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Gloria R. Grice

Kacie Monson

Jamie Pitlick

Rasma Chereson

Wendy Duncan

*See next page for additional authors*

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## **Authors**

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Gloria R. Grice<sup>1</sup>, PharmD, BCPS; Kacie Monson<sup>1</sup>, PharmD, BCPS; Jamie Pitlick<sup>1</sup>, PharmD, BCPS; Rasma Cherson<sup>2</sup> PhD; Wendy Duncan<sup>3</sup>, PhD; Gemma Geslani<sup>2</sup>, PhD, MPH; Kimberly Kilgore<sup>3</sup>, PhD; Puja B. Patel<sup>4</sup>, PharmD Candidate; and Heather Pautler<sup>5</sup>, PharmD  
<sup>1</sup> Department of Pharmacy Practice, St. Louis College of Pharmacy, St. Louis, MO; <sup>2</sup> Department of Basic and Pharmaceutical Sciences, St. Louis College of Pharmacy, St. Louis, MO; <sup>3</sup> Offices of the Deans, St. Louis College of Pharmacy, St. Louis, MO  
<sup>4</sup> St. Louis College of Pharmacy, St. Louis, MO; and <sup>5</sup> Department of Pharmacy, Barnes-Jewish Hospital, St. Louis, MO

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### Abstract

*Professionalism is a way of being which underlies all the responsibilities of a pharmacist and associated general and professional abilities. The Student Affairs Committee was charged with developing a college-wide professionalism plan to meet the Accreditation Council for Pharmacy Education (ACPE) Standards 15.1 and 23. This plan was developed concurrently with a new curriculum. The plan was developed systematically with the following goals: 1) create a definition of professionalism, 2) determine outcomes of the plan, 3) identify existing components which should be continued and new components to be added, 4) ensure existing and new components are linked to outcomes and 5) develop a continuous assessment process for the plan. The proposed plan consists of curricular, co-curricular and extra-curricular activities designed to help students gain experience in three professionalism pillars: Competence, Connection and Character, as defined by Brown et al in "Taxonomy of Professionalism". While knowledge and skills will be enhanced, the focus of development will be on student virtues, values and attitudes—that what they do defines who they are. The goal is to help students develop as people and professionals who value the high ideals expected of a pharmacist.*

### Introduction

A profession is distinguished by specialized education and a mission to provide objective counsel and service to others. Professionalism is the way of being that ensures that a service meets standards such as those stated in the Code of Ethics for Pharmacists.<sup>1</sup> Given the expanding role of pharmacists in direct patient care, as exemplified by the Center for the Advancement of Pharmaceutical Education definition of pharmaceutical care, the importance of professionalism in pharmacy education has markedly increased.<sup>2</sup> Since patients do not have the knowledge to evaluate the appropriateness or effectiveness of pharmaceutical services, healthcare will be compromised if the pharmacist does not act in the best interest of the patient.<sup>3</sup> Accordingly, accreditation Standard 23, of the Accreditation Council for Pharmacy Education (ACPE), requires that each college or school of pharmacy "provide an environment and culture that promotes professional behavior and harmonious relationships among students, faculty, administrators, preceptors and staff."<sup>4</sup>

Moreover, Standard 15.1 recommends that the college or school's evaluation of student learning should include "student self-assessments and faculty and preceptor assessments of student development of the professional competencies and the demonstration of professional behaviors."<sup>4</sup> To meet these requirements, a professionalism plan was created to facilitate student development of appropriate competencies, virtues, attitudes and behaviors of a professional pharmacist. For assessment purposes as well as practice opportunities, the plan must define measurable observations of professional behavior and allow multiple opportunities for students to practice the behavior. The purpose of this paper is to describe the development of a professionalism plan by a college of pharmacy.

### Plan Development

In 2009, the Student Affairs Committee (SAC), consisting of administration, faculty, staff and students, was charged with the development of a college-wide professionalism plan. The committee agreed that the professionalism plan should be longitudinal and consistently diffused throughout the program. Additionally, plan development should address: 1) measurable outcomes; 2) barriers that must be overcome to implement the plan and strategies to do so; 3) appropriate curricular and extra-curricular content, activities, practice opportunities and assessment; and 4) repeated, consistent faculty and student involvement in the process to obtain buy-

**Corresponding author:** Gloria R. Grice, Pharm.D., BCPS  
Associate Professor of Pharmacy Practice, St. Louis College of Pharmacy, 4588 Parkview Place, St. Louis, MO 63110  
Email: [ggrice@stlcop.edu](mailto:ggrice@stlcop.edu)  
Phone: 314-446-8550; Fax: 314-446-8386

in from all members of the college. The SAC outlined several steps in the development of the plan as outlined below:

1. Create a definition of professionalism (specific to a pharmacist)
2. Determine desired outcomes
3. Identify appropriate curricular, co-curricular and extra-curricular professional components (current experiences to retain and new components to be added)
4. Align components of plan to the desired outcomes
5. Develop a continuous assessment process for the plan

