# **Appendix 1 - Mission Outcomes Connection Guide**

**University Mission:** Concordia University Wisconsin is a Lutheran higher education community committed to helping students develop in mind, body, and spirit for service to Christ in the Church and the world.

**School of Pharmacy Mission:** The Concordia University Wisconsin School of Pharmacy is a Lutheran higher education community committed to the development of compassionate, knowledgeable and ethical pharmacists dedicated to providing exemplary patient care, pharmacy practice development, and research that improves the health of our communities.

SOP Mission Elements:	Patient-Centered Service / Service to the Underserved / Servant Leadership/ Service with Value							
Program Learning Goals:	[1] Servant Leadership (SL)	[2] Biomedical Sciences (BMS)	[3] Drug Action (DA)	[4] Drug Delivery (DD)	[5] Drug Information (DI)	[6] Social & Administrative Sciences (SAS)	[7] Therapeutics (TH)	[8] Communication (COM)
8 total								
	CL 4	DMC4	DA4	DD4	DIA	CAC1	Tua	COM
Student	SL1 SL2	BMS1 BMS2	DA1 DA2	DD1 DD2	DI1 DI2	SAS1 SAS2	TH1 TH2	COM1 COM2
Learning	SL3	BMS3	DA2	DD3	DI3	SAS3	TH3	COM3
Outcomes:	SL4	BMS4	DA4	DD3	DI4	SAS4	TH4	COM4
(SLO)	SL5	BMS6	DAT	DD5	DI5	SAS5	TH5	COM5
43 Total	020	Billoo		DD6	210	SAS6	TH6	COM6
		1						<u> </u>
Course Objectives (CO) Course Level:	COs are specific for each course and found in individual course syllabi.  Linked to the 43 SLOs							

#### **Definitions**

- 1. Mission: Statement describing our commitment to our values and goals. Aligned with University mission.
- 2. **Program Learning Goals:** Reflect high levels of intellectual behavior what students should know (learn), be able to do, and/or value at the end of the program.
- **3. Student Learning Outcomes:** What students should know (learn), be able to do, and/or value in order to advance to the higher level program outcomes. These outcomes are mapped to the curriculum and aligned with course objectives.

### **CUWSOP Program Domain: Servant Leadership**

<u>SL Program Outcome</u>: Develop pharmacists committed to the service of their profession and communities and in possession of the leadership skills required to provide service regardless of the pharmacist's position or title.

# Student Learning Outcomes for Servant Leadership

- SL1: The student will articulate the roles, responsibilities, and characteristics of leaders who are engaged in service to their organizations, communities, and profession. (1)
- SL2: The student will possess and articulate awareness of self as a leader through the discovery of their strengths and values. (1)
- SL3: The student will demonstrate a service orientation toward others by utilizing their talents, knowledge and skills to achieve the common good. (2)
- SL4: The student will demonstrate the ability to work in teams by utilizing the principles of combining individual strengths, team dynamics, and emotional intelligence. (2)
- SL5: The student will participate in leading change, within groups and organizations, aimed at accomplishing goals for the common good. (3)

### **CUW SOP Program Domain: Biomedical Sciences**

<u>BMS Program Outcome</u>: Develop pharmacists who have solid foundational and applicable knowledge of 1) how organisms function at system, organ, cellular, and molecular levels to maintain homeostasis and 2) how individual patient attributes and various disease states alter these functions.

