

2022 S2 NSC2500: Assignment 1 (Essay)

Topic: Written Essay

Due: Wednesday 31st August 2022 at 11:59pm

Submission: via the assignment portal on StudyDesk

Marks: Total of 100

Total weighting: 30% of the final mark

Purpose of assignment:

- Improve knowledge of homeostasis and how disruption may lead to a specific disease/disorder
- Understand and articulate how drug therapies address a particular pathophysiology
- Identify drug mode of action, indications, contraindications, potential interactions, adverse effects and therapeutic outcomes
- Learn how to integrate knowledge and present ideas logically and concisely
- Develop written communication skills
- Develop and improve critical thinking skills
- Specifically address Course objectives 1 - 4

Task overview and topic selection:

For this assessment, you will produce an essay that describes the pathophysiology of a specific disease or condition, as well as present the pharmacology that is used to address this. You will need to focus on the disease/disorder plus pharmacology that you have selected using the StudyDesk Topic Selection activity.

This topic selection activity will open at 9:00am on Monday 11th July and will close at 11:59pm on Wednesday 10th August. After this date, any student who has not chosen a topic will be randomly assigned to one. Students affected will be notified of their topic via an email to their USQ email address.

Please note that each topic is also capped, with **only 80 students** able to select each topic on a first-come first-served basis. ***So, if there is one particular topic that you are interested in, please ensure that you enter your selection as early as possible so that you don't miss out!***

You will then research your specific disease/disorder and the indicated pharmacology. From this you are to write an essay that describes the affected system (the normal physiology), what has gone wrong to cause the disease (the pathophysiology), and then how the related pharmacology is used to address this. Your essay is to be targeted towards an educated audience (for example, your peers in the Course).

Ensure that you use the marking criteria that is included later in this document to make certain that you are addressing all of the required details and information.

Structure and components of the assignment:

Students will work individually to prepare an original essay on their chosen topic. The essay must be no longer than 1500 words (*with a +10% leeway – you may submit a report that is more than 10% under the word limit, but this may be too brief and you will not be addressing the requirements*).

In addition to the text and general information, figures and illustrations can be very important tools to convey complex information to your audience. You are welcome – and encouraged – to utilise appropriate illustrations to support your text. Just remember that your text must refer to your figures/illustrations, and any figures or illustrations must also be appropriately referenced.

What to include in your essay:

Your essay should include (but is not limited to):

- A title page that includes your name, the essay title, the word count, as well as your student number
- A summary/abstract (250 words maximum that does not count towards the 1500 word limit of the essay itself) that succinctly summarises the essays content.
 - Your summary/abstract should follow the format of: introduction, summary of the main points/discussion in your essay, including the normal physiology, pathophysiology, and pharmacology, and then finish with a short conclusion.
 - *NOTE: references are not included with this*
- An introduction and brief overview of the normal physiology and homeostasis of the system that is relevant to your chosen topic (*Note that a **thesis statement** is **NOT** required*)
- The pathophysiology and the mechanisms leading to the disease/disorder
- The pharmacology related to the treatment of the disease/disorder
 - This must also include at least one specific drug example that addresses:
 - Drug naming (chemical, generic, and proprietary)
 - Mechanism of action (pharmacodynamics)
 - Pharmacokinetics
 - Route of administration
 - Indications, contraindications, precautions and side effects
- You should also consider any other aspects that may be relevant to your topic, for example:
 - Are there any important drug interactions (other medications, natural products, etc) that patients should be aware of?
 - Are there any lifestyle, exercise, therapy, or other physical considerations that are relevant? (for example, is the age of the patient a factor? BMI? Comorbidities? Polypharmacy? etc)
- The relevance of the disorder and pharmacology to clinical practice must also be clear
 - *This may be in any relevant context, but ideally your field of study (nursing, sports exercise, etc)*
 - *For example, consider how you would apply your knowledge of the topic to your field in a clinical setting. How would this improve how you operate? How will this affect the clinical outcomes? How will this knowledge help you provide patient centred care? etc*
- Conclusions

*Important note: A key element of this assessment is the **pharmacology**. Alternate therapies, or different types of pharmacology, may be relevant for the disease/disorder that you are presenting, **but if you do not present the pharmacology that is part of your specific topic you will not be addressing this part of the criteria and will lose marks.***

Writing the summary/abstract:

You will need to write and submit a short (250 word) summary with your essay. This should succinctly summarise the essay's content. It should follow the format of: introduction, summary of the main points/discussion (including the normal physiology, pathophysiology, and pharmacology) and finish with a short conclusion.

