

# ANNOUNCEMENT

FALL 2009–2010 – Two Web-based Courses

## **CONSCIOUSNESS: THE WEBCOURSE**

*And*

## **ADVANCED SEMINAR:**

## **MIND, BRAIN and CONSCIOUSNESS.**

Both taught by Dr. Bernard J. Baars  
See: [http://en.wikipedia.org/wiki/Bernard\\_Baars](http://en.wikipedia.org/wiki/Bernard_Baars)  
[bbaars@nsi.edu](mailto:bbaars@nsi.edu)

Center for Consciousness Studies  
University of Arizona, Tucson  
<http://www.consciousness.arizona.edu>

November 14, 2009 – February 7, 2010.

With a Winter Holiday Break from December 20, 2009 to January 7, 2010.

*If you are interested in Continuing Education Credits  
please check the relevant box on the Registration Forms at the bottom of this document.*

Both the WebCourse and the Advanced Seminar will run over 10 weekends, with two hours of Discussion Groups per weekend, mp3 audio files with lectures, written lectures and demonstrations via the web.

Discussion Groups for the WebCourse will take place on Saturdays and Sundays, 10am until 12 noon Pacific Time. For students who cannot be available at that time we will have an “asynchronous” Discussion Group. To check your own times for Discussion Groups, please visit <http://www.timeanddate.com/worldclock/>

The Advanced Seminar will take place on Sundays at 2 -4 pm Pacific Time. It will be tailored for specific student needs and interests. The Seminar will be small and somewhat more demanding, with advanced readings and a college textbook. Please contact the Instructor for details ([bbaars@nsi.edu](mailto:bbaars@nsi.edu)), and see the Registration Form at the bottom of this document.

# ***Consciousness: The WebCourse 2009 – 2010***

*Sponsored by the  
Center for Consciousness Studies  
The University of Arizona*

<http://www.consciousness.arizona.edu>

See the Registration Forms at the end of this document.

## ***COURSE DESCRIPTION and SYLLABUS***

We can explore our own consciousness from our own, *First Person perspective*; share our experiences with others, the *Second Person perspective*; and look at conscious beings from the outside --- the *Third Person* or "public" point of view.

These three basic perspectives organize our course.

Our *First-Person Labs* will take our *private perspective*, using Consciousness Diaries and experiential demonstrations. You are enthusiastically encouraged to keep a Consciousness Diary, to write down or audio-record your first-person experiences to explore. We will often ask you to refer to your diary in our Discussions. If you want to write a topnotch diary you can't wait very long --- your conscious experiences fade very quickly. So you should write them down immediately, or even better, audio-record them just as soon as you can. Your PC or Mac provide audio-recording software (with Quicktime or Word programs), or you can use a tape recorder. If you want to record your dreams you should also do so immediately after waking up. If you want to get very sophisticated you can convert audio to text. But a program that allows you to skip back and forth to remind yourself is very useful. Scribbling notes also works!

(We will give you an easy technique to enable you to experiment with your drowsy or "twilight" states, which are very interesting and creative, and still unfortunately neglected.)

*The Second Person perspective* emerges in our relationships to each other, in interpersonal experiences, in exploring ethical questions, and in the brain regions involved in romantic love and parent-child attachment.

*Scientific evidence* is often thought of in terms of the *Third Person perspective*, which we can think of as "public" or "inter-subjective." But notice that with brain

imaging methods, we can look at the brain from the outside, and learn a great deal about the way our mind-brains engage in the *First* and *Second Person Perspectives* as well! Brain imaging is very interesting (and no, we are not going to invade your privacy!) but human beings have been looking at each other and trying to understand each other ever since the first mother looked at the first baby, and vice versa. So this is not some weird thing; it's just that we have much better "shareable" evidence than today. If you have concerns about privacy and ethics, that is also worth exploring in this course. (It comes up under the *Second Person* heading...)

Our Lectures will explore new scientific findings about everyday consciousness, and also explore what we know about altered conscious states.

I believe the three classical viewpoints are very compatible with each other, and that they only provide three different *sources of information*. From that point of view, there are only practical questions --- what's the best way to understand what happens when people fall in love? When they dislike or even hate each other? When we feel guilty or angry or excited? What do people experience when they are seeing the color red? What is the best way to know what the brain is doing? By being practical we can avoid many unnecessary controversies.

