ADVANCED PHARMACY PRACTICE EXPERIENCE
ONLINE DRUG INFORMATION ROTATION MANUAL

University of Colorado School of Pharmacy

Nontraditional PharmD Program

2011-2012

MAILING ADDRESS
Nontraditional PharmD Program
Pharmacy and Pharmaceutical Sciences Building
Mailstop C238
12850 E. Montview Blvd., Room V20-1116
Aurora, Colorado 80045
Phone: 303-724-3582
Fax: 303-724-3732

NTPD PROGRAM DIRECTOR
Shaun Berning, PharmD
Telephone: 303-724-3548 / Email: Shaun.Berning@ucdenver.edu

NTPD ACADEMIC AND EXPERIENTIAL PROGRAM COORDINATOR
Monika Nuffer, PharmD
Telephone: 303-724-3524 / Email: Monika.Nuffer@ucdenver.edu

COORDINATOR, NTPD DRUG INFORMATION PRECEPTORSHIP
Miki Goldwire, PharmD, MSc, BS
Telephone: 303-888-8663 / E-mail: Micheline.Goldwire@ucdenver.edu

PROGRAM ADMINISTRATOR
Jennifer Payne
Telephone: 303-724-3529 / Email: Jennifer.Payne@ucdenver.edu

ADMINISTRATIVE ASSISTANT
Julie McDermott
Telephone: 303-724-3595 / Email: Julie.McDermott@ucdenver.edu
# TABLE OF CONTENTS

**DISCLAIMER** – 4

**EXECUTIVE SUMMARY** – 5

1. **PROGRAM OVERVIEW** – 6

2. **STATEMENT OF PRINCIPLE** – 6

3. **GOAL** – 6

4. **PREREQUISITES** – 8
   - 4.1 Rotation and Credit-by-Challenge Planning Call – 8
   - 4.2 Coursework – 8
   - 4.3 Administrative and Immunization Requirements – 9
   - 4.4 Preceptors and Students – 9
     - 4.4.1 Preceptors – 9
     - 4.4.2 Students – 9

5. **GENERAL POLICIES AND PROCEDURES** – 10
   - 5.1 Coursework – 10
     - 5.1.1 Overview – 10
     - 5.1.2 Postponing Enrollment in the Online Drug Information Rotation – 11
     - 5.1.3 Rotation Site Availability and Drop Policy – 11
     - 5.1.4 Specific Coursework – 12
     - 5.1.5 Description of Individual Assignments – 13
   - 5.2 Academic Honesty – 17

6. **ASSESSMENTS** – 17
   - 6.1 Mid-Point Assessments – 17
   - 6.2 Final Assessments – 17
     - 6.2.1 Preceptors – 17
     - 6.2.2 Students – 19

7. **SUBMITTING ASSESSMENTS** – 20

8. **GRADRES** – 20
   - 8.1 Experiential Grading Policy – 21
     - 8.1.1 Consistently Exceeds Expectations and Consistently Meeting Expectations – 21
     - 8.1.2 – Need Further Development and Guidance – 21
     - 8.1.3 – Needs Significant Improvement – 22
   - 8.2 “I” Incomplete Grade – 22
   - 8.3 “F” Fail Grade – 22
     - 8.4 General Grading Procedures and Policies – 22
9. ROTATION DISMISSAL POLICY – 24

10. PERSONAL TIME – 24
   10.1 Excused Absence – 24
   10.2 Unexcused Absence – 25
   10.3 Procedures for Notification and Make-Up – 25

11. EXTENSION PROCESS – 25
**DISCLAIMER**

Students pursuing their doctor of pharmacy degree through the Nontraditional PharmD (NTPD) program at the University of Colorado School of Pharmacy are University of Colorado students, and are responsible for reading, understanding and abiding by the policies and procedures as listed in the following bulletins and manuals:

- School of Pharmacy (SOP) Student Bulletin
- Nontraditional PharmD (NTPD) Student Bulletin
- Advanced Pharmacy Practice Experience (APPE) Rotation Manual
- Advanced Pharmacy Practice Experience (APPE) Online Drug Information Rotation Manual
- Advanced Pharmacy Practice Experience (APPE) Credit-by-Challenge Manual

The bulletins and manuals listed above are not contracts. The School of Pharmacy reserves the right to modify the policies and procedures described in the bulletins and manuals at any time. Students and preceptors will be notified of any changes and can refer to the website for the program's updated policies and procedures.
EXECUTIVE SUMMARY

Preceptors
Preceptors are required to:

I. Utilize eCollege for course materials including assignments and grade book, provide adequate constructive feedback to the student, and inform the Coordinator of the Drug Information (DI) rotation of any potential concerns with the student competing the necessary paperwork or possible plagiarism.

II. Complete the PRECEPTOR MID-POINT ASSESSMENT OF STUDENT form after the student completes one-half of the rotation. Discuss the assessment with the student and provide a copy to the Coordinator of the DI rotation and the NTPD office.

III. Follow the procedures described in this manual if a student’s performance does not consistently meet or consistently exceed expectations at any time during the course.

IV. Complete the PRECEPTOR FINAL ASSESSMENT OF STUDENT form and provide an assessment of the student at the end of the rotation after receiving his/her self-assessment. Discuss the assessment with the student and provide a copy to the Coordinator of the DI rotation and the NTPD office.

Students
Students are required to:

I. Utilize eCollege for accessing all assignments, required readings, and grades. Complete necessary paperwork including a signed declaration for Goals and Objectives of the course and the orientation checklist. Read all assignment descriptions thoroughly and submit work via e-mail.

II. Complete the STUDENT MID-POINT ASSESSMENT OF PRECEPTOR form at the midpoint of the rotation. Discuss the assessment with the preceptor and provide a copy to the NTPD office.

III. Follow the procedures described in this manual if performance does not meet or exceed preceptor expectations.

IV. Complete the student part of the PRECEPTOR FINAL ASSESSMENT OF STUDENT form at the end of the rotation and give to the preceptor for him/her to complete the assessment.