#### Step 1: Create a definition of professionalism (specific to a pharmacist)

In order to create a definition of professionalism specific to a pharmacist, the committee extensively reviewed published literature. Zlatic describes the fiduciary pharmacist – patient relationship as a “faith” or covenantal relationship and Reynolds adds that altruism “elevates the nature of the fiduciary relationship beyond responsibility and service to one of self-sacrifice.”<sup>5,6</sup> Hammer and colleagues portray professionalism as a bicycle wheel.<sup>7</sup> The hub is a core set of values including “altruism/service, caring, honor, integrity, duty, etc.” The spokes are “behaviors demonstrated by an individual: respect, accountability, empathy, compassion, etc.” The tire includes “dressing professionally, being punctual, acting courteously and other aspects of professional comportment”. Hammer further describes the following as influences of student professional development: Professional Competence (knowledge), Mentoring and Modeling, School Culture and Environment, Extracurricular Activities, Personal Values, Instruction and Guidance and Communication Empathy.<sup>7</sup>

Duncan-Hewitt suggests the ability to function professionally depends on one’s level of cognitive/moral development.<sup>8</sup> Brown and colleagues build upon Duncan-Hewitt’s ideas by describing professional development as a taxonomy that can be divided into three separate domains: Competence (professional capability), Connection (interpersonal compatibility) and Character (personal reliability). The domains are described as a hierarchy, in the form of a pyramid, with Competence as the foundation and Character as the highest level of professionalism.<sup>9</sup>

The American College of Clinical Pharmacy (ACCP) describes similar areas as critically important for developing a pharmacy professional in the “Tenets of Professionalism for Pharmacy Students”.<sup>10</sup> The tenets include altruism, honesty and integrity, respect for others, professional presence,

professional stewardship and dedication and commitment to others. ACCP also authored a white paper which listed characteristics of a professional to include responsibility, commitment to excellence, respect for others, honesty and integrity and care and compassion.<sup>3</sup> Additionally, the American Pharmacists Association, Academy of Student Pharmacists (APhA-ASP) and American Association of College of Pharmacy (AACCP) Task Force on Professionalism consider the following to be traits of a professional: knowledge and skills of a profession, commitment to self-improvement of skills and knowledge, service orientation, pride in the profession, covenantal relationship with the client, creativity and innovation, conscience and trustworthiness, accountability for his/her work, ethically sound decision-making and leadership.<sup>11</sup> Lastly, the “Oath of a Pharmacist” which, highlights several important qualities of a professional, including service, respect, life-long learning, moral, ethical and legal conduct and altruism, is a crucial element of how pharmacists define professionalism.<sup>12</sup>

Brown and colleagues astutely observe that “current definitions of professionalism, consisting mostly of lists of behavioral traits, do not adequately reflect the depth of personal and interpersonal dynamics that exist within professional relationships”.<sup>9</sup> After careful review of the literature, the SAC proposed the following definition of professionalism (voted upon and accepted by faculty and students):

*Professionalism consists of an individual’s competencies, virtues, attitudes and behaviors appropriate to a profession. A profession is distinguished from other work by the nature of the relationships between professionals and the people for whom they care. As professionals, pharmacists have covenantal or fiducial relationships with their patients-. That is, they are obligated to put the best interests of their patients ahead of their own.*

*Pharmacists must be trustworthy. To earn the trust of patients, pharmacists must operate upon values such as responsibility, a service orientation, commitment to excellence and collaboration. They must be competent in the knowledge and skills that are required for their profession and must be dedicated to maintaining that competency throughout their careers. Pharmacists must possess virtues such as honesty, integrity and altruism. As professionals, pharmacists must display attitudes such as empathy, care, compassion and social responsibility. Finally, pharmacists should promote confidence in their profession by exemplifying professional demeanor in all interactions.*

### Step 2: Determine outcomes of the plan

In order to determine the outcomes, the SAC first created a list of “Essential Questions”, or questions which students will reflect upon as a result of the plan. This included:

- What does it mean to have societal responsibilities and professional responsibilities and what are those responsibilities?
- Why is it important to be a role model?
- Why is it important to understand others and work responsibly and effectively with diverse populations as well as within and among teams?
- Why is it important to advance the profession of pharmacy?
- How do I keep up with what’s happening in the profession and the world around us and why is it important?
- Why is it important to be altruistic? How can this mentality become a part of who you are versus something you do just to look good?
- What does it mean to understand and control one’s self and how does that impact one’s life?
- What does the intersection of integrity, humility and responsibility look like and how does it impact the care of patients and populations?
- How do one’s virtues and attitudes affect values of moral courage and discernment and why is that important?

Next, the SAC agreed that Brown’s taxonomy model is functionally valuable because it “produces a consistent image of professional behavior that can be clearly visualized and easily articulated” and complements the definition by serving as a construct for the building blocks of the outcomes/levels, despite the complexity of the interpersonal dynamics that are involved.<sup>8</sup> Brown identifies three domains (pillars), each containing five specified levels (values) or performance objectives which strongly correlate to published literature regarding pharmacy and medical professional education. These domains and levels are listed in Table 1.