You will have the opportunity to engage with the Smarthinking team via the USQ library to get some early feedback on this element of your assessment. Please refer to the information on the related StudyDesk page. While this is not mandatory, the feedback that you can obtain from this process will be of particular help as you structure your main essay. Taking advantage of this will help you achieve the best possible mark for this assessment.

Your Smarthinking submission needs to be completed by Friday 12th August. Submitting this on time is important to allow sufficient time for the Smarthinking tutors to provide feedback on your academic writing, so that this can assist you to improve your work on this assignment.

With this component of your assessment, please just note that references and in-text citations do not need to be included. Your references will be included with your full essay.

Finding information

You may draw your information from a variety of resources, but you should focus on current, up-to-date, research and the current state-of-knowledge. A good guide is to select **a minimum of five recent and relevant scholarly journal publications** on your topic and cover these in your essay (primary peer-reviewed research articles published in the past 5 years are what we are looking for).

All of your information sources should be referenced appropriately, and you should avoid resources that may be unreliable or out-of-date (websites, news outlets, and similar, should be avoided).

Your references and in-text citations should be included within your essay, these do not need to be included with the summary/abstract. All references and in-text citations should be in the required reference format (Harvard AGPS or APA). References and in-text citations do **NOT** contribute to your word limit.

Textbooks can be a good resource for some established information and concepts, and these can be very useful during your initial investigations. However, you should then source the key information for your essay from evidence-based and peer-reviewed sources. Textbooks may be referenced in addition to these, but you should ensure that you are using journal publications as much as possible.

- *You should aim for a minimum of 5 primary journal articles for your essay*
- *These are the type of publications that are required to address the references criteria (ie, not textbooks!)*

Begin your search for scientific articles at the USQ Library website, specifically the [PubMed database](#) and/or Web of Science. Links to these resources can be found through the [USQ library website](#).

Referencing:

Referencing your information sources is an important part of this assessment. A reference list must be included with your essay (and this does **NOT** count towards the word limit).

The reference style will be:

- Harvard AGPS (<https://www.usq.edu.au/library/referencing/harvard-agps-referencing-guide>), or
- APA (<https://www.usq.edu.au/library/referencing/apa-referencing-guide>)

➤ ***You may choose to use either format, but you should only use the one format and must use it consistently and accurately***

Academic Integrity:

Please remember, USQ holds Academic Integrity (<https://policy.usq.edu.au/documents/14727PL>) as a core principle and any breaches (Academic Misconduct) can result in a range of penalties (<https://policy.usq.edu.au/documents/14732PL>).

It is very important that your essay is presented in your own words – do not just copy/paste material from other sources!

If you need help with maintaining academic integrity in your work please consult USQ Library Support (<https://www.usq.edu.au/library/study-support/start-toolkit>).

Formatting Guidelines:

- Font size 12pt (using a clear font, such as Arial, Calibri or Times New Roman)
- 1.5 line spacing
- Standard/normal margins (2.54cm)
- Title page with title, name, word count and student number
- The abstract and the main essay are to be submitted in **ONE** file
- The submitted file must both be in **PDF** format **ONLY**
 - Name your file in the format: <SURNAME>_ID#.pdf, eg:
 - IVANOVSKY_U61234567.pdf

Important format details to double-check and remember!

- The submitted essay file **MUST** be in PDF format **ONLY**
- The submitted file **MUST** include the summary/abstract as well as the main essay
- The summary/abstract **MUST** be no longer than 250 words
- The essay body **MUST** be no longer than 1500 words in length (+10% leeway) (*this total does not include words for the abstract*)
- The essay **MUST** include a full reference list
- In text-citations and references **MUST** be in Harvard AGPS or APA format **ONLY**

Submitting Your Essay:

- 1) You will submit your file using the assignment submission portal on StudyDesk
 - **Also remember that you are required to have read the 'Assessment Submission and Extension' document on StudyDesk, and you must also have completed the Academic Integrity Module, before you will be able to submit your assignment**
- 2) Any application for extensions must be made **PRIOR** to the due date and **MUST** be accompanied by supporting documentation.
 - Additional information on how to request an extension can be found [here](#).
 - Note that this process is centrally administered; your Examiner cannot approve extensions