V. Complete the STUDENT FINAL ASSESSMENT OF PRECEPTOR AND ROTATION SITE form and provide a copy to the NTPD office at the end of the rotation.
1. PROGRAM OVERVIEW

The online DI rotation is designed to enable students to learn, build competence and gain experience in the application of acquired knowledge in the field of drug information, specifically to develop skills in the retrieval, evaluation, and provision of drug information; to develop communication skills through effective writing; and to develop professional interpersonal skills. The NTPD program believes the drug information rotation provides students with the skills which are essential for the successful completion of all required rotations. Therefore, NTPD students must successfully complete the drug information rotation, either the online format or at a formal rotation site, prior to starting any other rotation.

2. STATEMENT OF PRINCIPLE

The guiding principle for the rotations is that pharmacy practitioners have responsibility for providing adequate drug information to fellow health care workers and patients. Therefore, NTPD students will take responsibility for provision of drug information.

3. GOAL

The goal of the online DI rotation is to build on previous didactic course knowledge, as well as a student’s prior professional experience to further develop a student’s ability to apply general and professional competencies in the art of drug information. After successful completion of this rotation, students do not merely gain knowledge and skill to be competent pharmacy practitioners, but should also expand upon their current level of practice to become better clinicians and communicators.

Specific Goals of the rotation are:

Data Collecting Ability:

1. Demonstrates systematic and thorough procedures for obtaining patient, drug, and other background data relevant to the request.
2. Ascertains the purpose for the question being asked (i.e., patient-oriented, information only, research-oriented, hospital policy information, etc.).
3. The student can discriminate between the requestor’s statement of perceived need and actual need.
4. Lists all demographic data on the inquiry form. The student clearly and concisely states the ultimate question of the caller.
5. Obtains accurate and thorough patient-specific data and other necessary background information when receiving requests for drug information.
6. The student effectively utilizes the Patient-Specific Drug Information Worksheet to collect data.
7. The student systematically and efficiently searches information sources, such as textbooks, biomedical literature, computer databases, etc.
Interpretative Skills:

1. Considers and critically evaluates patient factors and laboratory findings, which may affect therapeutic decisions/recommendations.
2. Appropriately interprets and synthesizes information from multiple sources, effectively applying that information to help solve patient-specific drug therapy problems.
3. The response reflects the student’s critical evaluation of biomedical literature of all types. The student is able to draw conclusions and make recommendations, which optimize patient care.

Knowledge Base within the Clinical Practice Area:

1. The student demonstrates a systematic, logical use of the tertiary, secondary and primary literature. The student can identify and utilize secondary literature references appropriately.
2. The student can determine the appropriate on-line database(s) to utilize in conducting a comprehensive literature search.
3. The student demonstrates an appropriate biostatistical knowledge base through written and verbal answers and participates actively in Journal Club.

Plan Design, Implementation and Follow-Up:

1. The student prioritizes responsibilities appropriately, keeping in mind the importance of patient care issues.
2. The student formulates clinically relevant responses to questions from health professionals.
3. The student responds to the inquiry in a timely fashion. If a complete response is not provided within the pre-specified time, preliminary information is provided to the inquirer within the time frame, with follow-up when all data are gathered.
4. The student justifies and documents the rationale behind the recommendation or response they provide.

Communication Skills:

1. Communication skills are presented effectively and clearly, in language (medical/lay terms) appropriate to the educational level of the inquirer.
2. Communications (presentations to preceptors) are presented succinctly and clearly in appropriate medical language to health care colleagues.
3. Formal written communications (i.e., consults, monographs, newsletters) are grammatically correct and follow standard medical writing styles.
4. Written communications are organized and sufficiently comprehensive to answer the inquiry.
Professional Attitude and Behavior:

1. The student willingly accepts and applies constructive criticism and advice from preceptors.
2. The student exhibits a high level of self-motivation, initiative and ability to work independently with a minimal degree of supervision.
3. The student meets all project deadlines and participates in assigned discussions and presentations.
4. The student displays a positive/professional attitude in the conduct of their responsibilities during the drug information rotation.

4. PREREQUISITES

4.1 Rotation and Credit-by-Challenge Planning Call

Students will contact the NTPD office upon admission into the NTPD program to schedule a rotation and credit-by-challenge planning call. This call is an individual advising session based on the student’s work experience. At the end of the call, students will receive a customized plan identifying which APPEs the student is eligible to challenge and the APPEs the student is to complete as a rotation, including the DI rotation.

4.2 Coursework

Prior to starting the any rotations, including the DI rotation, students must have completed the following coursework:

I. PRDO 7700 Clinical Skills Foundations - 2 credits
II. PRDO 7240 Evidence-based Pharmacy Practice - 3 credits
III. PRDO 7460 Advanced Drug Literature Evaluation and Clinical Applications - 1.5 credits
IV. PRDO 7560 Instructional Methods, with Seminars in Pharmaceutical Care - 2 credits

In addition, all students must complete at least 4, if not all, of the following Advanced Disease State Management Courses before starting rotations:

I. PRDO 7310 Cardiovascular and Renal Disorders – 3.5 credits
II. PRDO 7320 Gastrointestinal Disorders, Nutrition, and Critical Care – 4 credits
III. PRDO 7330 Infectious Disease, Pediatrics – 4 credits
IV. PRDO 7340 Oncology, Rheumatology – 4 credits
V. PRDO 7360 Endocrine Disorders, Hematology, and Pulmonary Disorders – 4 credits

VI. PRDO 7350 Neurology, Psychiatric Disorders, and Geriatrics – 4 credits

Students must complete the specific ADSM course that corresponds to each rotation. For example, if the student plans to do an elective oncology rotation, he/she must have already completed PRDO 7340.

4.3 Administrative and Immunization Requirements

All students must complete the administrative and immunization pre-rotation requirements one semester prior to the start of any rotation. Failure to complete the administrative and immunization pre-rotation requirement will delay the rotation start date. Students should contact the Administrative Assistant to receive a copy of the administrative and immunization pre-rotation requirements.

