

Appendix 1 – CPI Learning Activities (2nd to 5th Semesters)

Clinical Practice Improvement (CPI) Learning Activities: 2nd to 5th Semester Students CPI Outline, Plan, Reports, and Accomplishments

NOTE: Students are responsible for reviewing the website each semester for updates.

<http://www.cop.ufl.edu/education/doctor-of-pharmacy-degree-pharmd/working-professional-pharmd-wppd/pharmaceutical-care-papers-and-projects/>

1st Semester Students:

View foundation lecture and reflect on 1-3 potential CPI topic ideas

2nd Semester Students: CPI Project Outline

*Decide on *CPI goal to improve Pharmaceutical Care (PC) and write CPI outline (see steps below).*

*CPI Goals: Clinical Practice Improvement (CPI) goals relates to goals to improve pharmaceutical care in some way within the student's realm of influence. This could involve giving in-services to the community, counseling patients, implementing drug delivery systems to reduce medication errors, or traditional clinical pharmacy services. NOTE: The CPI can not be the same topic as the public health CPA paper (CPA 7).

1) Briefly describe a Clinical Practice Improvement (CPI)* Program or Strategy that you would like to implement or improve within the area of Pharmaceutical Care. This intention of this project is for the student to implement a program, strategy, or initiative to improve pharmaceutical care (PC) at your employment or within an affiliated WPPD practice site. The strategy may be one that is expected to have either a direct or indirect impact on drug therapy outcome of patients. Include the intended practice setting, patient care population, potential involvement with other colleagues or health care teams (e.g., programs, professionals, societies), and other pertinent thoughts/ideas. Attach a separate page.

**NOTE: Data collection or an evaluative component should NOT be included for UF presentations or written summaries.*

2) Conduct a literature search related to project topic. Narrow the search strategy to identify relevant clinical trials related to topic (use Limits for “clinical trials” for type of article).

3) Briefly outline 2-3 pharmaceutical care goals that you intend this CPI strategy to accomplish. During the class presentation (5-10 minutes), reflect on the needs of the intended patient population for which you intend to improve pharmaceutical care? What actions can you take this semester to research this strategy further?

See the Capstone Sakai website for the 2nd semester outline form (also attached as Appendix A).

3rd Semester Students: Written CPI Project Plan

Write and submit a CPI plan relating to your topic idea from semester two (1-2 page, full sentence, full paragraph written project plan/proposal) . The CPI plan will be presented during Session 1 or 2 during the third semester. Conduct a literature search related to project topic. Narrow the search strategy to identify relevant clinical trials related to topic (use Limits for “clinical trials” for type of article).

3rd semester PE I Course Requirement:

PE I Course Requirement– Submit CPI Plan (need to Pass Course before taking next body system course)

3rd Semester Practice Experiences (PE) I Course CPI Requirements (PHA5666):

During Year 1, students will review the Foundations CPI* video and outline, reflect on practice ideas, and plan a strategy to improve Pharmaceutical Care (PC). Clinical Practice Improvement (CPI) strategies should be designed to improve pharmaceutical care in some way within the student's realm of influence. Examples include giving in-services to the community, counseling patients, implementing drug delivery systems to reduce medication errors, or implementing clinical pharmacy services. The strategy may be one that is expected to have either a direct or indirect impact on drug therapy outcome of patients. See Sakai Website for Clinical Practice Improvement (CPI) overview and requirements. Students submit and present the CPI outline and plan during Session 1 (or remote weekend). The facilitator reviews the CPI outline and plan for approval during the 2nd and 3rd semesters, respectively. By Session 3, students will need to upload evidence of faculty approval for their final CPI outline and plan, incorporating suggestions for improvement from their facilitator. The final CPI Plan will be uploaded to PharmAcademic under CPI Year 1 (evidence, accomplishment). Upon satisfactory completion, facilitators will assign a grade of 100% to the gradebook for the 3rd Semester CPI assignment.

