

## SYLLABUS DE COURS / ACADEMIC SYLLABUS

Spirituality, philosophy and science

Intitulé du cours / *Spirituality, philosophy and science*

Discipline <i>Academic field</i>	Religious studies, philosophy, history of science
Enseignant <i>Teacher</i>	Alix Philippon
Contact <i>E-mail address</i>	<a href="mailto:alix.philippon@sciencespo-aix.fr">alix.philippon@sciencespo-aix.fr</a>
Niveau de formation <i>Academic level</i>	2A-4A
Volume horaire <i>Hours</i>	20H
Langue <i>Language</i>	Anglais

Description du cours / *Course outline*

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Knowledge never is a definitive achievement and its production is determined by multiple factors (political domination, social and cultural conditions, fashions, inertia,...). This course aims at offering a fresh analysis of the complex interactions between three dynamic fields of knowledge: science, philosophy and spirituality. Numerous scientific questions have stemmed from philosophical or spiritual reflexion, and conversely many scientific results have called for philosophical insights.

Historically intertwined, the three have become distinct from each other in the past few centuries. The calls for a dialogue between them have allowed numerous epistemological issues to be recently addressed. By embracing different perspectives across disciplines and regions (as traditions of thought both East and West have interacted and been plural), this course will call into question rationalism and materialism by introducing students to works, authors and research programs proposing alternative ways of looking at the world and man.

The philosophical issues that bear on spiritual beliefs have recently attracted the growing curiosity of philosophers and scientists on key topics such as the nature of consciousness, healing or the physical nature of reality. Many think that a joint effort between disciplines could benefit knowledge in the broader sense of the term. Without positing a miraculous reconciliation, this course will offer a space for the discussion and re-assessment of the relationships between science, spirituality and philosophy. Didn't the Pakistani Physicist Abdus Salam claim that the Sufi poet Rumi inspired the theory that made him win the Nobel Prize ? « All atoms dance like a single sun ».

Objectifs pédagogiques du cours / *Course objectives*

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This course focuses on trans-disciplinarity, engagement with tradition and modernity, critical thinking, and the cultivation of self and universality. Indeed, it explores the interactions between three of the most essential modes of thinking and fields of knowledge about man, nature and the world. It confronts their epistemologies, challenges their supposed dichotomies, and explores their compatibility and integration. It intends to show that spirituality, philosophy and science are evolving social constructs that vary across cultures and eras, and that their most recent interactions have opened fascinating perspectives. The main aim of the course is to explore the philosophical connections between spiritual traditions and modern science. It will address the mystery of the place of man in the world through comparative analysis across disciplines.

Students will learn:

- how knowledge is produced and how it can evolve through space and time, notably through controversies
- how three main fields of knowledge with their own “rules of the game” have historically interacted and have fertilized each other
- the latest attempts at integrating them

Compétences acquises / *Learning outcomes*

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The learning outcomes of this course shall be :

- Demonstrate knowledge on **key authors and works in domains of science** (Quantum physics, neuroscience,...), **spiritual traditions** (Buddhism, Shamanism,...) and **philosophical approaches** (idealism, monism,...) which will help students articulate different world-views and draw their own enlightened conclusions (if any).
- Describe **transdisciplinary** attempts to challenge the boundaries between these three modes of knowing reality and reassess in a dynamic fashion how fertile their interactions can be (in the way scientific results can lead to philosophical inquiry, science can probe mystical experiences, or new fields of research can emerge).
- Define **fundamental epistemological issues** regarding **knowledge production and limits**, notably through the study of specific **controversies**.
- Demonstrate **critical-thinking skills** that will be useful throughout their personal and professional life by encouraging them to think “out-of-the-box”.

Plan de cours par séance / *Course content for each session*

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## **I. Spirituality, science and philosophy : history, epistemologies, interactions**

**Week 1 : General introduction. Presentation of the course, definitions and issues addressed**

**Week 2 : An overview of their interactions: From conflict to dialogue... towards integration ?**

Reading : Trinh Xuan Thuan, “Science and Buddhism: two complementary modes of knowledge”, in Paul D. Numrich (ed.), The boundaries of knowledge in Buddhism, Christianity and science, Vandenhoeck and Ruprecht, 2008, p.22-42

## **II. Quantum mechanics, mysticism and metaphysical openings**

**Week 3 : The fundamental teachings of Quantum mechanics : in a no man’s land between spirituality and philosophy ?**

Juan Miguel Marin, « mysticism in quantum mechanics :the forgotten controversy », European Journal of Physics, 30, (2009), 807-822

**Week 4: The parallelism between physics and Eastern mysticism, and the “quantum mystics”**

Readings:

-Fritjof Capra, “The new vision of reality: Parallels between modern physics and Eastern mysticism”, India International Center Quaterly, Winter 2001/Spring 2002, Vol.28, N°4, p.72-81

- Sal Restivo, « Parallels and paradoxes in modern physics and Eastern mysticism I: A critical reconnaissance”, Social studies of science, May, 1978, Vol.8, N°2, p.143-81

**Week 5 : The metaphysical openings of Quantic scientific results : a “veiled reality”?**

-Carlo Rovelli, “Physics needs philosophy, philosophy needs physics”, Scientific American, 18 July 2018

<https://blogs.scientificamerican.com/observations/physics-needs-philosophy-philosophy-needs-physics/>