4.4 Preceptors and Students

4.4.1 Preceptors

Regardless of any policies and procedures described in this packet, preceptors and students are encouraged to contact the NTPD Coordinator of the DI rotation and/or the NTPD Academic and Experiential Program Coordinator to discuss any issues or problems that may arise.

All Preceptors must have a current resume (within the past year) on file with the NTPD department.

All Preceptors are expected to provide constructive criticism to the student on every assignment. Additionally, preceptors are expected to use common courtesy with any correspondence and to respond to all students inquiries in a timely fashion. Preceptors should treat this online rotation as if it were an in-person rotation with regards to the amount of time and energy given to the student.

4.4.2 Students

Students are expected to use common courtesy with any correspondence. Appropriate e-mail etiquette should include (but is not limited to) the following:

- **Mind Your Manners:** Think of the basic rules you learned growing up, like saying please and thank you. Address people you don't know as Mr., Mrs., or Dr. Only address someone by first name if they imply it’s okay to do so.

- **Watch Your Tone:** Merriam-Webster defines tone as an "accent or inflection expressive of a mood or emotion." It is very difficult to express tone in writing. You want to come across as respectful, friendly, and approachable. You don't want to sound curt or demanding.
• **Be Concise:** Get to the point of your email as quickly as possible, but don't leave out important details that will help your recipient answer your query.

• **Be Professional:** This means, stay away from abbreviations and don't use emoticons (those little smiley faces). Don't use a cute or suggestive email address for business communications.

• **Use Correct Spelling and Proper Grammar:** Use a dictionary or a spell checker — whichever works better for you. While you can write in a conversational tone (contractions are okay), pay attention to basic rules of grammar.

• **Read the email before you send it:** Be sure to read your e-mail before you send it. Remember, e-mail is a written document and a record of your correspondence. If you do not want to leave behind a written record, pick up the phone and call.

5. GENERAL POLICIES AND PROCEDURES

5.1 Coursework

5.1.1 Overview

Most students in the NTPD program complete the DI rotation through the online method. This rotation can be accomplished by working online with assigned preceptors on pre-established projects and assignments. Everything is done electronically, which is convenient for most students. Or, students can complete this rotation as an onsite rotation with a local DI center. (Please refer to the site-specific syllabus and NTPD APPE rotation manual for details regarding onsite rotations.) Since most students do not have a DI preceptor or service in their area, most choose to complete the rotation online. Both options for this course are worth 5 credits and graded pass/fail.

Students who choose to complete the online rotation should realize that this rotation will take approximately 200 hours to complete. The rotation is assigned 5 academic credits—more than any of the didactic courses. Consequently, students should expect it will take significant effort to complete it. Often, students underestimate the work involved in this rotation and do not plan accordingly in order to finish the rotation on time. **Therefore, students should be realistic in planning this rotation along with other coursework, rotations or work-related responsibilities.**

Also, students who choose to perform this rotation via the online method will need to complete the rotation within a typical semester schedule. This rotation begins in August, January or May/June and finishes in December, May or August respectively. Students will complete the rotation within 16 weeks during the fall or spring semester and 10 weeks during the summer semesters. Students who plan to complete the online DI rotation over the summer should plan on a more intense schedule. Assignments and projects are not due on a weekly basis, like the didactic courses. Many times, assignments will be due during the week, so students must stay organized throughout the rotation to stay on track. There are academic and financial penalties for not finishing the course on time (see Section 13).
5.1.2 Postponing Enrollment in the Online DI Rotation

Students who expect certain life events should postpone enrollment in the DI rotation as this is a very intensive course and will require a majority of your time. The following students should consider postponing enrollment:

- Students taking another rotation should not enroll in the online DI rotation; it is not recommended that students take the online DI rotation with another rotation.
- Students who are expecting a life changing event, e.g. a birth of a new child, change in job or a move.
- Students who have a vacation planned during the semester; holidays and vacations are not guaranteed during the online DI rotation, this includes the last week of the rotation.

5.1.3 Rotation Site Availability and Drop Policy

The NTPD program takes great care to choose appropriate rotation sites for our students. This process becomes increasingly challenging as more pharmacy schools open across the nation. Therefore, the NTPD program will offer one live rotation opportunity per rotation completed by the student. The one live rotation opportunity also includes the online drug information rotation offered by the NTPD program.

After mutual discussion between the student and the NTPD experiential staff, a rotation is considered “assigned” once the NTPD staff sends an email to the student confirming a site can accept the student for a rotation. The student may select to complete their rotation at this assigned rotation site; otherwise, the student will travel to Colorado to complete their rotation.

All students are expected to complete an assigned rotation. Any student who considers dropping a rotation must immediately inform the NTPD Academic and Experiential Program Coordinator and their preceptor.

A dropped rotation occurs when the student, at anytime, chooses not to complete an assigned rotation or chooses not to show up at the assigned rotation site. All students who drop a rotation and are in need of another rotation will come to Colorado to complete their replacement rotation. The student will be charged full tuition, a retake fee and two times the original non-refundable rotation fee for the replacement rotation or if the student submits a credit-by-challenge in lieu of completing a replacement rotation. If the student is not yet registered for their dropped rotation, then the student will be charged the equivalent of five (5) semester credit hours of tuition.

All dropped rotations will appear on the student’s transcript with an “I” (incomplete) grade. If the student does not retake and receive a final grade for the dropped rotation within 12 months, then the "I" grade will automatically turn into an “F” (failing) grade as written by the University’s Uniform Grading policy.

No student will be allowed to carry over the completed rotation hours from the dropped rotation to another rotation.
Exceptions to the above will be considered in the event of extenuating circumstances, which are listed under the excused absence section in this (APPE Rotation) manual. Documentation of the extenuating circumstance must be provided by the student to the NTPD Academic and Experiential Program Coordinator. If the student experiences an extenuating circumstance not listed in this manual, then the student should contact the NTPD Academic and Experiential Program Coordinator.

All students are expected to exhibit professional behavior while in the program and working with their preceptors, and should refer to the school’s Student Ethics and Conduct Code.

