on Dec 8. Make-ups, if needed, Dec 15 or 22. No class Sept 15. Class meets 12 times plus final exam.

Faculty: Timothy Coogan

Required text: *Casarett & Doull's Essentials of Toxicology*, Curtis D. Klaassen and John B. Watkins III, eds, 2003, McGraw-Hill, (ISBN 0-07-138914-8).