There are philosophers and scientists who adopt exclusive positions --- *mentalism* (idealism), *physicalism* (materialism), or various kinds of *dualism*. For example, the great contemplative traditions in Asia and the West are usually idealistic --- they often claim that the ultimate reality is mental or *subjective*. Science is often thought to be *physicalistic* --- it relies on the notion that publicly shared information is the most trustworthy, because it can be double-checked.

But in practice, ordinary life flips back and forth between the subjective experience that we have a headache and the public act of taking an aspirin (a physical object) for our subjective headache. Nobody has much trouble with that in practice.

Because this course is *not* devoted to philosophy --- which would take months or years to study in detail --- we will mainly take a "dual-source" point of view. That is, we will assume that our own, subjective, ego point of view is one useful source of information; and that our shared, intersubjective, public, sociocentric viewpoint is also useful. We will find this practical, common-sense way of switching between different points of view to be very useful in this course.

For us, the key question is the *believability* of each perspective. If you tell me that you see your computer screen in flaming red, I am happy to believe you for the purposes of this course. (If you see *everything* in a flaming red color, you might want to wear some sun glasses.)

We will not settle the philosophical question “what is consciousness?” but we will gain a better understanding of our growing understanding of consciousness in modern science, as well as in the great wisdom traditions.

We will do our best to make *Consciousness: The WebCourse2009-2010* fun and exciting for you, as well as thought-provoking.

### ***Announcements.***

You will receive information about the WebCourse platform as soon as you register. Please address registration questions to Abi Montefiore at [center@u.arizona.edu](mailto:center@u.arizona.edu)

Lectures will be posted online on the D2L site --- <http://d2l.arizona.edu> . Every week we will send out an mp3 or similar audio file of about a half hour. First-Person Labs are designed to explore your own experiences. We encourage you to do the F-P lab by yourself every week, since we hope you will be discussing your experiences with each other on the weekend on D2L.

All participants are encouraged to explore their ideas and experiences in small online Discussion Groups, led by Discussion Leaders.

Discussions will be held online on weekends, to encourage you to participate live. Asynchronous Discussions will be available to those who cannot join in synchronously.

Readings will include the textbook (below), as well as posted readings, powerpoint presentations, demonstrations, and more. We always explore new ways of teaching and learning in this course. This time we hope to explore Skype teleconferencing as one way to have real-life interactions with each other. But new technology is always tricky, so we cannot promise that audio conferencing will work smoothly. We just do our best.

### **OUR TEXTBOOK:**

Bernard J. Baars, *In the Theater of Consciousness: The Workspace of the Mind*. (NY: Oxford University Press, 1997).

[http://www.amazon.com/Theater-Consciousness-Workspace-Mind/dp/0195147030/ref=sr\\_1\\_1?ie=UTF8&s=books&qid=1254091318&sr=8-1](http://www.amazon.com/Theater-Consciousness-Workspace-Mind/dp/0195147030/ref=sr_1_1?ie=UTF8&s=books&qid=1254091318&sr=8-1)

### **OTHER SOURCES:**

William James, *Psychology: Briefer Version*. (1894) Free on the web.  
<http://books.google.com/books?id=Tv9fxXPCdtcC>

See also [www.bernardbaars.pbwiki.com](http://www.bernardbaars.pbwiki.com) ... and more as we go along.

The First Person Lab will be posted early in each week.

We hope you will join in D2L Discussions as much as possible. Don't be shy!  
(And if you do feel shy at first, just keep exploring your thoughts about feeling shy in your Diary! Shyness is a wonderful topic for this course.)

**Please direct Registration questions to:**

THE CENTER FOR CONSCIOUSNESS STUDIES, UNIVERSITY OF ARIZONA,  
[center@u.arizona.edu](mailto:center@u.arizona.edu)

## COURSE OUTLINE

***WEEK 1. (September 20) First, second and third person:  
Approaches to the evidence.***

Explorations of consciousness are very ancient. Science is a newcomer!

How can we explore our own experience without first solving metaphysical questions that nobody has been able to find a consensus on?

"Reportability" as the standard for 2nd and 3rd person explorations of consciousness. What if you can't describe your experience? Psychophysics and contrastive analysis.

