THE MCWHORTER SCHOOL OF PHARMACY
INFORMATION FOR FIRST-YEAR STUDENTS
TO PREPARE FOR THE 2023 FALL SEMESTER

Course Number (Credit Hours)	Course Title	Brief Description & Preparation	Course Coordinator
PHAR 301 (1 hour)	Professional Development & Wellness-I	This course is the first of a four-course series that emphasizes well-being, self-awareness, and professional development. Areas of focus within this course are: 1) campus resources and opportunities that contribute to students' educational experience; 2) strategies to effectively manage time and priorities; 3) activities that enhance student academic, physical, and spiritual wellness; and 4) career paths available in the pharmacy profession. **What do I need to know to prepare for this course:** Students should review all content in the Class of 2027 New Student Orientation Course in Canvas and actively participate in all activities during Pharmacy School Orientation the week of August 14th.	Dr. Whitney White
PHAR 302 (2 hours)	Foundations of the Pharmacy Profession-I	This course is the first of a two-course series that addresses the foundations of pharmacy. This first course addresses the history of health care in our country over the past 150 years, aspects about patient care, communication, health insurance, and various health care agencies. **What do I need to know to prepare for this course:** You can read about the above-mentioned topics (specifically Medicare and Medicaid) prior to the course, but this is not required.	Dr. Amy Broeseker Dr. Maryam Iranikhah
PHAR 303 (2 hours)	Drug Delivery Systems-I	This course is the first of a two-course sequence that focuses on the physicochemical properties of drugs, excipients, and dosage forms critical for the rational design, manufacture, and extemporaneous compounding of drug products. This course guides students in the application of physical chemistry and dosage form science to various characteristics of drug products (drug stability, delivery, release, disposition, pharmacokinetics, therapeutic effectiveness, application of quality standards for drug products). Commonly utilized conventional oral dosage formulations will be emphasized during the course. **What do I need to know to prepare for this course:** Students should prepare by reviewing basic physical chemistry principles including physical states of matter and bonding, pH, acid-base equilibria (i.e., acid dissociation constant), the Henderson-Hasselbalch equation and its utility in determining ionization state of weak acids or bases, and common chemical functional groups.	Dr. John Arnold

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PHAR 306 (3 hours)	Integrated Biomedical Sciences-I	Modular course (weeks 2-7) This course is the first of the four modular courses in a series that focus on basic biomedical sciences. Topics within this module address biomolecule structure and function, enzymology, and cellular processes. Students are provided a foundation for the biochemical action of medications. **What do I need to know to prepare for this course:** Reading the online materials reviewing organic chemistry, cell biology, and genetics posted to Canvas this summer and participating in the DASH week will prepare students well for this module.	Dr. Robert Wang
PHAR 307 (3 hours)	Integrated Biomedical Sciences-II	Modular course (weeks 9-13) This second modular course in the sequence addresses basic biomedical sciences focusing on metabolism and endocrinology. Students are provided a foundation for the pharmacological treatment of relevant disease states. **What do I need to know to prepare for this course:** Being successful in the first modular course along with a strong physiology background will help students be successful.	Dr. Robert Wang
PHAR 308 (1 hour)	Pharmacist Patient Assessment	This course provides a global overview of select patient assessment types. Pharmacists routinely perform many types of patient assessments including but not limited to those based on physical exam, patient medical records review, patient interview, and healthcare device results/data. **What do I need to know to prepare for this course:** Information will be sent to you regarding details of the type of stethoscope you will need to purchase.	Dr. Valerie Prince
PHAR 309 (2 hours)	Pharmaceutical Calculations	This mathematical skills-based course involves reinforcement and mastery of topics such as proper prescription interpretation, accurately calculating drug doses for prescriptions, weights and measures, concentrations, conversions, and accurate dosing of drugs in different dosage forms. Students also learn to apply kinetic principles and physicochemical parameters of drugs to therapeutically relevant issues. This course emphasizes the importance of accurate drug and dose calculations to ensure optimum and safe patient medication outcomes. **What do I need to know to prepare for this course:** Review various mathematical procedures that include unit conversions within the metric system, significant figures and rounding, proportions, percentages and ratios, multiplication and division techniques, rules of exponents and logarithms.	Dr. Bernadette D'Souza

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PHAR 320 (2 hours)	Integrated Pharmacy Lab* (includes DASH & SPRINT weeks*)	The first course in a series of authentic, hands-on experiences that enable students to develop skills that are essential for exemplary patient care. Students meet weekly for various lab activities that integrate course content (e.g., calculations, compounding, patient interview, biomedical sciences) providing the opportunity to assimilate and demonstrate knowledge and skills related to be team- and practice-ready. **What do I need to know to prepare for this course:** Ensure these important dates are on your calendar. Students will meet all day during these weeks. More details will be provided. DASH week (Developing Academic Success & Health): August 21 thru August 25 SPRINT week #1 (Simulating Practice ReadiNess & Teamwork): October 9 thru October 13 SPRINT week #2: November 27 thru December 1 *Attendance for all sessions of this course is required.	Dr. Jennifer Beall