# <u>Student Learning Outcomes for Biomedical Sciences</u>

### Anatomy, Physiology & Pathophysiology

BMS1. The student will explain the relationship between structure and function of body systems within healthy individuals. (1)

BMS2. The student will explain the relationship between structure and function of body systems within the pathophysiologic or diseased state. (2)

## **Biochemistry & Molecular Biology**

BMS3. The student will demonstrate knowledge of the molecular, genetic and cellular nature of biological processes. (2)

# Microbiology

BMS4. The student will explain the structure and action of commensal and pathogenic microbes in infectious pathophysiology. (1)

# **Immunology**

BMS6. The student will demonstrate knowledge of immunologic processes including but not limited to: antigen/antibody interaction, active and passive immunity, allergic responses and acquired and innate immunity. (2)

### **CUWSOP Program Domain: Drug Action**

<u>DA Program Outcome</u>: Develop pharmacists with a fundamental knowledge of the discovery, development, structure, mechanism of action, ADME (absorption, distribution, metabolism, excretion), therapeutic function, and associated adverse effects/toxicity of clinically important therapeutic pharmacological agents.

# Student Learning Outcomes for Drug Action

# Discovery and Development

DA1. The student will explain the strategies and process of developing new molecular entities. (1)

#### Structure, MOA and ADME

DA2. The student will describe the relationships among drug structures, ADME, and mechanisms of action. (1)

# Therapeutic Function/Adverse Effect / Toxicity

DA3. The student will identify drug class and predict therapeutic action and possible side effects based on mechanism of action, pharmacokinetic properties, and structure. (3)

DA4. The student will compare and contrast the structures and mechanism of action of drug entities when considering drug selection, therapeutic intent, and side effect profiles for diverse patient populations. (2)

# **CUWSOP Program Domain: Drug Delivery**

<u>DD Program Outcome</u>: Develop pharmacists who demonstrate the ability to analyze, select, evaluate, compound, and recommend products for patients based on 1) the physical and chemical properties of pharmaceutical products and 2) characteristics of absorption, distribution, metabolism, and elimination for individual patients and specific formulations.

### Student Learning Outcomes for Drug Delivery

### Analyze

DD1. The student will analyze a drug product's active and inactive ingredients to identify potential applications, warnings, and contraindications. (2)

## Select

DD2. The student will select appropriate routes of administration, dosage forms, and drug delivery systems to optimize bioavailability and therapeutic efficacy and safety. (2)

#### **Evaluate**

DD3. The student will evaluate physicochemical properties of drug substances that influence solubility, drug action, and stability to identify and select optimal pharmacotherapeutic agents.

(3)

DD4. The student will evaluate commercially available and extemporaneous drug products on the basis of their characteristic physical attributes to optimize drug product selection. (3)

### Compound

DD5. The student will prepare and compound extemporaneous preparations and sterile products, utilizing appropriate techniques, procedures and equipment related to drug preparation, compounding and quality assurance. (2)

#### Recommend

DD6. The student will recommend and provide appropriate packaging, storage, handling, administration, and disposal of medications. (3)

### **CUWSOP Program Domain: Drug Information**

<u>DI Program Outcome</u>: Develop pharmacists who retrieve, assess, evaluate, interpret, apply, and communicate drug information for individual patients, healthcare providers, and patient populations to promote evidence based health care, appropriate medication use systems and resource management, and public health initiatives.

# <u>Student Learning Outcomes for Drug Information</u>

### Retrieve

DI1. The student will demonstrate the ability to systematically retrieve drug information from multiple resources, including texts, journals, electronic databases, and patient records. (2)

#### Assess

DI2. The student will assess the drug information to determine its validity and the appropriateness for the clinical situation and intended recipient. (3)

# **Evaluate**

DI3. The student will critique the scientific and clinical merit of drug information to make appropriate recommendations for individual patients and other members of the health care team. (3)

#### Interpret

DI4. The student will analyze drug information and explain it to individual patients and other health care providers in the context of medication use systems, or individual patients or populations. (2)

#### Apply

DI5. The student will use a systematic and efficient process to identify the drug information needs of individual patients, patient populations, and other healthcare professionals, assess the available drug information, and use evidence-based medicine, guided by unique patient circumstances beliefs and attitudes, to make clinical decisions. (2)

# **CUWSOP Program Domain: Social and Administrative Sciences**

<u>SAS Program Outcome</u>: Develop pharmacists who demonstrate an ability to lead, manage, and practice in the profession in the context of health care delivery systems, incorporating legal and ethical obligations, values, unique patient attributes and public health issues.