Table 1. Recommended Timelines and Requirements for Practice Experiences Courses I (grey highlighting)

Semester	Requirements
2	<ul style="list-style-type: none"><u>Submit and Present CPI Outline:</u> Decide on project idea for Clinical Practice Improvement (CPI) strategy. Complete a CPI outline form (Resources tab). Include a literature search relevant to topic. Submit CPI outline and present to facilitator during Session 2 (body system course).
3	<ul style="list-style-type: none"><u>Write CPI plan:</u> Write a CPI plan (1-2 page, full sentence, full paragraph written plan with references) . Include a reference list after conducting a literature search relevant to the topic.<u>Submit CPI Outline and CPI Written Plan to Pass Practice Experiences I Course and Move forward to next course.</u>

At the end of Semester 3, the student's facilitator will evaluate the student's progress in successfully completing the CPI plan as Satisfactory (S) or Unsatisfactory (U). A grade of S will be assigned if the facilitator indicates the student has completed the CPI outline and plan by Session 3.

Grade = U	Grade = S
Unsatisfactory Progress	Satisfactory Progress
<p>One or more of the following have not been completed:</p> <ol style="list-style-type: none"> 1. Final CPI plan is submitted by Session 3. 2. CPI submission includes a 1-2 page written plan (full sentence, full paragraph). 3. CPI plan describes a way to improve Pharmaceutical Care within the student's realm of influence. 	<p>CPI Plan is completed by Session 3. The written CPI Plan is a 1-2 page, full sentence, full paragraph paper detailing plans to improve Pharmaceutical Care within the student's realm of influence.</p>

4th- 5th Semester Students: CPI Project Updates

Provide brief update (5 min) regarding achievement/progress in implementing the CPI Plan.

Provide a verbal and written summary of what you have accomplished in implementing a clinical practice improvement. Reflect on what you have learned. Describe the potential impact on pharmaceutical care at your workplace. Upload evidence of your accomplishments to PharmPortfolio at the end of semesters 4 and 5.

Note: Data collection is not required for the UF CPI or Capstone Paper requirements. Institution-specific data or evaluative methods should not be presented during class presentations or included in written assignments. Written summaries should **NOT include institution-specific data or systematic methods for quality improvement projects, medication use reviews, or patient/staff surveys. This type of project would require UF IRB approval. However, students may write criteria for a medication use review based on published literature for the CPI activity.*

See the Capstone website for CPI resources.

<http://www.cop.ufl.edu/education/doctor-of-pharmacy-degree-pharmd/working-professional-pharmd-wppd/pharmaceutical-care-papers-and-projects/>

Appendix 2 – Capstone Paper Learning Activities (5th to 9th Semesters)

Capstone Paper Options (Outcomes Paper, Practice Paper, Broad Review Article):

5th Semester Students (also see CPI updates in Appendix I):

-Write a summary of 3 potential topic ideas for the Capstone Paper (if caught up with CPI/Project requirements for 2nd-4th semesters). Each topic should include a literature search. If the Capstone topic is already determined, students may write a purpose statement and draft tables for relevant clinical trials as noted for 6th semester students.

OR

- Discuss 3 Capstone Papers reviewed from the course website. Write a ½ page summary which describes the differences in the 3 types of option papers, including the types of examples that are posted on the website. The intention is to learn the assignment options and provide information to the group. The written summary should be turned in during class to meet the requirement.

6th Semester Students:

Write a purpose statement for an evidence-based Capstone Paper and draft tables which outline the relevant clinical trials to topic purpose. The tables should outline details for study design and methodology for at least 3 clinical trials with a common purpose. To identify relevant clinical trials, conduct a literature search related to project topic. Use the “manage filters” feature within Pubmed to narrow down the search results to include “Clinical Trials” as “Type of Article”. This will help to identify all the clinical studies which are relevant to the purpose statement. The tables will serve as a basis for writing the first draft of the Capstone Paper in the 7th semester.

6th semester PE Course Requirement:

PE II Course Requirement – Submit documents which identify the purpose statement for Capstone paper and draft tables which outline study design, methodology and results for at least 3 clinical studies with a common purpose.

6th Semester Practice Experiences (PE) I Course Purpose / Study Table Requirements (PHA5667):

Students are required to submit an evidence-based Capstone Paper prior to completing the WPPD program. Sixth students are required to write and submit a preliminary outline of the paper which includes the purpose of the planned paper and tables detailing the design and results for at least 3 clinical studies relevant to purpose. See Sakai Website for Capstone Paper overview, requirements, and deadlines. Facilitators evaluate student progress each semester during the body systems course updates. Facilitators will issue a grade of Satisfactory (S) or Unsatisfactory (U) for completion of the sixth semester requirement (purpose/table).