The SAC, with input from faculty and students and permission by Brown, modified Brown’s model such that the pillars are inter-related as opposed to the pyramid model proposed by Brown (see Figure 1). It was determined that some of the elements in “Character” could be achieved before “Competence”, suggesting the model does not need to be hierarchical. Next, the SAC revisited the literature to ascertain all appropriate levels were represented slightly modified each to eliminate perceived redundancies and added potential missing elements. Additionally, the SAC developed goals/outcome statements related to these levels

to guide the continued development and possible future assessment of the plan (Table 2). Finally, the committee used the College Ability Outcomes and Pharmacist Responsibilities (Table 3) to identify ways to inter-connect professionalism outcomes with these guiding principles.

### Step 3: Identify existing components of the curricular and extra-curricular experience that should be continued and new components to be added

In preparation of a report for ACPE Standard 23, the SAC reviewed documentation from an *ad-hoc* committee on Professionalism, formed earlier at the College. In this report, the committee outlined all successful professionalism development initiatives, both academic and extra-curricular, based on survey analysis and extensive review of curricular and non-curricular opportunities for students to learn about and practice professionalism. Analysis of required course sequence revealed professional development exists as both “layers” and “threads” throughout the curriculum (Table 4). Early in the curriculum, students are engaged in work which develops traits that would be characteristic of a professional. As students progress through the curriculum, these traits are practiced with increasing connection to professional practice. The development of these traits is consequently “layered” as students’ skills are developed with more depth. In addition, several threads, such as ethical dilemmas, logical/critical thinking, self-learning, time-management, problem-solving and effectiveness, are taught and assessed throughout the curriculum. Given this, the SAC determined that the new plan must continue to contain curricular and extra-curricular components, but co-curricular components should be added as well. Each is defined below:

**Curricular components:** Curricular components related to developing professionalism will be incorporated throughout the curriculum beginning in pre-professional year 1, reinforcing the idea that professionalism is not a separate entity, but is integrated as a way of being. These elements can be taught in the form of a lecture, a discussion, or an activity within the classroom. The committee suggests that all curricular activities are specifically linked to professionalism values and goals and threaded/mapped throughout the curriculum (Table 4). Additionally, not every course needs to include curricular professionalism components. Rather opportunities will be determined as part of the development of new courses for the new curriculum. Many excellent current curricular examples could be weaved in to the new curriculum, such as case studies, role playing exercises and reflections written during experiential coursework.

Co-curricular components: Co-curricular components related to developing professionalism will be incorporated throughout the years beginning in pre-professional year 1. They are required elements that are conducted outside of a course, such as the summer reading program, advocacy and outreach day, the white coat ceremony and annual professional orientations). Table 5 shows the various co-curricular opportunities currently incorporated separated by year in the program and further divided by professionalism pillar that is being developed through that component.

Extra-curricular components: Extra-curricular components related to developing professionalism will be required. Each year, students will determine their goals (e.g., developing leadership skills, achieving better understanding of the legislative process and advocating for a specific political issue). Students sharing similar goals for the year will form a learning community and will participate in select activities chosen from an array of professional, community and college activities (Table 6) or suggest their own. These activities are not separated by professionalism pillar given the hypothesis that all pillars are likely being developed in these events. Students will be required to provide documentation for participating in the activities and must demonstrate achievement of ability outcomes (Cultural & Social Competence and Civic Engagement). Students will have ample opportunities to find activities in which they are interested. Each student will create an individualized plan for achieving the ability outcomes and will be required to show growth through a professionalism portfolio.

Step 4: Establish that existing and new components of the plan are linked to outcomes

The SAC determined the plan design and implementation would be most successful if aligned with the Curriculum and Curricular Assessment Committee's new curriculum development. As faculty are seeking new course approvals for the new curriculum, the SAC will ensure that curricular elements will be specifically linked to professionalism values and goals as outlined in the plan. Similarly, a member of the SAC will be involved in any/all modifications to co-curricular events or development of new ones to verify that these events are linked to professionalism values and goals.

Finally, the college administration has approved a new staff position, Director of Professional Student Affairs. This pharmacist-only staff position was created to serve the student body in career development, networking and professional development. This individual will help oversee student involvement in extra-curricular activities and help promote professional growth in that area through annual

reviews of participation in events, student portfolios' reflections and student goal-setting for the next year.

Step 5: Develop a continuous assessment process for the plan Evaluation

Although students entering professional year 1 would need to have demonstrated some evidence of professional competency (see Additional Considerations), formal evaluation of professionalism would not begin until they are in professional year 1. Students and faculty extensively discussed the evaluation of this plan. It was determined that quality was achieved in the production process as opposed to the inspection process. For example, monitoring each positive and negative act of professionalism in the classroom would require an inordinate amount of effort to maintain and would establish a military school-style set of merits and demerits which could lead to conflicts and ultimately serves as an external motivation for students, detracting from the intent of the professionalism plan.

Though the measurement of detailed behaviors in the classroom would be laborious and counterproductive to the desired campus environment, it is often necessary in the experiential setting as students are interfacing with sites, preceptors, health care professionals, other students and patients. At the College, the Experiential Programs Office has employed a tracking system for the ability outcome of Social and Professional Responsibility (SPR) for all Introductory Pharmacy Practice Experiences (IPPEs) and embedded a required grade for this outcome on all Advanced Pharmacy Practice Experiences (APPEs). This office will be charged with improving this system using new College ability outcomes and professionalism pillars. SPRs will continue to be tracked and count towards the student's grade performance as means of self-improvement and development. In fact, future studies planned include reviewing the predictability of issues with SPR in IPPEs and success on APPEs.

