1. SPECIFIC DETAILS: **LESSON 2**

LESSON 2	Linguistic, Pragmatic and Non-linguistic Characteristics of Professional and Academic English (PAE)	
Hours	2	
Teaching method	Lecture (1h.)	
	Practical exercises: 2/3 hours (in-/out-of-class activities)	
Teaching location		Normal classroom

2. OBJECTIVES

As a result of this lesson the students will be able to:

- Distinguish the different specialization degrees in texts.
- Identify the pragmatic, linguistic and non-linguistic characteristics in specialized texts.
- Describe the characteristics of a specialized text from the linguistic, pragmatic, and functional point of view.

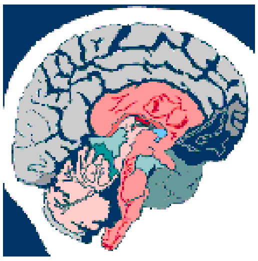
3. OUT-OF-CLASS ACTIVITIES

DEADLINE: dd/mm/yyyy (Please note that this deadline is **STRICT** and **will NOT be extended**)

Exercise 1.	**Analyse the following three texts about the Central Nervous System and answer the questions.**

TEXT 1

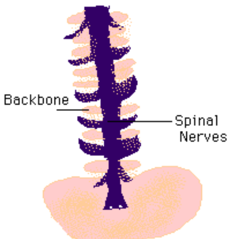
Taken from: http://library.thinkquest.org/5777/ner2.htm



Central Nervous System
"Brain & Spinal Cord"
Brain

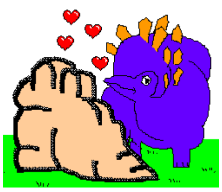
The brain keeps the body in order. It helps to control all of the body systems and organs, keeping them working like they should. The brain also allows us to think, feel, remember and imagine. In general, the brain is what makes us behave as human beings.

The brain communicates with the rest of the body through the spinal cord and the nerves. They tell the brain what is going on in the body at all times. This system also gives instructions to all parts of the body about what to do and when to do it.



Spinal Cord

Nerves divide many times as they leave the spinal cord so that they may reach all parts of the body. The thickest nerve is 1 inch thick and the thinnest is thinner than a human hair. Each nerve is a bundle of hundreds or thousands of neurons (nerve cells). The spinal cord runs down a tunnel of holes in your backbone or spine. The bones protect it from damage. The cord is a thick bundle of nerves, connecting your brain to the rest of your body.



The most brainless animal may have been the dinosaur, Stegosaurus. It weighed 1 1/2 tons, but its brain was only the size of a walnut.

TEXT 2

Taken from: http://www.purchon.com/biology/central.htm

CNS

The **C**entral **N**ervous **S**ystem consists of the Brain and Spinal Cord. It contains millions of neurones (nerve cells). If you slice through some fresh brain or spinal cord you will find some areas appear grey whilst other areas appear rather white. The white matter consists of axons, it appears white because it contains a lot of fatty material called myelin. The myelin sheath insulates an axon from its neighbours. This means that nerve cells can conduct electrical messages without interfering with one another. The grey matter consists of cell bodies and the branched dendrites which effectively connect them together. So this area is mainly cytoplasm of nerve cells which is why it appears white.

Different areas of the brain are concerned with different functions. If I drilled a hole in your head with my Black & Decker, and then put a piece of copper wire in and wiggled it about, I could give your brain a little electric shock; not enough to kill you of course, but enough to make something happen. So if the electrode was put into your taste centre you might taste something even though there was nothing in your mouth. We know exactly where to put the wires to make different things happen. So an electric shock in another area might make you wiggle your toes. That explains why you "see stars" when you bang your head and stir up the visual centre which is at the back of your brain. There are areas of the brain which deal with speech, hearing, smell, sight, movements, salivating, and so on. Some of these centres are concerned with the information coming into the brain (sensory areas) and others are concerned with making something happen (motor centres).

If your brain is anything like mine, the sensory areas and motor areas are connected up so that when you are stimulated, you do something sensible. What do you do when you bite into a ripe apple? Do you wiggle your toes or salivate? Some responses are very simple and everyone makes the same response: e.g. we all sneeze when our noses are tickled. Other stumuli are much more complicated and we do not all react or respond in the same way. Do you run away or go and stroke a lion when you see one in the playground? Well it all depends on whether you know the lion and if you thought he was hungry. Some people make a big big fuss when they see a fly because they think that it is a wasp and it will sting them to death. Other people have learnt the difference between a wasp and a fly!