### Student Learning Outcomes for Social and Administrative Sciences

# Leadership and Management

SAS1. The student will differentiate between leadership and management, categorize different styles of leadership and management, and apply them to financial, personnel, and operations management. (2)

#### Health Care Delivery

SAS2. The student will identify, discuss, and critique the types of government roles and policies that influence the delivery of health care. (3)

SAS3. The student will list and explain economic factors that play a role in health care delivery for the patient, the health care provider, and the public as a whole. (1)

#### Law

SAS4. The student will describe and apply the legal standard of care for the provision of pharmacy services in diverse professional settings. (2)

#### **Ethics and Values**

SAS5. The student will list and define ethical principles and apply a process for analyzing an ethical situation to justify an appropriate course of action. (3)

### Social and Behavioral

SAS6. The student will assess the patient's personal and social situation including beliefs, attitudes, and socioeconomic background and incorporate these factors in optimal patient care. (3)

# **CUWSOP Program Domain: Therapeutics**

<u>TH Program Outcome</u>: Develop pharmacists with the clinical knowledge, skills, and judgment to provide patient care in cooperation with other health care providers. Clinical decisions are based on sound therapeutic principles of drug and disease state management, treatment guidelines, and relevant individual patient factors, with the goal of providing evidence based, safe, and appropriate medication use for patients.

### **Student Learning Outcomes for Therapeutics**

# Disease

TH1. The student will define and explain the terminology, lab findings, physical signs/symptoms, risk factors, and evidence-based clinical practice guidelines related to diseases and medical conditions. (1)

#### Treatment

TH2. The student will analyze and compare drug therapies for safe, effective, and convenient use, including therapeutic benefits, potential side effects, contraindications, appropriate dosing, administration, and duration of therapy. (2)

TH3. The student will recommend the appropriate drug and non-drug therapies for treatment of diseases and medical conditions, including specific uses, indications, mechanisms of action, and drugs of choice. (3)

#### **Patient**

TH4. The student will identify, interpret, and evaluate relevant individual patient factors including medical, genetic, social, cultural, and economic aspects to recognize actual or potential drug therapy problems. (3)

### **Continued Care Plan**

TH5. The student will design a patient-centered, culturally sensitive care plan, including goals of treatment, appropriate drug and non-drug therapies, and monitoring parameters for safety and efficacy. (3)

TH6. The student will describe the importance of wellness and disease prevention in patient care and design appropriate care plans to promote these elements using evidence-based clinical practice guidelines. (3)

# **CUWSOP Program Domain: Communication**

<u>COM Program Outcome</u>: Develop pharmacists who, as individuals and in collaboration with others, utilize effective verbal, non-verbal, and written communication skills to promote evidence-based, safe, and appropriate medication use to achieve optimal patient care.

### Student Learning Outcomes for Communication

# **Audience**

COM1. The student will develop skills to be able to effectively retrieve information from and convey information to a variety of patients, family members, caregivers, health care professionals, and members of the general public. (3)

#### Professionalism

COM2. The student will demonstrate professional, ethical, and compassionate communication skills, including active listening, and appropriate verbal, non-verbal, and written techniques. (2)

#### **Cultural and Personal Attributes**

COM3. The student will apply knowledge of culture, literacy level, age, gender, disability, and other pertinent patient factors to achieve sensitive, individualized communication, and in a manner that will be best comprehended by the intended audience. (2)

#### Provision of Education

COM4. The student will use appropriate tools to communicate information and recommendations clearly, accurately, concisely, and in a timely manner. (2)

COM5. The student will demonstrate and verify the proper administration techniques for medications and devices within the scope of pharmacy practice. (2)

#### Documentation

COM6. The student will provide clear and accurate documentation of patient care activity to facilitate communication and collaboration among healthcare providers. (3)