Additionally, serious incidents of unprofessionalism will be forwarded to the College Conduct Board. The Conduct Board will expand its judiciary scope to professional misconduct in addition to its current scope of general misconduct. This board will operate in a manner similar to the newly established Honor Code Committee (HCC). The HCC was designed by students as a means to consistently review and track incidents of academic dishonesty. The HCC, approved by both the student body and faculty oversee all incidents of academic dishonesty at the College. The committee is composed of faculty, students and the Vice President for Student Affairs. Their role is to review each submitted case of alleged dishonesty and determine if there was an offense, the severity of the offense, the consequence(s) of the offense

and to maintain clear documentation in the student's file. Similarly, the Conduct Board will allow anyone to submit a form documenting a student's professional misconduct. The student will be notified, via a letter of his/her alleged unprofessional behavior. The student can plead responsible or not responsible or request a hearing. A panel of peers faculty and staff will preside over all hearings and determine responsibility and sanctions, if appropriate. Students will be able to appeal using the standard appeals process. Unprofessional incidents will be recorded for every confirmed occurrence.

#### *Assessment*

The SAC identified several methods to assess the proposed plan. The first method is to review professionalism grades on APPEs. Since APPEs occur during the final year of the program, this would be an appropriate time to determine if the plan was effective in achieving its goal. This data can be pulled directly from experiential portfolios. The second method is to review and track Conduct Board incidents. The Conduct Board is charged with creating de-identified reports on the quantity and scope of unprofessional issues submitted to and discussed at the Board that is shared with all students, faculty and staff.

The third method would be through the use of surveys. One could be a longitudinal professionalism survey. Similar to a pre-post survey, this survey would assess attitudes of professionalism at baseline for incoming students and then at various intervals until graduation (every one, two, or three years, for example). This survey would be based off the professionalism pillars and created by the SAC in collaboration with the Vice President of Institutional Research and the Campus Counselor. Additionally, there are likely examples of published instruments which can be explored during the development of an institution-specific survey. Another tool which could be used is the College's annual Student Affairs Survey. Each year, the SAC conducts a survey to assess student affairs services, student morale and professionalism as part of ACPE Standards monitoring. This yearly survey data can be a valuable source of peer assessment of professionalism and can be followed over time.

#### **Additional Considerations**

The success of this plan is highly dependent upon faculty and student buy-in. Therefore, the plan development has been incremental, achieving support from faculty and student representatives each step of the way. As an example, the Academic Honor Code and Integrity Policy, which defines the operation of the HCC discussed earlier, was designed and implemented by students with faculty and administrative

support.<sup>15</sup> Original versions of the plan proposed to faculty and students highlighting creative and radical plan formats were quickly revised once it was determined that faculty and/or students would not be supportive.

One essential prerequisite for the professionalism plan is to have a sound foundation in place prior to student entry, i.e., beginning with recruitment efforts. Without this foundation, the proposed opportunities may have a less desirable effect on student professionalism. Specifically, messages delivered to potential applicants should emphasize a standard of professionalism expected of incoming, current and graduate students and inform high school and college career counselors and advisors of the character and academic traits that demonstrate strong professional potential. Additionally, the College plans to incorporate into recruitment literature the concepts and issues addressed in the Oath of a Pharmacist, Pledge of Honor and Pharmacist's Code of Ethics. Furthermore, informational programs, such as career shadowing days and open house events for prospective students that emphasize the professional roles and responsibilities of pharmacists will be established.

Next, it is critical that professionalism be deemed a characteristic necessary for admissions and progressions. Some examples of how this can be obtained include:

- Letters of recommendation supporting student's professional potential
- Attitudinal questionnaire on professionalism
- Interview
- Determination of appropriate professionalism progression requirements for students to enter into as well as progression through the professional program.

Finally, the expectations for professionalism should not solely be on students. In order for the College to expect students to develop professionally, the campus must first be a place that exudes professionalism. This includes providing ample clean, organized spaces within which students can learn and study. An additional success factor is campus-wide development of professionalism to establish a common understanding and to encourage the development of role models among faculty, staff, preceptors and alumni. This can include a series of faculty development, staff development and programs with alumni/preceptors. These programs will describe the professionalism plan, review in detail the expectations of students and illustrate role modeling. Lastly, the College needs to strengthen its experiential training sites as they are environments that foster and positively impact students' professional development.

### Conclusion

After review of published literature on professionalism, a backward design approach<sup>14</sup> was used to create a professionalism plan that will encourage a professional environment at the College and promote optimal student development of appropriate competencies, virtues, attitudes and behaviors of a pharmacist. Brown's domains of professionalism (Competence, Connection and Character) were used as the "backbone" of this plan, but were revised to fit college-specific outcomes. Tailoring existing literature on professionalism specific to a college of pharmacy, including students in the development of the plan and achieving adequate faculty buy-in are essential elements to designing a successful professionalism plan. Finally, incorporating multiple, practical and relevant opportunities for assessment and evaluation methods enhance the plan. Colleges or schools can then use quality data for documentation of achievement of student competencies, which are not only necessary for accreditation standards, but critical for quality improvement.