5.1.4 Specific Course Work

All of the activities students are exposed to during the online DI rotation are designed to improve skills in information retrieval, evaluation, and communication, as well as increase drug therapy and disease management knowledge. The experiences during the online DI rotation have applicability to any future rotations and the clinical area in which the student expects to practice. Therefore, students must do this rotation before doing other clinical rotations. During this rotation, students are expected to answer inquiries from their practice site as well as simulated inquiries. Students will complete several writing projects during the rotation that are relevant to drug therapy decision-making.

The online DI rotation is divided into two core sections: Drug Information and Medication Safety. A list of the assignments/projects required in the DI rotation is listed in section 5.1.5 Description of Individual Assignments.

Students will have two preceptors. The primary preceptor will precept the majority of assignments and the secondary preceptor will precept only assignments involving medication safety (Adverse Drug Reaction, and Medication Error Assignment; Bibliography of New Drug Resources). Students should contact their preceptor(s) by email within the first couple days of the rotation and include the following information:

- Name
- Address
- Phone and fax number
- UCDenver email address
- Best times to contact you by phone and e-mail
- Brief description of your current practice site

Students are also expected to contact their preceptor via phone within the first couple days of the rotation.

All work is expected to be completed in microsoft word and e-mailed as an attachment to the appropriate preceptor. Students are expected to read all assignment descriptions and
become familiar with the information available on Blackboard. All assignment descriptions are posted in Blackboard. Appropriate grammar, sentence structure, and English is expected with every assignment. Preceptors are not required to review any assignments in which the student failed to follow the assignment description.

Preceptors may ask for revisions on all assignments, including DI questions. Assignments must be completed to the preceptor’s satisfaction before a grade can be issued. This may require several drafts. A course calendar is provided with due dates for all assignments. These due dates may be negotiable with your preceptor. However, the journal club dates and the Threaded Drug Monograph discussion dates are not negotiable.

Preceptor feedback on assignments will be provided in a timely manner. Assignments may be submitted prior to due dates and will be evaluated in the order that they are received. Preceptors will make all attempts to provide feedback as soon as possible following submission. However, this may vary depending on the number of students enrolled in the rotation and the amount of submissions for a given assignment. If students have questions or concerns regarding feedback on assignments, they are encouraged to discuss this with the preceptor. A reasonable time is within one week. Students should save a copy of all email correspondence.

If the student feels the preceptor is not returning assignments in a timely fashion, the student should contact the preceptor (by phone or email) and explain their concerns, in a respectable and clear manner. Detail what the concerns are regarding. If no response is received, contact the preceptor again within 24 hours to ensure they have received the email or to schedule a phone conference to discuss any concerns. If the response is not timely on subsequent assignments, please contact the Coordinator of the DI rotation. It is important that the student establishes good communication with the preceptor and discusses any initial concerns with them, just as you would do in a “live” rotation.

Preceptors will work closely with the student to ensure all assignments are completed in a timely fashion. If a student feels as if they are falling behind they will need to provide the preceptors with potential dates for completion of any outstanding assignments. Students should review the Assignment Checklist to see which assignments are overdue. It is imperative that the student catch up with overdue assignments. Additional tuition charges exist if the student is unable to complete the rotation on time (see Section 13).

5.1.5 Description of Individual Assignments

**Medication Safety (Reviewed by the Secondary Preceptor)**

1. **Bibliography of Resources of New Drug Therapies**

   Students are to locate a minimum of 5 resources for obtaining information on New Drug Therapies (drugs approved by the FDA within the last 6 months). These resources can include items such as newsletters, bulletins, journals, Internet sites, etc. The resources located should NOT be for one specific drug, but should be resources that cover all new drugs approved within a given time frame. Students should prepare a Bibliography of Resources for New Drug Therapies that contains the citations according to the AMA Style Guidelines unless otherwise stated by your preceptor.

2. **Medication Error Prevention Quiz**
The Medication Error Prevention Quiz consists of 25 multiple choice questions that have been designed to uncover and correct gaps in knowledge and misconceptions regarding drugs that have, in the past, led to medication errors. These questions were developed for healthcare practitioners to determine how well they are prepared to recognize potential medication error related problems. The examples used are based on actual incidents received through the United States Pharmacopeia/Institute for Safe Medication Practices (USP/ISMP) Medication Error Reporting Program (MERP). These errors have previously occurred in hospitals. To obtain the correct answers to these questions, the use of references, notes, colleagues, etc. is encouraged. The goal of this teaching tool is to decrease the chances of a particular error occurring or reoccurring.

3. ISMP Medication Safety Alert Item Analysis
For this assignment, the student is responsible for reading the ISMP Medication Safety Alert Newsletter, identifying one agenda item that you research at your practice site, and implementing this agenda item at your practice site. The report should contain how you personally modified a current medication use practice to improve medication safety for your patients, and what measurement(s) you propose to use to determine the success of your actions. **Please Note:** The identified agenda item **should NOT** be a medication safety practice that has already been modified at your site. It should be a new item that you personally identify and modify as a requirement of this course. This document must utilize correct grammar, punctuation, spelling, and citation of references. If you work at a practice site that does not involve patient care, an alternative assignment will be provided.

4. FDA Medwatch and Patient Safety Quiz
Student review information on the FDA’s MedWatch and Patient Safety program and complete a 16 question quiz. After, the student should be able to describe the importance of postmarketing drug surveillance, identify basic limitations of premarketing clinical trials in the detection of ADRs, list the professional and regulatory requirements regarding the monitoring and reporting of ADRs, and, discuss the FDA MedWatch program.

5. ADR Monitoring and Reporting Site Analysis
Students are to read the ASHP Guidelines on ADR Monitoring and Reporting and compare these guidelines to guidelines developed at their institution listing the strengths and weaknesses of their institutions policies for ADR Monitoring and Reporting. If the institution is one in which the monitoring and reporting of ADR is not feasible, an alternative assignment will be provided.

