













ROMÂNIA Mircea Cristea Technical College Brașov

M2 Toxic effects and Risk assessment DU 3 Phenethylamine designer drugs

Part I

Title (DU title)	DU 3 Phenethylamine designer drugs
Author/s (name of the teachers involved)	Cindea Mirela
Discipline/s involved	Education
Index of contents	Sociological imagination Social responsability Sociology of education Social issues Social environment Consumption of NPS
Learning objectives (how to define learning objectives, see example:	 To define the concept of toxic effect of psychoactive substances on the human body. To be aware of their risk on the health and to

https://toxoer.files.wordpress.com/2017/06/o1-usal-asyllabustoxoer.pdf)	be able to evaluate individually or with some help the direct and indirect effects of the consumption of these substances.
Materials, and spaces (physical/virtual)	Ines platform
Teaching strategies (e.g. brainstorming, cooperative learning (Jigsow), role-playing etc)*	Exposure Brainstorming Learning through discovery Virtual translation - free discussions
Mediation tools (e.g. digital technologies needed to carry out the activity)**	Videoprojector Video Keynotes
Activity involving students	Transposing the message through artistic

in the process of co-construction* of the content/activity (at least 1 for DU) which idea and how can it be integrated into the UD?*** expression (lyrics; melodic line)

Part II

^{*/**} We recommend identifying teaching-learning strategies and tools through the eLeneToolkit¹ https://elene4life.eu/dynamic-toolkit/

¹ eLene4Life is an Erasmus+ KA2 project (2018-2021) supporting curriculum innovation in higher education through the development of active learning approaches for soft skills, with the ultimate aim of improving students' employability. https://elene4life.eu/

Describe the Teaching-learning sequence

General presentation of the subject: Toxicology

Toxicology arose in antiquity with the discovery of toxins by humans.

Among the first people to study the effects of poisons (and poisonous plants) was the father of Chinese medicine, Shen Nung, who died of poisoning from a poisonous plant.

Another pioneer in toxicology is considered to be the father of modern medicine, Hippocrates. Some documents show that the Queen of Egypt, Cleopatra, experimented with various toxins on war prisoners. In the medieval era, the Jewish philosopher Moses Maimonides, who

Lesson 1. Teaching-learning sequence (micro-planning)

20 min. Topic overview

wrote the famous Treatise on poisons and their antidotes stood out. One of the greatest toxicologists of the age was Paracelsus, (the father of iatrochemistry), who, around 1500, said: 'All substances are poisons, there is no substance that is not a poison; only the right dose makes the difference between a poison and a cure'. Goethe used to say: 'Dosis sola facit venenum' But the father of toxicology is considered to be Mateu J.B. Orfila, Spanish physicist, who compiled a systematic correlation between the chemical and biological properties of a toxin.

Toxicology: Study of adverse effects of chemical on the body

The exposure of the body to toxic substances is achieved through three

ways: oral-ingestion; inhalation and intravenous.

How can the human body fight toxins and eliminate them?

- 1. Absorption
- 2. Distribution
- 3. Metabolism
- 4. Excretion

1. Absorption

- short description
- flow of the substance in the human body

2. Distribution

- short description
- students' involvement by collecting

15 min. Questioning e feedback

examples from the class using the brainstorming method

- students must become aware of the negative effects of toxic substances on the body; at the same time, they must assess the risk through the lens of negative effects.

3. Metabolism

- short description
- brainstorming and concrete examples using various methods/sources/models: information from the media, concrete examples if there are any; hypothetical cases.

4. Excretion

- short description
- the natural way of eliminating toxins from

the body

Observations and conclusions

The classification of toxic substances according to their "aggressiveness" and the exposure to the organisms, the effect of harmful substances on the body;

Projecting negative effects: negative hypothetical scenarios.

The students of class XI C have transposed into verses the negative effects of toxic substances on the body.

15 min. Debate

5 min. Remarks and conclusion

Part III

Preparation of teaching-learning materials (slide, audio, paper, presentation, infographics, etc).

The didactic resources (created/modified by teachers in collaboration with researchers) are based on the contents available in the short-blended learning course http://ines.unibo.it/course/view.php?id=10

Example of activity involving students in the process of co-construction

- **Instagram**: share posts with specific tags and create stories by tagging profiles.
- **Tiktok**: make videos up to 3 minutes long and react to other user's uploaded videos by tagging them.
- **Telegram**: record audio, create podcasts, comment on specific posts in

chat groups, share links to materials, conduct video interviews (e.g. conducting interviews about what NPS is and providing a better explanation of it or addressing misconceptions). Editing and creating presentations about NPS, using storytelling to create videos or comment on images (e.g. identifying what TV series don't say about NPS and creating an image contest to see which one gets the most votes).

- YouTube: Live YouTube (or Twitch) sessions where experts respond to questions - the presenter and expert should be engaging to avoid being boring with recordings posted on YouTube channel or live audio Telegram sessions that can be turned into podcasts.
- Other potential activities include creating themed advertisements, themed memes, and using the "yes, but..." structure. Kahoot is a quiz platform that can be used to create question banks on NPS or risks/effects. It's also possible to create comics or even short rap music pieces.

SONG

It's about drugs, the worst entourage I'm lost in my mind, honestly I need a line I was a chatterbox, now I'm very quiet I can't concentrate, always zoning out A big smile on my face, but something just ain't right, I'm cold inside,
The heart doesn't beat; it struggles, screaming for help,
In the past, everything was clear,
Now, everything is... ha, you see? ... unclear
And I wonder "Am I guilty for this?"

I fell in a trap and I tried drugs to see what it feels like I was with my friends who told me "just do it" Step by step, little by little, I started to like it. I started to lie to myself saying "you're doing this for fun" The days have passed and I'm still doing it. They say now you can do anything (can I?) Big fat lie, hate to tell you, You had fallen in the pit and there is no escape

So many problems, I have no idea what to do, I argued with my parents and I left home I said I could handle it, guess what?, I was wrong, I have no memories, cause I've forgotten them all, I'm even afraid of myself, I'm even paranoid,

I can't control my body, it's like I'm being controlled,

I've got scars on me, it's like I'm mutilated,

There is no one to help me and my friends have forgotten me.

Kid, take care of your life, be aware of what you're getting into!

Believe me, it's not cool to sit like a vegetable in bed,

Connected to a device,

When the others are playing outside, or walking around the park,

When you face death and you can't do anything about it,

When you see your parents in tears, exhausted,

When everyone around you is dressed in white,

They inject you with all sorts of things, telling you that it's complicated.

You'd turn back time to fix what is broken,

But the hourglass is turned and the sand is finished.

It's too late to ask for forgiveness,

But you should do it.

Only heaven saves you,

But this is not guaranteed, either.