The Theater of Consciousness: A helpful metaphor. Metaphors are not facts!

What do we lose when consciousness is lost or reduced? The puzzle of the Minimally Conscious State (MCS): Terry Schiavo. Sleep and drowsy states. Meditation and "higher" or altered states.

## READINGS:

Baars (1997), Prologue and Chapter One.  
James (1893). Chapter on The Stream of Thought.

Online readings to be posted and emailed.

### **FIRST PERSON LAB 1:**

How to keep your Consciousness Diary. Record your thoughts as soon as you can! Memories are ok -- but they are *memories*. Notice the difference in your Consciousness Diary. Are your memories after one minute the same as your memories after ten seconds?

Note: Did you decide to audio record your Diary or write it down? What are the pros and cons? How would you test somebody's conscious experiences as accurately as possible? What would you lose in that process? All observations have tradeoffs.

Cultivating mindful self-observation. Gathering information about our own consciousness. Meditation, noting, and the stream of consciousness. Data to be gathered: what happens when you try to focus consciousness? Twilight states of consciousness.

### **DISCUSSION GROUPS: (Saturday and Sunday, 10-12 noon, Pacific)**

Your first thoughts on your own experiences. Meeting other conscious people in the course. Your thoughts on your conscious encounters.

***WEEK 2. In the Theater: The bright spot of consciousness has limited capacity from moment to moment.***

Why multi-tasking has limits. Some interesting implications.

FIRST PERSON LAB 2: Your Consciousness Diary: What happens when you are “loading” your mental capacity? Slips and automatism in musicians and others. Slips are usually minor, or funny, but there is some evidence that they may be involved in auto accidents and even major disasters... Can you record some of your slips --- in speech or action? Slips can be very revealing ...

DISCUSSION GROUPS. Your Consciousness Diary. Exploring multi-tasking in everyday life. Do you notice slips, automatism and speed changes when you are multi-tasking? What else do you notice?

***WEEK 3: In spite of our limited conscious capacity from moment to moment, consciousness also enables vast information access in the mind-brain.***

The astonishing amount of knowledge that we can access by way of conscious experiences.

Brain evidence for conscious contents. The *thalamo-cortical brain core* as the basis of global interactions in the brain. Why this part of the brain is believed to underlie conscious experiences.

READING: Baars (1997). Chapter 2.

Baars (1997) summary article in *Journal of Consciousness Studies*

Baars (2002). The conscious access hypothesis. [Trends in Cognitive Science](#). See Baars' wiki site.

**FIRST PERSON LAB 3:**

Your Consciousness Diary: Exploring your personal memories --- true ones, false ones and creative reconstructions of the past. Taste preferences or taste aversions are often very powerful memories of our early years. The feeling of knowing something about your past.

***WEEK 4: In the "lighted area" of the conscious spotlight: Sensation, imagination and fringe experiences.***

Isaac Newton and the discovery of the subjective color spectrum. The inner and outer senses. Input competition. Some imaging experiments. The compelling power of imagination. Metaphors and persuasive images. Emotions and "heart-felt" experiences.

Plato and abstract ideas. Plato was a psychologist. The Hindu-Buddhist psychology of subtle experiences. Fringe experiences and the tip-of-the-tongue phenomenon.

Where in the brain does visual consciousness first become unified? Top-down and bottom-up processing: Cooperation in the creation of conscious contents.

**READING: Baars (1997). Chapter 3.**

**FIRST PERSON LAB 4:**

Your Consciousness Diary: Exploring your imagination through dreams, daydreams, evocative images and language. Jungian, Freudian, and other dimensions of dream contents. Notice ambiguities and multi-leveled meanings.

Life is full of ambiguities: Ambiguous and multiple meanings, figures and words. Feelings and fringe consciousness: The tip of the tongue and other feelings.

Notice that consciousness tends to collapse multiple meanings into one --- at any given moment. This is a fundamental insight.

**Connotation and allusion, meaningfulness and meaning.**

Illusions of conscious continuity: The blind spot, peripheral vision, and eye fixations in reading.



***WEEK 5. Outside of the lighted spot on the theater stage:  
"Working memory" as extended consciousness.***

How focal consciousness interacts with working memory. What is working memory?

