



1st Interdisciplinary Neuroethics Diploma Course

Universidad Anáhuac México Norte^a • Cátedra UNESCO • Istituto Scienza e
Federe • Gruppo di Neurobioetica • Bioética Clínica y Neuroética Anáhuac

^aFacultad de Educación ∩ Facultad de Derecho ∩ Facultad de Ciencias de la
Salud ∩ Facultad de Economía y Negocios ∩ Facultad de Psicología ∩ Facultad de
Bioética

Objective

To give basic knowledge to the students about what is neuroethics, from an interdisciplinary perspective that allows appreciation of its neuroscientific and philosophic identities. From this, the course should make evident problems and novelties arising in diverse knowledge domains, at the philosophic and practical level. Likewise, we aim to prompt connections and interdisciplinary dialogue among the professors for the course's benefit and the ignition of future collaborations.

MODULE 1

Introducción a la ética y las neurociencias

Introduction to ethics and neurosciences

MODULE 2

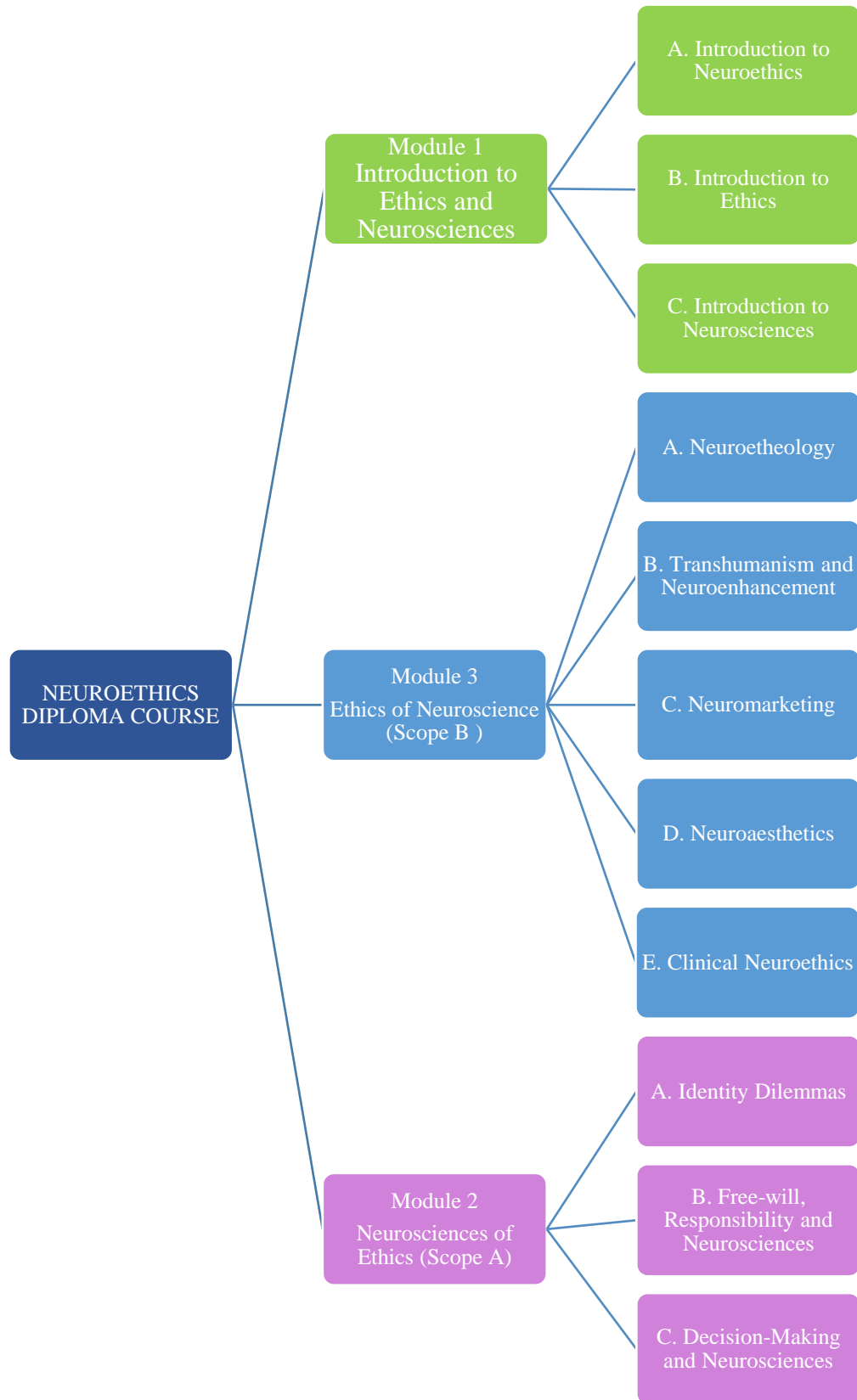
Neurociencias de la Ética

Neuroscience of Ethics SCOPE A

MODULE 3

Ética de las Neurociencias

Ethics of Neuroscience SCOPE B





1ST MODULE

Introduction to Ethics and Neurosciences

The purpose is to give essential ethics and neuroscience knowledge to students coming from different disciplines, that allows them to understand the following modules and to prompt analysis and reflection of dilemmas on their own. **35h**