Table 1. Recommended Timelines and Requirements for Practice Experiences Course II (grey highlighting)

Semester	PHA5667 PE II Course Requirements
6	<p><u>Write a purpose statement for the Capstone Paper and draft tables outlining study design, methods and results for at least 3 clinical trials (relevant to purpose). Include reference list.</u></p> <p>Submit a document including purpose and study table(s) to pass the Practice Experiences II Course.</p>

At the end of Semester 6, the student’s facilitator will evaluate the student’s progress in successfully completing the Capstone Paper purpose and study table(s) as Satisfactory (S) or Unsatisfactory (U). A grade of S will be assigned if the facilitator indicates the student has completed the Capstone Paper purpose and study table(s) by the CPA due date. By the designated due date (12/8/12), students will need to upload evidence of faculty approval for the sixth semester requirement (presented during the concurrent body system course). As evidence for satisfactory completion, facilitators will sign the Normann tracking form for the Capstone Paper purpose/table requirements for sixth semester students.

Grade = U	Grade = S
Unsatisfactory Progress	Satisfactory Progress
Student has not submitted either the Capstone Paper purpose statement and/or relevant study tables which detail study design and methodology for at least 3 clinical studies.	Student has submitted a written purpose statement and detailed relevant study tables which outline the design and methodology for at least 3 clinical studies.

7th Semester Students:

Write first draft of Capstone Paper. Present briefly in class for facilitator feedback. Revise and submit first Capstone Paper to Capstone Sakai website assignment tab for central WPPD review within 4 weeks after Session 3 of the seventh semester. See Capstone Sakai website (Resources for guidelines, requirements, deadlines, tutorial and assignment submission instructions).

8th Semester Students:

Submit final paper for review by the end of the 8th semester. Resubmit to the original Capstone website assignment link. See Capstone Sakai website for detailed submission and Turnitin instructions.

9th Semester Students:

Submit the approved, final paper as evidence of PHA5668 course completion. Submit to assignments tab (PHA5668 Sakai website).

9th semester PE Course Requirement:

PE III Course Requirement – Submission of Approved, Final Capstone Paper to PHA5668 website.

Capstone Paper Options (5th-8th Semester): Decide on Topic during 5th Semester

For all 3 options described below, students write a review paper and evaluate at least 3 published studies.

Purpose: Learn to evaluate published data, and how to write and revise a review article.

Process: Write Capstone Paper first draft during the 6th or 7th semester (as early as the 5th semester). Choose from 1 of the Option papers described on the website. Instructions for submitting the 1st draft to UF for central review (including deadlines) are posted on the website. Revise and re-submit the FINAL paper during the 8th semester to meet graduation requirements. See document posted on the website regarding deadlines for each semester. The final paper must be submitted at the latest during early 9th semester (at least 12 weeks prior to the expected graduation date). The paper topic may be presented in lieu of a case via PowerPoint slides sometime between the 6th-8th semesters (1 time only). The Capstone paper topic may be different from the original CPI outline idea.

NOTE: Students are responsible for reviewing the web information each semester for updates and deadlines. Examples and a tutorial with tips on how to write a paper are posted on the Capstone website.

****Current Options for the Capstone Paper for 5th-8th Semester Students:**

General Paper Requirements: Write and submit a paper that requires literature evaluation, and synthesis of data and conclusions. This may be one of the following 3 paper options (approx. 4-10 single-spaced pages in length without tables, well-referenced).

RECOMMENDED: Practice Paper related to CPI topic (previously Option #2)

Relevant to practice setting, requires summarization of literature and available published data relevant to the students practice setting or the original CAPSTONE project outline/idea. Review ≥ 5 studies relevant to the topic (minimum 3 studies for topics with less available literature), and can be evaluated for methodology and data endpoints. Ex: Article highlighting methods to improve ADR reporting. The student may include a "Practice Experience" section which qualitatively describes their experience with the practice topic which is in some way related to the purpose of the studies reviewed for the paper. For example, what CPI strategies and resources were implemented, what were the perceived improvements in pharmaceutical care, and what were the challenges, obstacles, and limitations of the CPI implementation. Topic may be presented in lieu of a case via PowerPoint slides sometime between the 6th and 8th semester (one time only). IMPORTANT NOTE: An evaluative component (data collection) for the practice paper is NOT required for the WPPD program and SHOULD NOT be included in the practice paper.