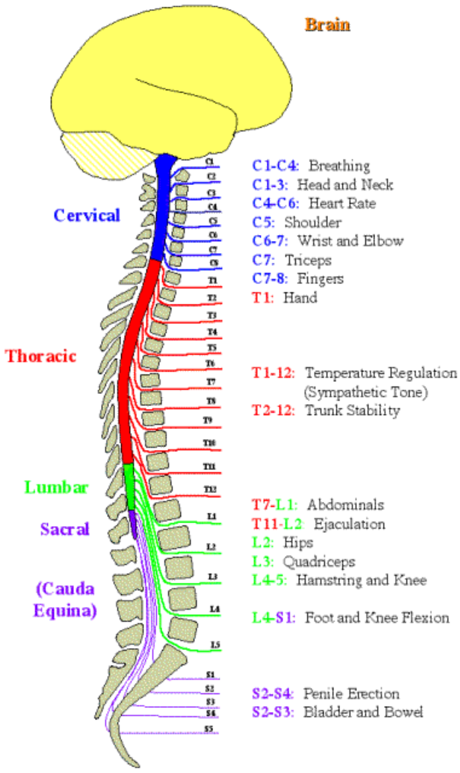
TEXT 3

Taken from: http://www.reeve.uci.edu/anatomy/scns.php

Anatomy 101: Spinal Cord and Central Nervous System

The Human Spinal Cord

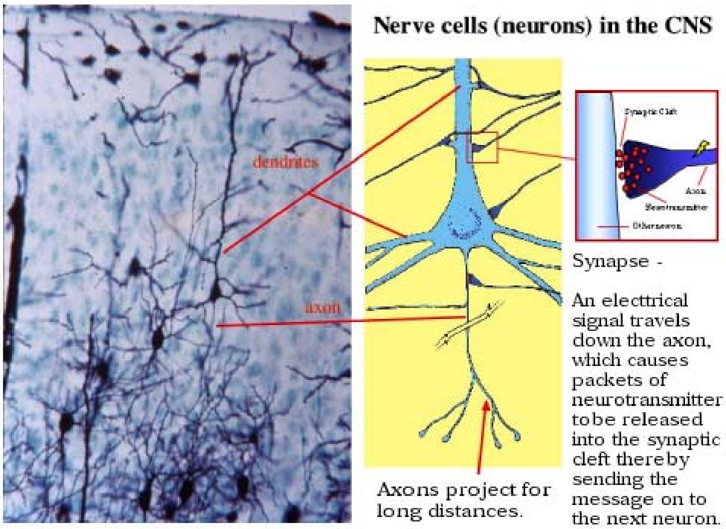
The spinal cord is a long column of nervous tissue that acts as the pathway for transmitting information between the brain and the body. It is encased by a series of bones, the vertebrae, which allow for flexibility of the back and protect the very delicate spinal tissue. Different levels of the spinal cord control different parts of the body. There are 31 segments in the spinal cord and each controls a different movement. For example, cervical level 1-2 (C 1-2), the highest and closest to the skull, controls breathing, C 5-6 (the most common injury site) is at the bump where your neck meets your back and controls fingers and hands. At each segment, nerves leave the cord, nerves that are responsible for specific parts of the body. Nerves from the body also enter the cord at each segment, providing sensory information about specific body parts to the brain.



In additional to nerves coming into and out of the spinal cord at different segments, the spinal cord also conveys information between the brain and spinal cord and vice versa. Large bundles of nerves, called tracts or columns, run, for example, from the motor centers in the brain down the spinal cord and connect to pools of motor neurons that are responsible for movement.

