

PHM7002A/B – Découverte du médicament : enjeux actuels (2 cr.)

Conferences and supervised readings

For participants in the [Summer School on Medicines](#) (SSM), the requirements for PHM7002A (2 cr) are:

1. Choose a drug-related topic outside your current field of study (to be validated by the professor).
2. Write a literature review article (~3,000 words): 45% of the final grade.
3. Perform a ~20-minute oral presentation (including questions) at a "Current Issues in Drug R&D" Symposium: 45% of final grade.
4. Attend presentations at the final Symposium: 10% of the final grade.

Notes: The Summer School on Medicines may be held in May, June, or July, but the PHM7002A and B course itself will always be taken during the following fall semester (final assessments in December). The requirements for PHM7002B (2 cr) are identical to those for PHM7002A; the two courses may be taken concurrently. For those who wish, these credits will be eligible for the [Microprogramme de deuxième cycle en recherche, développement et évaluation du médicament](#) (15 credits).

Learning objectives

At the end of this course (including the full program of SSM), participants will be able to :

- Describe the major steps in drug research and development (R&D), highlighting the objectives and risks involved at each step, from idea to market.
- Discuss current issues in areas of drug R&D that are outside their research specialty.

Criteria for the choice of topic

Interdisciplinarity. To develop your interdisciplinary skills, the topic must cover an area outside your field of training. You are therefore strongly encouraged to explore other topics related to drug discovery, clinical development, real-world evaluation, or economic and business aspects.

Important dates

August 15 - Submission of the topic for validation. Submission should include a working title and descriptive abstract (~50 words) of the topic as well as a short starting bibliography (2-3 references). For example, articles from [Nature Reviews Drug Discovery](#) are excellent starting points. The submission should be accompanied by a short CV (1 page) indicating your previous training and a short description of your current research.

September 15 - Submission of the article outline for comment. The one-page detailed outline should present the main ideas that will be addressed in the review article. References are not required.

November 15 - Submission of the final version of the review article.

Mid-December (date to be determined) - Symposium " Current Issues in Drug R&D". Oral presentation on the topic

of the review article. The date and time of the symposium and instructions for the preparation of oral presentations will be communicated during the semester. The PPTX file for each oral presentation must be submitted no later than 24 hours before the Symposium.

Note: All documents must be submitted via the Studium page of the course.

Writing the review article (3,000 words, excluding references).

Evaluation will rely mainly on the review paper and the related oral presentation. The article must be on a current theme or issue related to drug discovery, development, real-world (post-marketing) evaluation, or economic and business aspects. This is an opportunity to develop your ability to synthesize information and your critical judgment. The quality of your written communication is part of the evaluation insofar as it reflects your mastery of the subject (if necessary, reports in English are accepted for those who are less comfortable with French). To guide you in writing your reports, here are our main recommendations, along with grading scheme (100 pts = 45% of the course).

Overall presentation: 10 pts. The article should be double-spaced and paginated. Abbreviations should be identified when they first appear in the text. The title page should include the title of the report in addition to your name and course acronym. Structure your work with subheadings (e.g., "Introduction", "Review" and "Perspectives"). Figures and tables should be numbered and accompanied by captions.

Introduction (max 2 pages) : 20 pts The introduction should situate the reader in the general context of drug R&D and highlight the relevance of the topic. Present the problem, whether it is scientific, technological, economic, societal, etc. Define the specialized terms and the main issues. Elements of this description can also be found in part in the review section, as long as you follow a logical order. The idea is to provide the information necessary to understand the concepts that you will be dealing with afterwards.

Review (about 7 pages) : 50 pts. To do this review, you will need to rely on your readings (which are there to support and flesh out your understanding of the topic). Highlight the issues. Be specific in describing the data: give numbers and illustrate with examples when relevant. Organization of the text using subsections is encouraged.

Critical perspectives (about 1 page) : 20 pts. Often the most difficult part... because it is the most creative. It requires you to take a step back from the theme that has been presented. Do not limit yourself to summarizing the synthesis or to saying that it is "interesting". Make a personal effort to develop an opinion on, for example, the issues and/or future developments and/or the strengths and weaknesses. Justify your judgment and develop your ideas rather than simply listing them.

Annotated bibliography : 10 pts. The bibliography (20-40 references) should present the main sources consulted during your research for the review paper. Primary sources (original articles) should largely dominate over review articles. The most important references should be accompanied by a 2 to 3-line commentary that explains why the reference is noteworthy ([example of article with annotated bibliography](#)).