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Figure 1: Revised Taxonomy Model<sup>9</sup>

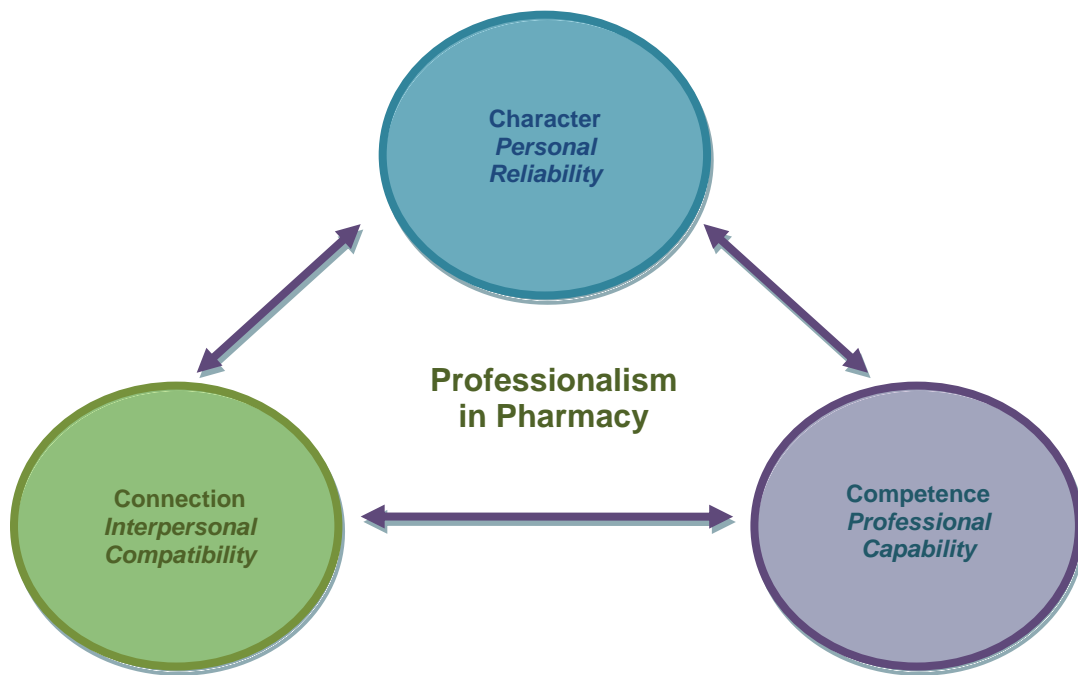


Table 1: Domains of Professionalism<sup>9</sup>

<b>Competence (Professional Capability)</b>	<b>Connection (Interpersonal Compatibility)</b>	<b>Character (Personal Reliability)</b>
<ul style="list-style-type: none"><li>• Self-directed learning</li><li>• Knowledge</li><li>• Applied skill</li><li>• Proactivity</li><li>• Wisdom</li></ul>	<ul style="list-style-type: none"><li>• Compassion</li><li>• Empathy</li><li>• Self-control</li><li>• Kindness</li><li>• Influence</li></ul>	<ul style="list-style-type: none"><li>• Honesty/Integrity</li><li>• Humility</li><li>• Responsibility</li><li>• Service</li><li>• Moral Courage</li></ul>