Cells of the Nervous System
Neurons

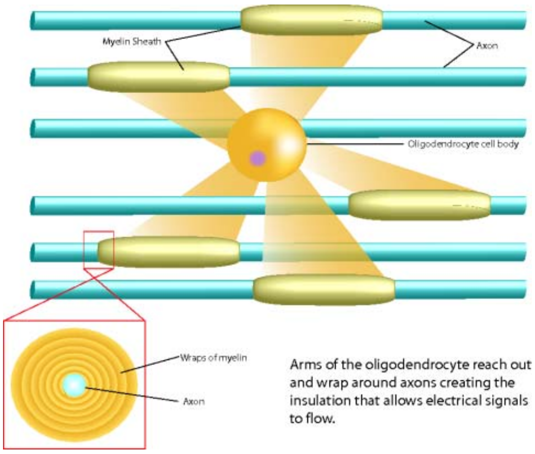
The brain sends messages to the spinal cord and body through neurons. Neurons have a cell body and branching arms, called dendrites, that receive input from other nerve cells. They also have a long arm, called an axon, that reaches out to make contact with other neurons. The messages are sent via electrical signals that are converted into chemical signals at the synapse, the place where the axon of one neuron contacts another neuron.



Glia

Only 10% of brain and spinal cord cells are neurons. The remaining 90% are support cells called glia. The term glia comes from Latin for glue, as these cells bind the nervous system together. Many neuroscientists thought that glia were passive cells that did little except provide support for neurons. Because of this and a lack of good imaging techniques, glia have been all but ignored until recently. In the last few years, new technology for staining and imaging glia have been developed that allow scientists to better understand what these cells do. Glial cells include astrocytes, oligodendrocytes and Schwann cells.

Oligodendrocytes



Nerve cells send messages via electrical and chemical signals. Electrical signals are sent from the cell down a long snaky projection, the axon, to the next cell. Axons, like power cords, need insulation to keep the electricity flowing. The insulation in the spinal cord and brain is a fatty substance called myelin. Myelin is made by oligodendrocytes, which are a type of glial cell or neural support cell. Each oligodendrocyte sends out many arms that wrap around axons forming insulating myelin. Normal myelin is formed by approximately 30 wraps round an axon, although remyelination studies have shown that messages can be sent with as few as 3-10 wraps. When oligodendrocytes are damaged and myelin in disrupted, the neurons cannot communicate and the result is paralysis or motor dysfunction.

Questions:

- 1. Do the three texts above have the same degree of specialization?

- 2. What are the elements that allow you to establish the differences between them?

Exercise 2.	**Identify the informative, expressive, and directive functions in the following sentences.**

	Function
The house is near the cinema	
I enjoy the trip a lot	
She 'd like some milk with the coffee	
Close the fridge	
Have a nice day	
Correct texts 1 to 3 before doing the translation	
Don't you want to do the ironing?	
oh good, I'm so glad!	
But isn't this room 222A?	
Isn't that great?	
The Earth is round	
It's late!	

Exercise 3	Describe the characteristics of text 1, 2, and 3 according to their pragmatic, linguistic, and non-linguistic aspects.

TEXT 1:	
Pragmatic aspects:	
Topic	
Participants (sender/receiver)	
Communicative situation	
Communicative function	
Type of discourse	
Linguistic aspects	
Syntactic level	
Range of Vocabulary	
Non-linguistic aspects	
Extralinguistic codes	

TEXT 2:	
Pragmatic aspects:	
Topic	
Participants (sender/receiver)	
Communicative situation	
Communicative function	
Type of discourse	
Linguistic aspects	
Syntactic level	
Range of Vocabulary	
Non-linguistic aspects	
Extralinguistic codes	

TEXT 3:

Pragmatic aspects:	
Topic	
Participants (sender/receiver)	
Communicative situation	
Communicative function	
Type of discourse	
Linguistic aspects	
Syntactic level	
Range of Vocabulary	
Non-linguistic aspects	
Extralinguistic codes	

Exercise 4.	**Read the following text and state linguistic features motivated by: (a) conciseness; (b) precision; (c) systematization; and (d) depersonalization.**

Taken from:
http://www.iop.org/EJ/article/1742-6596/112/3/032075/jpconf8_112_032075.pdf?request-id=e7b24e90-0a4c-4be1-b6cc-209179b89678

Development of laser produced plasma diagnostics for the Megajoule Laser facility and associated metrology

R Marmoret, JY Boutin, R Rosch, G Soullié, P Troussel, O Landoas, L Disdier, and JL Bourgade.

[...]