6. ADR Analysis
Students will analyze one suspected adverse drug reactions (ADRs) to determine whether or not the ADR should be reported to the FDA MedWatch Program (based on the criteria described in the Desk Guide, the article Clinical Impact of Adverse Drug Event Reporting, and clinical experience). If the student does not routinely encounter ADR in their practice, the simulated ADR may be used. Students can choose to analyze an ADR that has occurred at their practice site or they can request an ADR to analyze from the preceptor. Students are to submit a word document containing a summary of the suspected ADR and their analysis of the ADR.
**Drug Information (Reviewed by the Primary Preceptor)**

7. **Website Reviews**
   Students will review several internet websites and provide a critique that includes the source of the information contained in the site, any access fee, the author(s) and their credentials, the purpose of the site, mission statement, and if the site meet these goals, the intended audience, if the material is current, referenced appropriately, if the site is easy to navigate, your overall impression of web site and how and if you would use this site in your practice setting.

8. **26 DI Responses Submitted (25 plus one literature review)**
   Students will complete a minimum of 25 DI Worksheets. Students will be expected to answer questions of various difficulty levels and time requirements. In meeting the required number of questions, one-third (8) of questions should be of low difficulty (take < 30 minutes to answer); one-third (11) of moderate difficulty (take 31-89 minutes to answer); and one-third (6) highly difficult (take > 90 minutes to answer). Questions will come from various experiences including: 1) submission of 11 questions that you have researched while working as a pharmacist at your practice site. These will be submitted by completing a DI response form for each question. If clinical studies or Web sites are used to support your response, then the reference information should be included on the DI response form. If you are currently not working at a practice site, additional simulated questions will be provided for you to use in place of practice site questions.
   2) answering simulated questions (14 questions) using the DI response form, 3) one literature review to include a summary of an article published within the past 6-months that is of significant interest to health care providers using proper medical writing. This article may be chosen by your preceptor. The student will include the complete citation at the top of the document followed by a summary (1-2 pages) of the study, critique (describe any study limitations), and conclusions about the applicability of the article to clinical practice..

9. **Journal Club**
   A pharmacy-related article for review and analysis will be selected by either the student or the preceptor, preferably published within the past 6-12 months. Each student will be asked to present one (1) article by serving as the leader of the journal club discussion. In addition, each student must participate in two (2) journal discussions. Students are encouraged to participate in all journal clubs, but are only required to participate in a total of three. Students completing the article analysis for presentation should prepare a short critique of the article using the standard journal club critique form using proper grammar, spelling, and punctuation. The day of the journal club a threaded discussion (under the Discussion Board Section of the DI rotation Web site) will be set up by the coordinator and will include a link/attachment to the completed article analysis. Participants will then be able to review the critique, submit questions to the leader and make comments on their interpretation through the threaded discussion. The leader/presenter should respond to any questions or comments posted during the designated time frame.
10. Drug Monograph

Drug monographs are used to evaluate drugs that are being considered for formulary addition. A monograph may evaluate recently approved agents or established agents. The monograph gives a general overview of the agents and highlights the strengths and weaknesses in comparison to other agents in the class. You are to assume that your monograph will be handed to all Pharmacy and Therapeutics or Drug Review Committee members. The monograph should include the following sections: Pharmacology, Pharmacokinetics, Efficacy, Precautions/Contraindications, Adverse Events, Interactions, Dosing, Safety Considerations, Cost/Pharmacoeconomics, Conclusions, and References. Students will submit a minimum of one draft and a final version of the drug monograph, although several drafts may be required if the student does not have a grasp of medical writing. Students should proofread the first draft for correct spelling, punctuation and grammar.

11. Alternative Medicine Monograph/DUE/Therapeutic Class Review

One of the following can be submitted: Alternative Medicine Monograph, Drug Use Evaluation Criteria, or Therapeutic Class Review.

With the use of Alternative Medicines continuing to grow it is imperative as health care providers and providers of information on medication use, that we continue to expand our knowledge base in this area. The Alternative Medicine Review will allow students to research, critically evaluate, and compile information on a selected Alternative Medicine using an evidence-based medicine approach. This assignment follows the same outline as the drug monograph listed above.

Drug use criteria should be developed if one or more of the following are met 1) the drug has a limited therapeutic use and requires guidance in its use, 2) the drug is a high-risk agent with potential problems due to adverse effects or toxicity, and it is a safety risk (e.g., chemotherapy drugs), 3) the drug is expensive. Drug use criteria may contain one or more of the following appropriate use or indication(s), appropriate dosage guideline which may include route, dosing interval, or duration of drug therapy, appropriate monitoring of drug therapy. The drug use criteria may apply to medical services (e.g., a drug to be prescribed by cardiologists), prescribing criteria (e.g., a drug to be prescribed for a specific indication or under specific conditions), patient care areas (e.g., a drug to be administered only in the emergency department), or duration of therapy (e.g., laboratory tests have reached therapeutic goals).

Class reviews contain information on pharmacology, FDA approved indications and more common off-label uses, dosing, clinical trials, adverse effects, drug interactions, cost, etc. The purpose of a therapeutic class review is to evaluate the relative similarities and differences among agents within a therapeutic class. Usually, a class review is brief and more concise than a monograph on a single drug. Unlike the latter, a class review is not designed to establish the drug’s properties and efficacy. It seeks to determine the advantages and disadvantages among the drugs compared with others included within the same class. Information on each drug in the class needs to be reviewed, although only a small percentage of studies may actually be cited. The review must be concise, yet thorough in its discussion of the pertinent highlights. The use of tables often is the best way to summarize and convey comparative information. Information presented in tables may need to be derived from a variety of sources.
5.2 Academic Honesty

Honesty is expected of all students. Any compromise in scholastic integrity will not be tolerated. Plagiarism is a type of academic dishonesty or cheating where the author intentionally uses words or ideas that are not their own without due acknowledgement. Plagiarism is stealing another person's words and submitting them as your own. This includes verbatim sentences from medical journals and even the Physicians' Desk Reference® (PDR). The student should never use verbatim sentences from any source unless properly documented with quotes.