ALTERNATIVE OPTIONS:

Outcomes Paper (previously option #3)

Preparation of a comprehensive critique/analysis of a therapeutic issue based on ≥ 5 published clinical outcome trials with a common purpose (minimum 3 studies for topics with less available literature). The clinical studies need to include evaluation of outcomes endpoints (to be distinguished from laboratory or surrogate endpoints such as hemoglobin A1c or blood pressure, respectively). Topics may be related to recent or upcoming coursework (e.g., renal, endocrine, gastrointestinal, pulmonary, neurology, HIV, Cardiovascular, and others). The paper topic may be presented in lieu of a case via PowerPoint slides sometime between the 6th and 8th semester (one time only).

Broad Review Article (previously option #1)

Extensively referenced, evidence-based review article of a broad topic related to pharmaceutical care. Include the hypothetical journal targeted, and the author instructions (see Jan. or Dec. issue). Ex: Review treatment of a selected disease state. The paper topic may be presented in lieu of a case via PowerPoint slides sometime between the 6th and 8th semester (one time only).

SEE Capstone website for assignment resources:

<http://www.cop.ufl.edu/education/doctor-of-pharmacy-degree-pharmd/working-professional-pharmd-wppd/pharmaceutical-care-papers-and-projects/>

Clinical Practice Improvement (CPI): 2nd to 5th Semesters CPI Outline, Plan, Reports, and Accomplishments

Student Name: _____ Date: _____

Semester: _____ Grade: _____

Facilitator Name: _____ Site: _____

Overview: During the first semester (Foundations Course), you have should identified 1-3 potential ideas for to improve Pharmaceutical Care at an affiliated site, beginning with a rough draft of ideas and thoughts for the project. In the 2nd semester, you are asked to continue to evolve this “*work in progress*” to the next level by deciding on a topic to plan during the 3rd semester. In the 3rd semester, students will write out a written project plan (1-2 pages) detailing the action steps needed to accomplish the CPI goals identified this semester. Students will provide provide written and verbal reports on actions taken and accomplishments achieved during the 4th-5th semesters. See further details below for each specific semester level.

Documentation: Submit the documentation each semester to the body system course assignments tab (CPI progress reports). In addition, 3rd semester students should submit the CPI Plan to the PHA5666 course assignments tab by Session 1 academic calendar date.

Background Resource: Capstone Sakai website, Foundations CPI lecture module.

***CPI - Clinical Practice Improvement (CPI)** relates to goals and/or strategies to improve pharmaceutical care in some way within the student's realm of influence. This could involve giving inservices to the community, counseling patients, implementing drug delivery systems to reduce medication errors, or traditional clinical pharmacy services.

SEMESTER 1: View foundation lecture and identify 1-3 potential CPI topic ideas

SEMESTER 2: Decide on a CPI topic and present/submit a brief outline during Session 2.

1) Briefly describe a Clinical Practice Improvement (CPI)* Program or Strategy that you would like to implement or improve within the area of Pharmaceutical Care. This intention of this project is for the student to implement a program, strategy, or initiative to improve pharmaceutical care (PC) at your employment or within an affiliated WPPD practice site. The strategy may be one that is expected to have either a direct or indirect impact on drug therapy outcome of patients. Include the intended practice setting, patient care population, potential involvement with other colleagues or health care teams (e.g., programs, professionals, societies), and other pertinent thoughts/ideas. Attach a separate page.

***NOTE: Data collection or an evaluative component should NOT be included for UF presentations or written summaries.**

2) Conduct a literature search related to project topic. Narrow the search strategy to identify relevant clinical trials related to topic (use Limits for “clinical trials” for type of article).

3) Briefly outline 2-3 practice goals that you intend this CPI strategy to accomplish. Write a reflection on the needs of your practice and the intended patient population for which you intend to improve pharmaceutical care. Include in this reflection your CPD learning objective(s) for the

identified Clinical Practice Improvement (CPI) activity. Write out 2-3 action steps you can begin to take this semester to research and initiate your CPI strategy/activity. Present a verbal summary of CPI goals, planned action steps, and personal CPD objective(s) within 5-10 minutes during class. Email documentation to your facilitator by Session 1 for feedback prior to or during the Session 2 presentation. Submit this written CPI outline (goals, strategy, action steps) to the CPI / CAPSTONE assignment link within the current body system course. The CPI outline exercise will serve as a basis for writing and initiating the CPI Plan in Semester 3.