### **III. Scientism as fundamentalism and materialism as dogma ?** **Controversies on psi phenomena and attempts to move beyond the main paradigm**

#### **Week 6 : The debate on parapsychology**

Readings:

- Mark Leary, « Why are (some) scientists so opposed to parapsychology ? », Explore, Sept/Oct. 2011, Vol.7, N°5, 275-277.
- Jack Hunter, « ‘Between realness and unrealness’ : anthropology, parapsychology and the ontology of non ordinary realities », The Journal of the British Association for the Studies of religions, 17.2, (2015) 4-20

#### **Week 7 : For a post-materialist paradigm ?**

Readings:

- Documentary, The mystical brain (2006) directed by Isabelle Raynauld
- Manifesto for a post-materialist paradigm ? by Mario Beauregard and Dean Radin  
online : <https://opensciences.org/about/manifesto-for-a-post-materialist-science>
- Amit Goswami, “Why the Quantum world view is inevitable, and everyone with a post-materialist mindset should focus their attention on it”, <https://www.amitgoswami.org/2018/07/17/why-the-quantum-worldview-is-inevitable-and-everyone-with-a-post-materialist-mindset-should-focus-their-attention-on-it/>

#### **IV. Altered states of consciousness and healing: when sciences of the body and the mind converse with old spiritual traditions**

##### **Week 8 : The hallucinogenic and therapeutic plant of Ayahuasca used by American Indian Shamans and the issue of consciousness**

###### Readings:

- Documentary Other Worlds, directed by Jan Kounen
- Benny Shanon, « Altered states and the study of consciousness : the case of ayahuasca », The journal of mind and behavior, Vol.24, N°2 (Spring 2003), 125-153

##### **Week 9 : Has science probed spirituality? The success of meditation and mindfulness**

###### Readings:

- Matthieu Ricard, Antoine Lutz and Richard J. Davidson, « Mind of the meditator », Scientific American, Vol.311 N°5 (November 2014), p.38-45
- John J. Holder, « James and the neuroscience of Buddhist meditation », William James Studies, Vol.10, (2013), p.1-11
- David L. Mc Mahan, « Misuses of mindfulness : Ron Purser and David Loy's 'Beyond Mc mindfulness (2013) », in C. Pierce Salguero (ed) Buddhism and medicine. An anthology of modern and contemporary sources, Columbia University Press, 2020 (3 pages)
- Nicholas M. Brisbon and Glenn A. Lowery, « Mindfulness and levels of stress : a comparison of beginners and advanced hatha yoga practionners », Journal of religion and health, Vol.50, N°4 (Dec 2011), p.931-941

##### **Week 10 : The mystery of Mongolian shamanic trance solved ? The scientific work of French Shaman Corine Sombrun on the brain**

###### Reading:

- Pierre Flor-Henry, Yakov Shapiro, Corine Sombrun, « Brain changes during a shamanic trance : altered modes of consciousness, hemispheric laterality and systemic psychobiology », Cogent Psychology (2017), 4 : 1313522 (25 pages)

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-Fritjof Capra, "The new vision of reality: Parallels between modern physics and Eastern mysticism", India International Center Quarterly, Winter 2001/Spring 2002, Vol.28, N°4, p.72-81

-Pierre Flor-Henry, Yakov Shapiro, Corine Sombrun, « Brain changes during a shamanic trance : altered modes of consciousness, hemispheric laterality and systemic psychobiology », Cogent Psychology (2017), 4 : 1313522

-Amit Goswami, "Why the Quantum world view is inevitable, and everyone with a post-materialist mindset should focus their attention on it", <https://www.amitgoswami.org/2018/07/17/why-the-quantum->

[worldview-is-inevitable-and-everyone-with-a-post-materialist-mindset-should-focus-their-attention-on-it/](https://www.amitgoswami.org/2018/07/17/why-the-quantum-worldview-is-inevitable-and-everyone-with-a-post-materialist-mindset-should-focus-their-attention-on-it/)

-Elemer Hankiss, "Quantum mechanics and the meaning of life", Institute of Advanced Studies Koszeg, Working Papers 2017, [https://iask.hu/wp-content/uploads/2017/09/wp\\_hankiss\\_170530\\_en.pdf?x51955](https://iask.hu/wp-content/uploads/2017/09/wp_hankiss_170530_en.pdf?x51955)

-John J. Holder, « James and the neuroscience of Buddhist meditation », William James Studies, Vol.10, (2013), p.1-11

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<https://blogs.scientificamerican.com/observations/physics-needs-philosophy-philosophy-needs-physics/>

-Benny Shanon, « Altered states and the study of consciousness : the case of ayahuasca », The journal of mind and behavior, Vol.24, N°2 (Spring 2003), 125-153

-Lothar Schafer, "Introduction. Your cosmic potential: being part of the universe", in Infinite potential. What Quantum physics reveals about how we should live, Random House, 2013.



Alix Philippon is Associate Professor in sociology at Sciences Po Aix. She has worked extensively on religion and politics, more specifically on the mystical tradition of Islam and other religious traditions, notably in Pakistan, Indonesia and Iraq. She has published two books and dozens of book chapters and articles. Forthcoming: *The Qadiriyya Sufi Order: Saints, shrines and politics between Iraq and Pakistan*, Routledge, 2025.