1.1 Introduction to Neuroethics 4.5 h (3 classes)

This section will introduce the student to neuroethics origins, how the field works, as well as the problems it faces globally and also a unique perspective of its origins in Mexico.

1.1.A Historia, Definiciones y Neuroética Global

- History briefing and definitions, and a global perspective of neuroethics advances.

1.1.B Neuroethics in Mexico

- Prehistory and today's scenario of neuroethics in México

1.1.C Neuroethics Map

- A map and a compass for neuroethics wave. An overview of the structure through scopes, approaches, domains, frameworks.

1.1.D.i Interdisciplinarity

- Introduction to Interdisciplinary studies processes.

1.2 Introduction to Ethics and Bioethics (6 classes)

This section will set the foundations to understand ethics and bioethics as the guide for neuroS/T/I and the interpretation of neuroadvances on matters of identity, consciousness, conscience and free will.

1.2.A Introduction to Ethics, Morality and Bioethics

- Concepts and definitions.

1.2.B Happiness

- It's relevance regarding in choosing an ethical framework.

1.2.C Human Nature

- Different lines of thought and its impact in neuroethics scope A and B.

1.2.D Freedom

- Relevance with respect ethics and neuroethics scope A.

1.2.E Conscience and Consciousness

- Distinguishing the two concepts and explaining in a moral framework and in terms of neuroethics advances.

1.2.F Human acts and personhood.

- Human acts through examples and exercises.

1.3 Introduction to Neurosciences 10.5h (5 classes)

Scope A and Scope B should be considered in the planning of the material. Scope A: How neuroS/T/I contribute to society, and where they should be guided carefully. Scope B: How the mind, thought and behavior are studied (through which tools, concepts, theories, and assumptions), how they are understood (including what it is known v.s. not known). Use examples and definitions of identity, consciousness, conscience, free will, decision-making in your explanations.

1.3.A Introduction to neurosciences

- Overview of the different neurosciences

- Basic Neurosciences What is basic neuroscience? Include its objects of study (extension and limitations), methods, methodologies, philosophical assumptions.

1.3.B Clinical Neurosciences (Neurology and Psychiatry)



I and II What is clinical neuroscience, include its objects of study (extension and limitations, methods, methodologies, philosophical assumptions.

1.3.C Surgical Neurosciences (Neurosurgery)

- What is neurosurgery? Include its objects of study (extension and limitations), methods, methodologies, philosophical assumptions.

1.3.D Cognitive Neurosciences (Neuropsychology)

- What is neurosurgery include its objects of study (extension and limitations), methods, methodologies, philosophical assumptions

1.3.E Neurociencias e Imagenología (Neuroimaging)

- What is neurosurgery include its objects of study (extension and limitations), methods, methodologies, philosophical assumptions

Sesión de Interdisciplinariedad y ejercicio

+3 hours of Workshop/Discussion/Practice/BINCA

+3.5 hours Practice Hourse

Interdisciplinarity and exercise

2ND MODULE

Neurociencias de la Ética o Ámbito A / Neuroscience of Ethics or Scope A

The purpose of this module is to show the students what neurosciences can add to the understanding of identity, consciousness, conscience, free will, decision making topics and what the limitations and issues of such contributions are. **30h**

1. 1.1.D.i Interdisciplinarity

- Introduction to Interdisciplinary studies processes.

2.1 Dilemas de Identidad y Neuroética 6h (3 classes) /Identity dilemas and Neuroethics

This section approaches how neurosciences contribute and challenge to understand or re-think the concept of identity.

2.1.A Abordaje desde la Genética /Genetic Approach

- Qué es la neurogenética, qué es el Human Genome Project, Cuales son los avances actuales de la genética en cuanto al sistema nervioso y comportamiento. Hablar de neurodiversidad.

2.1.B Abordaje desde la Filosofía / Philosophic approach

- Qué es identidad desde la filosofía.

2.1.C Abordaje desde el Derecho / Legal approach

- Qué es identidad para el derecho. Qué importancia tiene este concepto en la práctica de las diferentes áreas del derecho.