If a student is suspected of plagiarism, the preceptor should have definitive documentation and talk with the student about the seriousness of the offense. If the preceptor has a feeling that the student plagiarized material (because the student’s past work was not written in such a proficient manner) but does not have definitive proof, the preceptor should talk with the student about their concerns without accusing the student. In either case, the preceptor should use this opportunity to teach the student about the seriousness of plagiarism. The preceptor may contact the Coordinator of DI rotation for further assistance. If a second incidence of alleged plagiarism with appropriate documentation (proof) occurs, the student's activities will be brought to the attention of the NTPD Program Director for appropriate action.

6. ASSESSMENTS

6.1 Mid-Point Assessments

Mid-Point student and preceptor assessments are primarily designed to promote continued dialogue between preceptors and students and will be completed at the half-way point in the semester.

Preceptors are expected to provide constructive criticism and include any concerns the preceptor might have regarding the students performance thus far.

Students are expected to assess their level of commitment and ensure they adequately provide the preceptor with any concerns.

6.2 Final Assessments

6.2.1 Preceptors

The final assessment is the process by which the preceptor evaluates the student’s performance at the end of the online DI rotation. The primary preceptor shall complete the preceptor final assessment of student form. The secondary preceptor will provide written comments via email. The Coordinator of the DI rotation shall combine the comments from the secondary preceptor with the primary preceptor’s evaluation form.

Summative assessment tool contains the specific goals and objectives stated in section 3 of this document. Grading of the students is based on a four-point scale for each component (domain) of the assessment tool:
I. Consistently Exceeds Expectations

II. Consistently Meets Expectations

I. Needs Further Development and Guidance (Defined as not consistently exceeding or meeting preceptor expectations.)

II. Needs Significant Improvement (Defined as consistently failing to exceed or meet preceptor expectations.)

Preceptors shall be required to provide written comments to support grades of “consistently exceeds expectations,” “consistently meets expectations” or “needs significant improvement” in any domain in an advanced pharmacy practice experience.

Examples of such verbiage are listed below.

COMPETENCY: Interpretative Skills:
The response reflects the student’s critical evaluation of biomedical literature of all types. The student is able to draw conclusions and make recommendations, which optimize patient care.

Jane had a tendency both in her DI question responses and in her monograph drafts to head to tertiary literature or summaries provided by others to answer clinical questions. Because of this, it is not clear whether she is proficient in critical evaluation of all types of biomedical literature.

COMPETENCY: Knowledge Base Within the Clinical Practice Area:
The student demonstrates a systematic, logical use of the tertiary, secondary, and primary literature. The student can identify and utilize secondary literature references appropriately.

As mentioned above, there was a tendency to focus on tertiary literature for many assignments. Although this approach may be appropriate for some types of questions, in some cases it results in answers that are out dated which can compromise patient care. When writing evaluating drug therapies it is very important to go to the primary literature and evaluate it to determine the relative value of the drug therapy under review.

COMPETENCY: Plan Design, Implementation, and Follow-Up:
The student responds to the inquiry in a timely fashion. If a complete response is not provided within the pre-specified time, preliminary information is provided to the inquirer within the time frame, with follow-up when all data are gathered.

For a number of the DI questions, the amount of time logged in as spent on the question was beyond what it should have taken to respond. In addition, when a clearly urgent situation was presented the answer was documented as provided in a timely fashion (ie, either completely answered quickly or with a preliminary answer followed by a complete one).

COMPETENCY: Communication Skills:
Communication skills are presented effectively and clearly, in language (medical/lay terms) appropriate to the educational level of the inquirer.
DI questions were generally answered at the physician/researcher level regardless of the level of the questioner.

Formal written communications (i.e., consults, monographs, newsletters) are grammatically correct and follow standard medical writing styles.

Grammatical skills require work as does Jane’s ability to clearly get the message across in the written format.

COMPETENCY: Professional Attitude and Behavior:
The student meets all project deadlines and participates in assigned discussions and presentations.

Due to medical and work related issues only early assignments were provided on time. During the last week and week following the end of the rotation, over half of the assignments were submitted.

Preceptors shall be encouraged but not required to recommend a course grade for students:

I. I Recommend a PASS Grade
II. I Recommend a FAIL Grade
III. I Do Not Wish to Recommend a GRADE

Preceptors who recommend a FAIL or I DO NOT WISH TO RECOMMEND A GRADE shall be required to provide written comments to justify the grade. Written comments must explain why the preceptor feels the student accomplished or did not accomplish the overall competencies of the course.

Each preceptor shall give a copy of the preceptor final assessment of student form to each student at the start of each APPE rotation.

Preceptors shall have the option to nominate students for a School of Pharmacy award for excellence in experiential training.

Students shall have the option to nominate preceptors for a School of Pharmacy award for excellence in experiential training.

6.2.2 Students

Students shall complete a student final assessment of primary preceptor, student final assessment of secondary preceptor, and a student final follow-up assessment, which is an assessment of the rotation itself. All information should be forwarded via e-mail to the Coordinator of the DI rotation and the Program Administrator.
7. SUBMITTING ASSESSMENTS

The midpoint and final assessments shall be mandatory and confidential except as described below.

Copies of all assessments shall be forwarded to the Coordinator of the DI rotation and the NTPD office. It is to each student’s advantage that they ensure that all assessments are completed and returned on a timely basis.

Students who fail to submit their assessments of each preceptor and the rotation shall not be permitted to continue in the program. A final grade will not be assigned until ALL assessments (including those from the student about the preceptor) have been received.

The NTPD Coordinator at his/her discretion shall provide a copy of any assessment to the Experiential Education Committee and to administrative officers in the School of Pharmacy.

8. GRADES

It is important for students to understand that the online DI rotation is not formatted like a traditional online course. It has been designed after an onsite DI rotation that might be completed in an actual DI Center. The online DI rotation should be thought of as one 200 hour rotation, equivalent to 5 weeks of full time work. The 200 hours will require approximately 20 hours per week during the short summer semester and 12 hours per week during the spring and fall semesters. The 200 hour estimate reflects the workload for degree candidates with typical writing skills and typical pharmacy practice exposure to providing drug information. As with onsite rotations, additional time is likely to be required to meet the degree requirements for degree candidates who have little experience in drug information or medical writing, or with difficulties with written or spoken English.