**Table 2: Values and Goals for the Three Domains (Pillars)<sup>9</sup>**

Value	Goals
<b>Competence (Professional Capability)</b>	
Self-directed Learning <sup>6</sup>	<ul style="list-style-type: none"> <li>• Demonstrates a desire/commitment for (life-long) learning</li> <li>• Recognizes what one needs to learn (awareness of lack of ability)</li> <li>• Continually self-assesses one’s own performance</li> <li>• Pursues a constant course of self-improvement</li> </ul>
Knowledge <sup>1,6,7,12,14</sup>	<ul style="list-style-type: none"> <li>• Develops and builds upon a strong foundation of knowledge</li> </ul>
Applied Skill <sup>3,4,7,13</sup>	<ul style="list-style-type: none"> <li>• Applies a variety of cognitive and psychomotor processes and techniques accurately</li> <li>• Communicates the proper information to others</li> <li>• Manages time and multiple tasks efficiently</li> </ul>
Pro-activity <sup>6,9</sup>	<ul style="list-style-type: none"> <li>• Displays a commitment to excellence/quality</li> <li>• Puts forth optimal effort at all times</li> <li>• Plans, organizes and prioritizes goals and activities</li> <li>• Takes initiative to do what needs to be done</li> <li>• Shows perseverance and follow-through</li> </ul>
Discernment <sup>3,5,7,9</sup>	<ul style="list-style-type: none"> <li>• Solves problems by thinking critically and carefully analyzing options</li> <li>• Exercises sound judgment and makes wise decisions</li> <li>• Recognizes ethical issues</li> <li>• Complies with all laws and regulations governing the practice of pharmacy</li> </ul>
<b>Connection (Interpersonal Compatibility)</b>	
Understanding and Control of Self <sup>6</sup>	<ul style="list-style-type: none"> <li>• Adapts well to changing circumstances</li> <li>• Demonstrates patience and maintains grace under pressure</li> <li>• Understands one’s own biases</li> <li>• Resolves interpersonal conflicts effectively and efficiently</li> <li>• Displays positive affect in professional settings</li> </ul>
Understanding and Caring About Others <sup>1,4,8,11</sup>	<ul style="list-style-type: none"> <li>• Is tolerant and accepting of others</li> <li>• Seeks to understand how others think and feel</li> <li>• Shows sincere concern for the suffering of others</li> <li>• Uses clear and appropriate speech, writing and body language and ensures audience understanding</li> <li>• Applies active listening skills and responds with appropriate communication</li> <li>• Treats people with courtesy, respect and friendliness</li> <li>• Is cooperative and helpful when working with others</li> </ul>
Influence <sup>2,8</sup>	<ul style="list-style-type: none"> <li>• Assumes a leadership role when necessary</li> <li>• Motivates and inspires others</li> <li>• Shows pride in the profession</li> <li>• Advocates for the profession, community and others</li> </ul>
<b>Character (Personal Reliability)</b>	
Integrity <sup>5</sup>	<ul style="list-style-type: none"> <li>• Is consistently honest</li> <li>• Ensures and maintains confidentiality</li> <li>• Distinguishes between right and wrong</li> <li>• Seeks fairness and equity for all concerned</li> <li>• Makes informed ethical decisions in professional settings</li> </ul>
Humility <sup>8</sup>	<ul style="list-style-type: none"> <li>• Is responsive and accepting of constructive criticism and willing to admit fault</li> </ul>
Responsibility <sup>6,8</sup>	<ul style="list-style-type: none"> <li>• Holds one’s self accountable when things don’t go as planned instead of making excuses or blaming others</li> <li>• Comportment/presence - dresses and grooms oneself appropriate to each environment</li> <li>• Provides consistent care on a daily basis</li> </ul>
Altruism <sup>2</sup>	<ul style="list-style-type: none"> <li>• Serves others no matter how difficult the situation may be</li> <li>• Seeks to satisfy needs of others above one’s own</li> <li>• Does more than is required on behalf of others</li> <li>• Contributes to the betterment of individuals, communities and the profession</li> </ul>
Moral Courage <sup>1,3,5,10</sup>	<ul style="list-style-type: none"> <li>• Makes decisions based on what one knows to be right despite the circumstances, even if the decision is risky, unpopular, or inconvenient.</li> </ul>

<sup>1</sup>Cultural & Social Competence

<sup>2</sup>Civic Engagement

<sup>3</sup>Critical Thinking

<sup>4</sup>Oral Communication

<sup>5</sup>Valuing & Ethical Decision-Making

<sup>6</sup>Foundations & Skills for Lifelong Learning

<sup>7</sup>Integrative Learning

<sup>8</sup>Collaboration

<sup>9</sup>Problem-solving

<sup>10</sup>Creative thinking

<sup>11</sup>Written communication

<sup>12</sup>Conceptual Understanding of Scientific and Mathematical Principles

<sup>13</sup>Information Literacy

<sup>14</sup>Reading

Table 3: College Ability Outcomes &amp; Pharmacist Responsibilities

Outcome	Definition
<b>General Ability Outcomes</b>	
Problem Solving	The graduate identifies problems and potential approaches for solving these; and designs, implements and evaluates effective and appropriate strategies to arrive at viable solutions.
Critical Thinking	The graduate systematically explores and analyzes issues, assumptions, evidence, ideas and events before accepting opinions or formulating conclusions.
Creative Thinking	The graduate thinks and works in a manner characterized by imagination, innovation, divergent thinking and risk taking.
Written Communication	The graduate writes clearly and effectively to diverse audiences for a variety of purposes.
Oral Communication	The graduate enhances shared understanding by listening to, interpreting, developing and expressing ideas, verbally and nonverbally, in oral formats, across a range of technologies and for a variety of purposes and audiences.
Valuing & Ethical Decision-Making	The graduate makes decisions about personal and professional conduct through a process that relates values to ideas, actions and consequences and uses clearly defined ethical principles.
Foundations & Skills for Lifelong Learning	The graduate exhibits intellectual curiosity; takes responsibility for developing knowledge, skills, attitudes, values and habits; and conducts regular self-assessment to develop and enact a plan to improve performance, adapt to change and promote continuous personal and professional growth.
Conceptual Understanding of Scientific and Mathematical Principles	The graduate develops, manages and applies a scientific and mathematical knowledge base to evaluate information in a variety of contexts to: extrapolate trends and patterns from existing data, explain natural phenomena and predict probable outcomes.
Integrative Learning	The graduate makes connections among ideas, bodies of knowledge and experiences to synthesize and transfer learning to new, complex situations.
Cultural & Social Competence	The graduate demonstrates self-knowledge and empathetic understanding of others; makes judgments informed by historical, aesthetic, cultural, social, behavioral, economic, political and global contexts; and works responsibly and effectively with diverse populations.
Collaboration	The graduate contributes to team tasks and responsibilities, facilitates participation of group members, fosters a constructive climate and manages and resolves conflict to strengthen overall cohesiveness and effectiveness.
Civic Engagement	The graduate works to make a difference in his/her community.
Information Literacy	The graduate determines the extent of information needed; and identifies, locates, retrieves, evaluates and effectively and responsibly uses and shares that information to accomplish a specific purpose.
Reading	The graduate exhibits a range of well-developed and discipline-specific skills and strategies to interpret written text.
<b>Professional Ability Outcomes – the contexts in which all college general outcomes will be practiced</b>	
Pharmaceutical Care	The graduate provides pharmaceutical care in cooperation with patients, prescribers and other members of an interprofessional health care team based upon sound therapeutic principles and evidence-based data, taking into account relevant legal, ethical, social, economic and professional issues, emerging technologies and evolving pharmaceutical, biomedical, sociobehavioral and clinical sciences that may impact therapeutic outcomes.
Systems Management	The graduate manages and uses resources of the health care system, in cooperation with patients, prescribers, other health care providers and administrative and supportive personnel, to promote health; to provide, assess and coordinate safe, accurate and time-sensitive medication distribution; and to improve therapeutic outcomes of medication use.
Public Health	The graduate promotes health improvement, wellness and disease prevention in cooperation with patients, communities, at-risk populations and other members of an interprofessional team of health care providers.
<b>Pharmacist Responsibility Areas</b>	
Patient Care Provider Population Care Provider Practice Manager Self-Developer Interprofessional or Organizational Team Member Advocate for the Profession & Community Member Information Master	