2.2 Libre Albedrío, Responsabilidad y Neurociencias 6h (3 classes)/ Free-Will, Responsibility and Neurosciences.

This section approaches how neurosciences contribute and challenge to understand or re-think the concepts of freedom and responsibility.

2.2.A Aspectos Filosóficos / Philosophic approach

- Definition of freedom, free will, responsibility and their relationship among them at the light of neurosciences' contributions.

2.2.B Abordaje desde el Neuroderecho /Legal Approach



- Freedom and responsibility in law. What is the practical importance of these two concepts in the different areas of practice of law, especially in criminal law and what are the ethical implications of such potential changes.

2.2.C Casos Prácticos/ Practical Cases

- Approach of violence, freedom and responsibility at light of neuroscientific advances, from practical cases.

2.3 Toma de Decisiones 9h (3 classes) /Decision-Making

This section approaches how neurosciences contribute and challenge to understand or re-think the concept of moral decision-making.

2.3.A Approach from neuroeconomics

- What is decision-making from the neuroeconomics perspective, what does this tell us about moral decision-making?

2.3.B Neuropsychological approach.

- Which neuropsychological processes intervene in decision-making?

2.3.C Moral decision-making and neuroethics

- What are the neuroethics considerations on neuroscience teachings of moral decision-making?

+3 Workshop hours /Discusión/Actividad Práctica/BINCA

Teen Criminal Case the Panel of this module's prof. give implications.

+ 3.5 Practice hours

MÓDULO 3

Ética de las Neurociencias o Ámbito B / Ethics of Neuroscience or Scope B

The purpose of this module is to show students the extent of neuroS/T/I applications in the different professional domains. Likewise, point out ethical considerations in each case and incite the student's reflection from its own area of expertise. **35h**

3.1 Neurotheology 6h (2 classes)

Reflect on what the newest studies addressing concepts of theology and spirituality through neuroimaging can tell. How these should be interpreted, and if and how they can contribute to spiritual matters.

3.1.A Approach from Theology and Metaphysics

- Reflect from theology about the latest articles concerning spiritual experiences, faith, meditation, prayer and neuroimaging.

3.1.B Approach from fMRI

- Reflect from neuroimaging about the latest articles concerning spiritual experiences, faith, meditation, prayer and neuroimaging.

3.2 Transhumanism and Neuroenhancement 6h (3 classes)

This section will address what is transhumanism, what are the related concepts and relationship to neuroS/T/I, especially neuroenhancement.

3.2.A Theory and philosophic lines of transhumanism.

- Review concepts and what philosophic views see transhumanism and posthumanism.

3.2.B Philosophic and Legal considerations and advances in neurotechnologies and neuroenhancement.

- What are the current advances in neuroS/T/I in the clinical, educational and public/lifestyle domains



- What are the needs and risks for/of these? Which could be aligned with the transhumanist or posthumanist movements? Could they be interpreted as morally admissible as part of a different line of thought? What are the legal and philosophical implications of some of these advances?

3.3 Neuromarketing (2 classes)

This section will approach the advances neuroS/T/I have brought to the world of marketing, positive and negative, what the ethical considerations are, and how they are addressed in practice.

3.3.A Neuromarketing Foundations

- How are neurosciences used in marketing, what changes have these brought to the market.

3.3.B Neuromarketing in practice

- Reflections about the ethical implications through real case experiences. (+1)

3.4 Neuroestética/ Neuroaesthetics 6h (3 classes)

This section will review how neuroS/T/I are used to understand aesthetics, how aesthetics are used in clinical neurosciences, and what the ethical and philosophical considerations are.

3.4.A Philosophy of Beauty

- Review concepts of beauty and art from the philosophical perspective.

3.4.B The neurosciences of perception of beauty

- What have neurosciences added or changed to the concept of beauty, aesthetics and art, and the perception of these.

3.5.C Aesthetics and clinical neuroscience: psychotherapy.

- What do art and beauty contribute to clinical neurosciences in therapy.

3.5 Clinical (Medical) Neuroethics 6h (3 classes)

This section will review the advances of neurosciences in the medical domain, and the bioethical dilemmas rising from these advances.

3.5.A Clinical Bioethics Foundations

-Review the most appropriate methodologies for the approach of clinical neuroscience dilemmas. Is there a possibility to generate a most appropriate methodology for clinical neuroethics in the medical domain?

3.5 B Clinical Neurosciences Issues

- Review which are the most common ethical dilemmas in clinical neurosciences.

3.5.C Practical Cases

- Practice with cases.

+5 horas de Taller/Discusión/Actividad Práctica/BINCA

+5 hours of Workshop/Discussion/Practice/BINCA

TOTAL: 100 horas