Because of this, ALL of the assignments are given up front at the beginning of the rotation along with a timeline to assist with the best sequence for completing these assignments. Online students, just like onsite students, are expected to multi-task and work on some assignments throughout the rotation. This allows for students to gain a variety of experiences throughout the rotation and feedback from preceptors can be incorporated into final assignments. The two most time consuming assignments are the Drug Monograph and Alternative Medicine Assignments which require research, compilation, evaluation, and summarization of information on a single agent. Students will need to work on these assignments throughout the semester. Interim key due dates are provided on the calendar (topic selection, draft 1, draft 2, and final copy).

The grade for each student for each rotation will be one of the following:

I. Pass

II. I (Incomplete)

III. F (Fail)
8.1 Experiential Grading Policy

8.1.1 Consistently Exceeds Expectations and Consistently Meets Expectations

The student’s respective experiential program will submit a “Pass” (P) grade to the Office of the Registrar for an APPE course when the preceptor recommends a “Pass” grade and her/his summative (final) assessment of the student’s performance is comprised only of “consistently exceeds expectations” and/or “consistently meets expectations” scores.

8.1.2 Needs Further Development and Guidance

The student’s respective experiential program will submit a “Pass” grade to the Office of the Registrar for an APPE course when the student’s preceptor recommends a “Pass” grade, or chooses not to recommend a grade, and her/his summative (final) assessment of the student’s performance contains no more than five (5) “needs further development and guidance” scores. The Experiential Education Committee will assign a course grade if the student’s preceptor recommends a “Fail” (F) grade. Students shall be expected to improve their performance in future APPE courses for all areas of performance graded “needs further development and guidance” in an APPE course.

A student with six (6) or more scores of “needs further development and guidance” in the preceptor’s summative (final) assessment of her/his performance in a single rotation, shall have her/his course grade assigned by the Experiential Education Committee and, at the Committee’s choosing, may be required to create an action plan designed to help the student to improve her/his performance in future APPE courses. If requested to write an action plan, the student will submit a written copy of the plan to the student’s respective experiential program within seven (7) days of notification of the requirement to write an action plan. The Experiential Education Committee has the right to interrupt the APPE program of any student who does not meet the seven (7) day deadline to submit an action plan.

A student scored “needs further development and guidance” in an APPE course summative (final) assessment for the same one (1) or more areas of performance scored “needs further development and guidance” in a previous APPE course summative (final) assessment:

i. Will be required to create an action plan designed to help the student to improve her/his performance in future APPE courses and the student will submit a written copy of the plan to the student’s respective experiential program within seven (7) days of receipt of the second summative (final) assessment. The Experiential Education Committee has the right to interrupt the APPE program of any student who does not meet the seven (7) day deadline to submit an action plan.

ii. Will have their APPE course grade determined by Experiential Education Committee. The course grade for the student’s second APPE course and a copy of the action plan will be provided to the Student Advancement and Appeals Committee.
8.1.3 Needs Significant Improvement

A student scored “needs significant improvement” for one or more areas of performance in an APPE course summative (final) assessment:

i. Will be required to create an action plan designed to help the student improve her/his performance in future APPE courses and to submit a written copy of the action plan to the student’s respective experiential program within seven (7) days of receipt of the summative (final) assessment. The Experiential Education Committee has the right to interrupt the APPE program of any student who does not meet the seven (7) day deadline to submit an action plan.

ii. Will have their APPE course grade determined by the Experiential Education Committee. The APPE course grade and a copy of the action plan will be provided to the Student Advancement and Appeals Committee.

8.2 “I” Incomplete Grade

A student assessed with an “I” (incomplete) rotation grade will have one year to satisfactorily complete the rotation, and the student will be charged a rotation retake fee. In accordance with school policies, the “I” (incomplete) grade will automatically become an “F” (fail) grade if the student does not satisfactorily complete the rotation within one year. Students should refer to the NTPD Student Bulletin for more information regarding this policy.

8.3 “F” Fail Grade

A student assessed with an “F” (fail) rotation grade shall be required to satisfactorily complete another rotation, and the student will be charged a rotation retake fee. In accordance with school policies, failing a rotation places the student on academic probation and failing the repeated rotation or another rotation may result in academic suspension.

Any student placed on academic probation should refer to the Academic Advancement section in the NTPD Student Bulletin to review the policies and procedures associated with academic probation.

8.4 General Grading Procedures and Policies

- The Experiential Education Committee shall have the power to approve or revise a submitted action plan designed to assist individual students. The plan approved by the Committee shall be in writing and shall be signed by the student. The student’s signature shall not denote that the student agrees with the summative (final) assessment of her/his performance in any APPE course. A student who refuses to sign an action plan shall have their APPE program terminated.

- A copy of the approved action plan prescribed by the Experiential Education Committee for a student completing APPE courses shall be sent by the Office of
Experiential Programs to the student’s preceptor at the start of all future APPE courses.

- An approved action plan prescribed by the Experiential Education Committee may include an interruption or modification of the student’s APPE courses.

- The Experiential Education Committee shall review the on-going performance of a student who has had an action plan prescribed by the Committee. The plan shall be modified as seen fit by the Committee. A review for a student permitted to continue APPE courses shall take place after each APPE course is completed. A review for a student not permitted to continue their APPE courses shall take place after the completion of the prescribed action plan and, if the student’s APPE courses continue, after each subsequent APPE course is completed.

- For NTPD students graded “needs further development and guidance” or “needs significant improvement” during any rotation, the NTPD Academic and Experiential Coordinator may contact the preceptor and the student to determine why the student received the grade. The NTPD program may provide a pass grade for the rotation following the guidelines outlined above. However, the student’s grade for the rotation maybe determined by the Experiential Education Committee if the NTPD Academic and Experiential Program Coordinator learns from the preceptor(s) any factors that may put the grade into question.