**Table 4: Current Student Professional Development Components of Curriculum**

Class	Activity
<i>Pre-Professional Year 1</i>	
EN1001	Read essays covering various ethical situations and write themes about choices students make (ethical decision-making)
EN1002	Practice distinguishing between own desires and what is good for patients
CH1001	Develop self-learning and time management
SS1100	Complete a community service project
BI1100	Select class reps to “right any perceived wrongs” (group and personal responsibility)
MA1100	Learn how to be more effective citizens, human beings and pharmacists in the systems of community, health care and society
<i>Pre-Professional Year 2</i>	
AP2100	Define the traits of an ideal pharmacist
HU2000	Learn effective communication skills, compassion for people who are fundamentally different and their own cultural biases. Learn to work together, both in small groups and as a class team, to organize ideas in a logical fashion, manage time effectively, be honest, be confident and be creative problem solvers.
PY2100	Develop accuracy and desire for life-long learning
PP2120	Discuss “real world” issues
<i>Professional Year 1</i>	
AP3100	Learn to be accountable for preparation/actions, practice professional/objective evaluation of peers, practice time-management and scheduling, practice both oral and written communication, practice appropriate classroom conduct and practice using appropriate reference source citations, for understanding of what constitutes academic dishonesty/plagiarism
EN3100	Learn to communicate with diverse groups of people in a variety of settings in a sensitive, ethical manner; through group work learn to respect one another; learn to be accountable to fellow group members during construction of a collective presentation and learn to exhibit responsibility and empathy; learn to present ideas clearly both in large meetings and in one-on-one communication settings; learn how to suggest therapies in a way to aid compliance; and role play to demonstrate methods of avoiding alienating patients and to exemplify ethical dilemmas encountered by pharmacists.
PP3150	Learn professional norms and boundaries within the healthcare field through interaction with the medical community outside of the school.
<i>Professional Year 2</i>	
PH4100	Think critically and value lifelong learning and diligence
TH4120	Examine patient case situations both in individual and group settings to provide optimal outcomes
PP4170	Serve a population of patients by preparing and providing educational messages to patients and caregivers
<i>Professional Year 3</i>	
PA5130	Work as a group to write a case that examines “real life” ethical dilemmas and participate in a project that examines strategies for increasing “self-efficacy”
PP5156	Learn how to interact and collect information from first independent personal patient experience and interprofessional experience
PP5160	Recognize and evaluate health disparities, cultural aspects and perceptions of health care within patient populations while making rational decisions
PA5140	Learn how “individual” or “profession-wide” failures/events in ethical or “standard” behavior have led to government intervention/ regulation
IPPE	Reflect on observations of own or others’ behaviors.
<i>Professional Year 4</i>	
APPE	Reflect on observations of own or others’ behaviors