Inner speech and the visuospatial sketchpad. The magic number, 4 thru 9.

The front half of the brain: working memory and extended consciousness.

READING: Baars and Franklin (2003). How consciousness and working memory interact. Trends in Cognitive Sciences.

**FIRST PERSON LAB 5:**

Working Memory load in everyday life. The visuo-spatial sketchpad in everyday life: our visual imagination.

Try to compare our visual images in normal waking, and in the Twilight State. (See our Twilight State Experiment...)

Is mental effort like a muscle? Some amazing findings.

Your inner speech, inner humming, inner actions, and inner running, jumping and dancing. When people watch sports on TV they seem to mentally run through the same actions. (Not consciously, necessarily.)

***WEEK 6. Aiming the spotlight: Attention, absorption and the construction of reality.***

Selective attention. Eye movements. Voluntary and spontaneous attention. Brain basis: Prof. Tutis Villis brain slideshow for eye movements. (On the web).

Selection biases --- in opinion formation, culture, cults and indoctrination. The amazing stability of belief systems.

READING: Baars (1997). Chapter 4.

FIRST PERSON LAB 6: Daniel Simons' demonstrations of inattention blindness.

Are you "Absent minded" or "other-minded"? Try the Stanford Hypnosis Scale. Attention and absorption.

***WEEK 7. It is dark backstage: The unconscious context of conscious experiences.***

The banks of the stream of consciousness. Egocentric brain maps and the self. Tip of the tongue and the prefrontal cortex. How am I doing? , appraisal and emotion.

Current concerns, and Unfinished business, as active contexts in the stream of consciousness.

Interpreting projection, in scientific terms. Our thoughts may unconsciously trigger moods. Emotional trauma as an active context.

READINGS: Baars (1997). Chapter 5.

FIRST PERSON LAB 7: Fixedness: being blind to the obvious. Priming conscious thoughts. Breaking rigid contexts for creativity. Unconscious contexts and interpersonal activities.

***WEEK 8. The Stage Director in the Theater of Consciousness.***

Lecture. Split selves, fragmented selves, disordered selves. A theater or a parliament?

Brain establishments, dominant coalitions, and revolutions. Our limited self-awareness.

Split brains and divided personalities.

**Reading: Baars (1997). Chapter 7.**

FIRST PERSON LAB 8: Your Consciousness Diary. What's free about free will?

The devil made me do it! Counter-voluntary acts. Collecting errors of action and speech. Everyday dissociation: accidents, earthquakes. William James on fugue and hypnosis.

## ***WEEK 9. Sharing our consciousness with others.***

### **READING: Baars, Chapter 8, 9, and Appendix.**

Intersubjectivity. About age three or four, toddlers begin to share their experiences. "Look, Mommy, airplane!"

The origins of shared consciousness: empathy and "negative empathy." Theory of Mind.

Why doesn't your dog look where you point? Do ravens have a Theory of Mind? Autism as a disorder of interpersonal empathy. Temple Grandin and Asperger's Syndrome. We need to share our contexts of communication.

First Person Lab 9: Your Consciousness Diary.

Your self-conscious emotions: Pride, embarrassment, self-esteem, guilt. Experimenting with a shifting sense of self.

Imagining how the world seems to others. The pitfalls of mindreading.

The ethical contract: Person-to-person relationships.

## ***WEEK 10. Some concluding thoughts.***

What is it good for? Functions and theories of consciousness.

The biological roots of the conscious brain. Some theories.

Consciousness in mammals and other critters.

When does a fetus become conscious?

Consciousness as a standard for ethical personhood. The growing evidence for animal consciousness.

FIRST PERSON LAB: Please take a look at your Consciousness Diary from Week 1 to Week 11. What do you notice?

# 1. Consciousness: The WebCourse 2009 – 2010

## Registration Form

[www.consciousness.arizona.edu](http://www.consciousness.arizona.edu)

I would like to participate in *CONSCIOUSNESS: THE WEBCOURSE* \_\_\_\_\_

(For the *Advanced Seminar* please use the Advanced Seminar Registration Form, below.)

Course dates: November 14, 2009 – February 7, 2010. Winter Holiday Break, December 20 - January 7.