- A student assessed an “I” (incomplete) grade for one or more APPE courses shall have their performance reviewed by the Experiential Education Committee after the completion of the student’s last APPE course and “I” (incomplete) grade changed to a “Pass” or “Fail” grade.

- A student who fails to complete an APPE course and does not submit the final assessment of course and student will receive an “I” (incomplete) grade for their APPE course. If the student does not retake and receive a final grade for the incomplete rotation within 12 months, the “I” grade will automatically turn into a “Fail” grade in accordance with University Uniform Grading policy. (Please refer to the Rotation Site Availability and Drop policy.)

- A student who wishes to appeal an Experiential Education Committee decision are advised to follow the grievance policies and procedures as described in the School of Pharmacy Student Bulletin.

- A student whose performance is to be reviewed by the Experiential Education Committee shall be permitted to submit documentation to the committee. This may take the form of a dossier documenting their competency through the APPE courses.
• Any decision made by the Experiential Education Committee in the case of an individual student shall not set a precedent for subsequent decisions for other students.

9. ROTATION DISMISSAL POLICY

The following may result in dismissal of a student from a rotation:

I. Failure to adhere to site policies and procedures.

II. Failure to adhere to UC Denver School of Pharmacy policy and procedures.

III. Persistent unacceptable performance, conduct and/or behavior.

IV. Any action which is detrimental to the care of a patient or to the clinical service provided by the site and/or preceptor.

V. Unauthorized removal of any books, charts, references, journals or equipment from a patient area or practice site.

VI. Violation of State and/or Federal laws.

10. PERSONAL TIME

Attendance for a rotation is mandatory though the School of Pharmacy realizes that events can occur which may prevent attendance. The following statements address these circumstances and the procedures for making-up lost time.

10.1 Excused Absence

Excused absences fall into four categories:

i. Medical Necessity

ii. Death of a Family Member

iii. Jury Duty

iv. Extenuating Circumstances Unforeseen by This Policy

I. Medical Necessity – Refers to an unpredictable or serious illness of the student or an immediate family member. Routine physician and other health care practitioner visits within the student’s control do not fall under this policy and should be schedule at other times.

II. Death of a Family Member – Includes death of a spouse, child or significant other in the immediate family as well as parents, grand-parents and sibling or the student, spouse or significant other.
III. Jury Duty – Students summoned for jury duty must contact the NTPD Director of Experiential Program for advice.

IV. Extenuating Circumstances Unforeseen by This Policy – Students with extenuating circumstances not addressed by these policies should contact the NTPD Coordinator of Experiential Programs.

10.2 Unexcused Absence

Absences that do not fall into any of the above categories are unexcused and are not permitted. Vacations are not permitted during the DI rotation in which daily internet access is not feasible.

10.3 Procedures for Notification and Make-Up

Students who require an excused absence must inform their preceptor and the Coordinator of the DI rotation as soon as possible. If requested, the student shall provide documentation, signed by an appropriate authority, to verify the requirement for an excused absence.

Students who miss one or two days of a rotation for an excused absence shall be required to make up that time at the discretion of the preceptor. Students who miss more than two days of a rotation for an excused absence shall be required to make up that time at the discretion of the preceptor and the Coordinator of the DI rotation. Students who have an unexcused absence shall be required to make up the missed time. Failure to complete make-up work within a time frame specified by the Coordinator of the DI rotation and/or preceptor will result in an Incomplete (I) grade.

Irrespective of time-off for any reason, students are required to complete all the objectives of the rotation. A student shall normally be deemed not to have completed all the objectives of a rotation if they are in attendance for less than 200 hours during the prescribed dates for an APPE rotation and will be required to complete an additional rotation.

11. Extension Process

Students who are unable to complete the requirements of the online DI rotation within one semester will receive an "Incomplete" grade and will need to re-enroll in the course. Students who have not completed the work of the APPE will receive grades of “Incomplete” [I]. Incomplete grades remain as documentation on your transcript but do not affect your grade point average [GPA] unless an actual grade for the course is not submitted within one year. Incomplete grades become permanent after one year; failing grades affect your GPA.

The rotation ends on the last day of courses, as specified on the course calendar. All assignments are expected to be successfully completed by that date. Students who have not completed the requirements of the rotation by the grade submission date will be issued grades of Incomplete, Withdrawal or Incomplete Failing. Depending on the amount of work to be completed, students may be required to retake the rotation at any semester in which the student can be rescheduled, based on availability of rotation slots. Availability for the
subsequent semester is not guaranteed, and is unlikely. Time extensions, in 3 week increments, may be requested in writing through the course director, to complete limited outstanding assignments. Extensions will be expected to begin on the first day of the subsequent semester. Other extension period start dates may be considered on a case-by-case basis, through agreement among the course director, preceptor, and student.

The student may purchase a three-week extension, if they do not think they will complete the necessary course work within the semester. To begin this process, the student should submit a written request via e-mail to the Coordinator of the DI rotation.

One extension fee [currently $600] is charged for every THREE (3) WEEK extension or portion thereof. The Coordinator of the DI rotation will keep track of the additional period required for completion of the rotation requirements and will submit the total number of extension fees to be charged to the student’s account to the NTPD Academic and Experiential Program Coordinator, once the rotation has been successfully completed. By requesting a time extension, the student is accepting the total amount of the APPE extension fees. The accumulation of fees is stopped only by completion of the rotation or formal withdrawal of the student from the rotation. Formal withdrawal from the rotation requires repeat of the rotation and repayment of full tuition in order to receive academic credit for the rotation.

Extension of the rotation beyond one additional semester requires approval by the NTPD Academic and Experiential Program Coordinator. Extension fees continue to accrue but increase in amount to $600 per extension fee if extension into a third semester is required.

Time extensions will normally begin on the first day of the subsequent semester. The 3-week inter-semester breaks are not typically included in the time extension periods, nor are preceptors expected to work with the students during these intervals unless both parties (the student and preceptor) decide mutually.

Exceptions to these policies may be considered on an individual basis. Requests for exceptions must be submitted in writing to the Coordinator of the DI rotation and the NTPD Academic and Experiential Program Coordinator.