Table 5: Co-curricular Activities

Pre-professional Year 1	Pre-professional Year 2	Pre-professional Year 3	Professional Year 1	Professional Year 2	Professional Year 3	Professional Year 4
<b>Competence</b>						
Dress appropriately for classroom and professional activities: <ul style="list-style-type: none"> <li>Applied Skills</li> <li>Pro-activity</li> </ul>						
Portfolio/Written Reflections for Professional Advocate & Community Member Proposal (professional activities, volunteer opportunities): <ul style="list-style-type: none"> <li>Self-directed learning</li> <li>Applied Skills</li> <li>Pro-activity</li> </ul>						
Electives/Seminars for balancing checkbooks, finances, retirement planning, managing household, budgeting <ul style="list-style-type: none"> <li>Self-directed learning</li> <li>Knowledge</li> <li>Applied Skills</li> </ul>						
Professional seminars and convocations						
			White coat ceremony <ul style="list-style-type: none"> <li>Discernment</li> </ul>	Immunization certification <ul style="list-style-type: none"> <li>Self-directed Learning</li> <li>Knowledge</li> <li>Applied Skills</li> <li>Pro-activity</li> <li>Discernment</li> </ul>		
			Professional Orientation: 1. Self-directed Learning; 2. Discernment			
			Residency Preparation Series			
			CPR certification <ul style="list-style-type: none"> <li>Knowledge</li> <li>Applied Skills</li> </ul>		CPR certification <ul style="list-style-type: none"> <li>Knowledge</li> <li>Applied Skills</li> </ul>	ACLS certification (optional) at end of year
			Professional Development Workshops (CV, letter of intent, interviewing, networking, etc.)			
<b>Connection</b>						
Class Representative <ul style="list-style-type: none"> <li>Understanding and Control of Self</li> <li>Understanding and Caring about Others</li> <li>Influence</li> </ul>						
Portfolio/Written Reflections for Professional Advocate & Community Member Proposal (professional activities, volunteer opportunities): <ul style="list-style-type: none"> <li>Understanding and Control of Self;</li> <li>Understanding and Caring about Others</li> <li>Influence</li> </ul>						
Professional seminars and convocations						
			Professional Orientation <ul style="list-style-type: none"> <li>Understanding and Control of Self</li> <li>Influence</li> </ul>			
			Professional Development Workshops (CV, letter of intent, interviewing, networking)			
<b>Character</b>						
Academic Honor Code and Integrity Policy: <ul style="list-style-type: none"> <li>Integrity</li> <li>Humility</li> <li>Responsibility</li> <li>Altruism</li> <li>Moral Courage</li> </ul>						
Portfolios ( <i>attendance in pharmacy courses is tracked within</i> ): Responsibility						
			Professional Orientation: <ul style="list-style-type: none"> <li>Integrity</li> <li>Humility</li> <li>Responsibility</li> <li>Altruism</li> <li>Moral Courage</li> </ul>			
			Faculty-driven career advising			
			Professional Development Workshops (CV, letter of intent, interviewing, networking)			

**Table 6: Extra-curricular Activities**

Type of Service	Examples of Activities		
	Competence	Connection	Character
Profession	Attendance or participation in professional convocations		
	Attend Etiquette Dinner		
	Participate in Outreach and Advocacy		
	Participate in Legislative Day		
	Participate in an "Ask the Pharmacist" segment on a local news station		
	Participate in a patient counseling competition (e.g., ASHP)		
	Develop, lead or participate in a pharmacy-related service project		
	Give a presentation (poster, podium, class) on pharmacy-related topic		
	Complete a professional development program or CE program		
	Become a student leader or member in a pharmacy-related organization, such as a fraternity or interest group		
	Attend or present at a local, regional, or national pharmacy organization's meeting		
Write a state representative about a pharmacy-related topic			
Type of Service	Examples of Activities		
	Competence	Connection	Character
Community	Assist seniors with income taxes		
	Participate in Asthma Friendly Pharmacy activities		
	Become a literacy volunteer		
	Participate in the care package drive for the troops		
	Join the college Choir with some leadership role in the organization		
	Participate in church activities (e.g., committee member or leader, worship leader, service project, presentations)		
	Create, lead or participate in class field trips that are in line with the goals of the professional plan (e.g., trip to Cahokia Mounds, Civil Rights Museum)		
	Contribute to a community project (picking up trash, planting trees, mulching)		
	Contribute to charity by participating in fundraising events (e.g., Alzheimer's Walk, Homecoming Week, Dance-A-Thon, Breast Cancer Awareness Week)		
	Participate in Habitat for Humanity		
	Help organize a community activity		
	Become a long term care visitor over a time sufficient to develop relationships with residents		
	Participate in Open Airways activities		
	Participate in college community service day		
	Complete a personal development program (in line with the outcomes of the class)		
	Conduct a screening activity not directly related to pharmacy (e.g., bone density)		
	Enroll in a service-learning course or contribute to a service-learning project that is part of an existing course		
	Participate in a service project not necessarily related to pharmacy		
Join a varsity sports team member and participant in NAIA Champions of Character (e.g., service project)			
Work with children in an organized setting (e.g., reading stories in the library, Sunday school teacher)			
Type of Service	Examples of Activities		
	Competence	Connection	Character
College	Become a teaching assistant or tutor		
	Participate in focus groups		
	Participate in initiatives to promote and support diversity (e.g., Multicultural Week, Black History Month, Diwali Festival, ISO Night)		
	Participate on a panel (e.g., Professional Orientation, Health Literacy Day)		
	Serve as a student representative on faculty committee		
	Complete the roommate workshop for Residence Hall occupants		
	Serve as a sports team captain		
	Plan or participate in Spring Fling		
	Serve on an <i>ad hoc</i> faculty, staff or student committee		
	Serve as a student leader in organization, social fraternity, student government, or interest group		
	Join a student organization		
	Assemble Survival Kits for finals week		
	Perform in the theater on campus		
	Volunteer at an Alumni Association event		
	Plan or participate in the Welcome Back BBQ		
	Attend/participate in professional convocations		
	Attend Lunch & Learns		