SEMESTER 3: Write and submit a CPI plan relating to your topic idea from semester two (1-2 page, full sentence, full paragraph written project plan) . The CPI plan will be presented during Session 2 during the third semester. Conduct a literature search related to project topic. Narrow the search strategy to identify relevant clinical trials related to topic (use Limits for “clinical trials” for type of article). Third semester students should submit the CPI Plan to the PHA5666 course assignments tab by Session 1 academic calendar date. After receiving feedback for improvement by Session 2 academic calendar date, revise and resubmit the final documentation to PHA5666 and upload to PharmPortfolio.

SEMESTER 4-5: Provide a verbal and written summary of what you have accomplished in implementing a clinical practice improvement. Reflect on what you have learned. Describe the potential impact on pharmaceutical care at your workplace.

**Note: Data collection is not required for the UF PC Project requirements. However, if you decide to evaluate your project for your employer or institution, make sure that your project data collection procedures are HIPAA-compliant, and that you receive IRB approval from the institution at which you will conduct the data evaluation. Any evaluative program information should not be presented during class presentations or for written assignments*

Facilitator Evaluation for 2nd-5th Semester Grading in Body System Course (2-3 grade % points):

Written Draft or Plan (50 points)

- Facilitator comments may be provided during class session or individual appointment.

Verbal Report / Discussion (50 points)

- Facilitator comments may be provided during class session or individual appointment.

**University of Florida Working Professional Doctor of Pharmacy Program
Capstone Assignments: Study Tables, First and Final Papers (5th to 9th semester students)**

Student: _____ Semester: _____

Topic: _____ Date: _____

Evaluator: _____ Grade : _____

Students should complete the assignment based on the enrolled semester.

5th Semester Students (also see CPI updates in Appendix I): The completed summary should be no more than 1 page in length. -Write a summary of 3 potential topic ideas for the Capstone Paper (if caught up with CPI/Project requirements for 2nd-4th semesters). Each topic should include a literature search. If the Capstone topic is already determined, students may write a purpose statement and draft tables for relevant clinical trials as noted for 6th semester students.
OR - Discuss 3 Capstone Papers reviewed from the course website. Write a ½ page summary which describes the differences in the 3 types of option papers, including the types of examples that are posted on the website. The intention is to learn the assignment options and provide information to the group. The written summary should be turned in during class to meet the requirement.

Semester 6 Students:

-Write a purpose statement for the Capstone Paper and draft tables which outline the relevant clinical trials to topic purpose. To identify relevant clinical trials, conduct a literature search related to project topic. The tables will serve as a basis for writing the first draft of the Capstone Paper in the 7th semester. Submit purpose statement and study tables to PHA5667 assignments tab.

Semester	PHA5667 PE II Course Requirements
6	<p><u>Write a purpose statement for the Capstone Paper and draft tables outlining study design, methods and results for at least 3 clinical trials (relevant to purpose). Include reference list.</u></p> <p><u>Submit a document including purpose and study table(s) to pass the Practice Experiences II Course.</u></p>

7th Semester Students:

- Write first draft of Capstone Paper. Present briefly in class for facilitator feedback.
Students: Note required followup documentation. Revise and submit first Capstone Paper to Capstone Sakai website assignments for central WPPD review within 4 weeks after Session 3. See Capstone Sakai website for submission instructions and resources.

8th Semester Students:

- Revise and submit final Capstone Paper. Present briefly in class for facilitator feedback.
Students: Note required followup documentation. Submit final paper to the original Capstone website assignment link by the end of the 8th semester. See Capstone Sakai website for detailed submission and Turnitin instructions.

9th Semester Students:

- Submit the approved, final paper as evidence of PHA5668 course completion. Submit to assignments (PHA5668 website).

Facilitator Evaluation for 5th to 9th Semester Grading in Body System Course (2-3 grade % points):

Written Draft or Plan (50 points)

- Facilitator comments may be provided during class session or individual appointment.

Verbal Report / Discussion (50 points)

- Facilitator comments may be provided during class session or individual appointment.

** Students who have already completed the final Capstone Paper receive full credit (100%). **