Times: Discussion Groups will be held on Saturdays and Sundays 10am -12 noon, Pacific Time. An asynchronous Discussion Group will be provided for participants who cannot make those times. You are asked to participate in one Discussion Group, either on Saturday or Sunday.

### YOUR INFORMATION

NAME: (LAST) \_\_\_\_\_ (FIRST) \_\_\_\_\_ TITLE: \_\_\_\_\_

EMAIL (required) \_\_\_\_\_ AFFILIATION: \_\_\_\_\_

BILLING ADDRESS: (Street Address) \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_

ZIP \_\_\_\_\_ COUNTRY: \_\_\_\_\_ TELEPHONE: \_\_\_\_\_

Are you interested in Continuing Education Credits for this course?

Please indicate: \_\_\_\_\_

We will notify you as soon as CEU approval is received.



## 2. *Advanced Seminar: Mind, Brain & Consciousness.*

**2009 - 2010**

**F A L L 2 0 0 9 – 2 0 1 0 ---- ADVANCED SEMINAR REGISTRATION FORM**

I would like to participate in the *ADVANCED SEMINAR: MIND, BRAIN & CONSCIOUSNESS*

\_\_\_\_\_

**Times:   Sundays 2-4 pm, Pacific Time**

(Notice: For *Consciousness: The WebCourse* please use the separate Registration Form above.)

**Course dates: November 14, 2009 – February 7, 2010 (Winter Holiday Break, December 20 - January 7)**

### YOUR INFORMATION

**NAME: (LAST)** \_\_\_\_\_ **(FIRST)** \_\_\_\_\_ **TITLE:** \_\_\_\_\_

**EMAIL (required)** \_\_\_\_\_ **AFFILIATION:** \_\_\_\_\_

Please describe your educational background, previous coursework, personal reading, advanced activities and anything else you feel is relevant.

Feel free to tell us about yourself in detail, and add any additional pages you need.

Please don't be shy! The more we know about you, the more Dr. Baars can tailor the Advanced Seminar to your interests and background.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(Please add as much as you like).

**BILLING ADDRESS: (Street Address)** \_\_\_\_\_

**CITY** \_\_\_\_\_ **STATE** \_\_\_\_\_

**ZIP** \_\_\_\_\_ **COUNTRY:** \_\_\_\_\_ **TELEPHONE:** \_\_\_\_\_

**Are you interested in Continuing Education Credits for this course? Please indicate:** \_\_\_\_\_

**We will notify you as soon as CEU approval is received.**

**REGISTRATION FEES – ADVANCED SEMINAR- MBC - FALL 2009**

(Note: This registration fee is payable to: The University of Arizona Foundation. This is not a tax-deductible charitable contribution).

STANDARD: \$350 \_\_\_\_\_ STUDENT: \$250 \_\_\_\_\_

**PAYMENT METHOD**

**CREDIT CARD**      MasterCard      Visa      American Express      TOTAL: \$ \_\_\_\_\_

Note that Continuing Education Credits are in the application process. If you want CEU's and we receive approval, a \$40.00 fee will apply.

If paying by credit card, please note that the UA Foundation will appear as the vendor on your credit card statement.

Billing Name \_\_\_\_\_

Billing Address (if different from above) Street Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Province \_\_\_\_\_ Mail Code \_\_\_\_\_ Country \_\_\_\_\_

Card No. \_\_\_\_\_ Expiration \_\_\_\_\_

3-digit code \_\_\_\_\_

**CHECK** (Payable to: University of Arizona Foundation in US Dollars from a US Bank)

**WIRE TRANSFER** (please contact CCS for instructions) Email to [center@u.arizona.edu](mailto:center@u.arizona.edu)

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**PLEASE SEND YOUR REGISTRATION MATERIALS TO:**

DIRECT FAX: 520-626-6416      BY MAIL : Center for Consciousness Studies  
Dept. of Psychology, University of Arizona

Direct Tel 520-621-9317      POB 210068, Tucson, AZ 85721-0068 USA  
Attn: Abi Montefiore

Refund Policy: refunds minus a \$40 processing fee if notification is received by Nov. 16.

Questions? Please direct any questions to the Center for Consciousness Studies  
[center@u.arizona.edu](mailto:center@u.arizona.edu), Tel 520-621-9317 or Fax 520-626-6416