Ensure that you note the following:

- Late submissions without prior authorisation will incur late penalties as per USQ policy (<http://policy.usq.edu.au/documents/14749PL>).
 - *Remember that for NSC2500 this is a 5% reduction of the maximum possible marks for each calendar day, or part day, that the assessment is late.*
 - *Assignments submitted more than one week after the due date without an approved extension will receive a mark of zero.*
- For more information on assessment submission, extension, and late penalties in NSC2500 please refer to the '**Assessment Submission and Extension**' page on StudyDesk.

Selection of topics:

The topic selection activity will open on StudyDesk from 9:00am on Monday 11th July and will remain open until 11.59pm on Wednesday 10th August.

You MUST have selected your topic before the activity closes. Any student who has not chosen a topic once the activity closes will be randomly assigned to one (students will be notified of their designated topic via an email to their USQ student email address).

Please note that each topic is also capped and **only 80 students** will be able to select each topic on a first-come first-served basis. ***So, if there is one particular topic that you are interested in, please ensure that you enter your selection as early as possible so that you don't miss out!***

When you are selecting your topic, make sure that you note the specific details. For example, if you choose a topic that was "Diabetes mellitus (type 2) and sulfonylureas", but you then prepare your essay on type 1 diabetes, or base it on insulin therapy, **you will lose marks or receive a zero mark for the related criteria.**

IMPORTANT:

- ***You MUST complete your assignment on the topic you have chosen, or the one that was assigned to you.***
- ***If you complete your assignment on a different topic without approval, you will receive a zero mark for the assessment.***

Topics (80 students MAX for each):

1. Osteoarthritis and non-steroidal anti-inflammatory drugs (NSAIDs)
2. Pneumonia and antibiotics
3. Angina and nitrates
4. Epilepsy and anti-seizure medication
5. Prostate cancer and hormone ablation

Marking Criteria	Marks (total 100)
Summary/abstract <ul style="list-style-type: none"> Succinctly presents the important information covered in the essay Includes a short introduction, summary of the main points/discussion (ie, the normal physiology, pathophysiology, and pharmacology) and also a short conclusion Is in the required format (PDF) and within the word-limit (250 words +10% leeway) Spelling and grammar are correct throughout 	10 marks
Essay: overall content <ul style="list-style-type: none"> The topic is clearly introduced and there is a logical progression of ideas The essay demonstrates a thorough and complete understanding of the topic, particularly the pathophysiology and pharmacology The essay text is informative and would be understood by an educated audience Includes and considers recent developments, new research & advances in knowledge 	12 marks
Essay: Normal physiology <ul style="list-style-type: none"> A brief and accurate overview of the normal physiology relevant to the topic/disease/disorder is provided 	10 marks
Essay: Pathophysiology <ul style="list-style-type: none"> The pathophysiology of the disease/disorder presented is comprehensive, relevant to the specific disease/disorder, and correct Mechanisms responsible for the disease/disorder are explored in detail 	20 marks
Essay: Pharmacology <ul style="list-style-type: none"> The related pharmacology to treat the disease/disorder is clearly described Relevant drug examples (at least one) are noted, including the: <ul style="list-style-type: none"> Drug class and naming Mechanism of action (pharmacodynamics) and pharmacokinetics Routes of administration Indications, contraindications, precautions and side effects 	16 marks
Essay: Relevance to practice <ul style="list-style-type: none"> The relevance of the disease/disorder <u>and</u> the pharmacology to clinical practice is clearly apparent <ul style="list-style-type: none"> <i>May be in any relevant context (eg. nursing and newly diagnosed oncology patients, sports exercise and patients with chronic respiratory disease, etc)</i> 	12 marks
Essay: literacy and format <ul style="list-style-type: none"> Is in the required format (PDF) and within the word-limit (1500 words with +10% leeway) The essay is well written and clear; spelling and grammar is correct throughout Imagery and figures are well used to support the text, and are clear and appropriate 	10 marks
Essay: References <ul style="list-style-type: none"> References are well used to support the information provided (MINIMUM 5) In-text citations are well used to support key information and figures References are recent, appropriate, and correctly formatted (Harvard AGPS or APA) 	10 marks