3. Plasma diagnostics metrology

These calibrations are performed on dedicated facilities. For 14 MeV neutrons we use D+ Ion accelerator on tritiated target and for the X-ray diagnostics (imaging system, spectrometer) we use Xray tube associated with spectro-goniometer and synchrotron facility beam line. Due to the temporal, high brightness, polarization and spectral characteristics of its radiation, the synchrotron is an ideal source for X-UV calibration. This calibration must be performed on a specific beam line where it is possible to optimize the intensity, the spectral purity and the size of the analysis beam. Our laboratory participate in the design on specific beam lines dedicated for X-ray calibration measurement on SOLEIL synchrotron source at Saclay France [2].

The figure 2 presents the beam line configuration on SOLEIL synchrotron facility dedicated to X UV calibration of plasma diagnostic. We use only two parts of the beam line which enable to calibrate the plasma diagnostics in the energy range 30 to 28000 eV (41 - 0.044 nm)

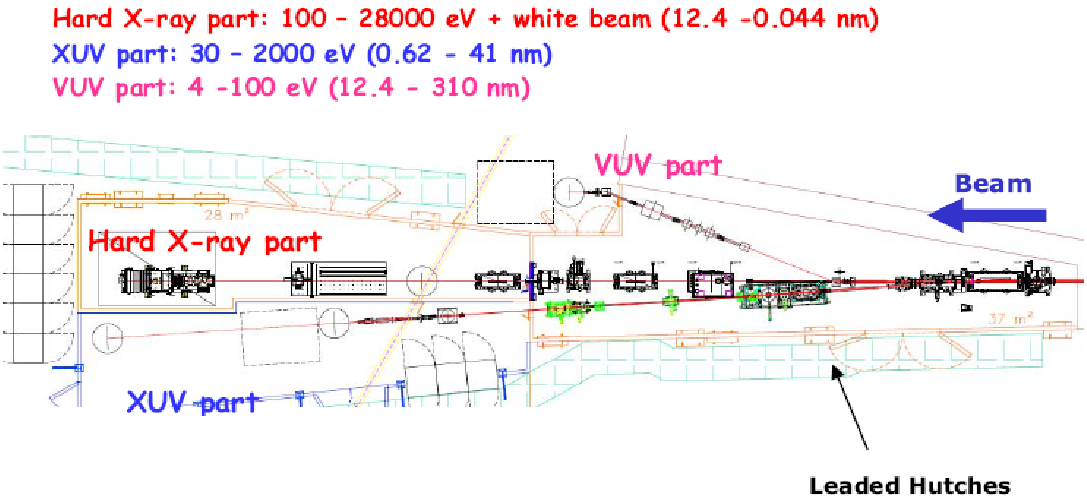


Figure 2. Beam line configuration on SOLEIL facility dedicated for X-UV metrology of plasma diagnostics

1) Linguistic features motivated by **conciseness**

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2) Linguistic features motivated by **precision**

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3) Linguistic features motivated by **systematization**

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4) Linguistic features motivated by **depersonalization**

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Optional exercise	Do a brief review of one of the articles mentioned in the section "Basic Bibliography". (**0.25 points,** which will be added to the final mark)

DEADLINE: dd/mm/yyyy (Please note that this deadline is STRICT and will NOT be extended)

- **Basic Bibliography:**

ALCARAZ, E. (2000): *El inglés profesional y académico.* Barcelona: Alianza editorial. Especialmente, páginas: 24-37.

CABRÈ, M.T. (2004*):* «La terminología en la traducción especializada». En Gonzalo García, C. y García Yebra, V. (eds.): *Manual de documentación y terminología para la traducción especializada*. Madrid: Arco Libros, pp.89-122

CABRÈ, M.T. (2004*):* «¿Lenguajes especializados o lenguajes para propósitos específicos?». En VAN HOOF, A (ed.): *Textos y discursos de especialidad: el español de los negocios. Revista Foro Hispánico*, n. 26, pp.19-37.

M. T. Cabré, R. Estopà, J. Freixa, M. Lorente, C. Tebé: «Les necessitats terminològiques del traductor científic». En *Translating Science. Proceedings. 2nd International Conference on Specialized Translation*, Barcelona: PPU, pp. 165-174.

GONZÁLEZ, L. (1997): «El terminólogo como mediador lingüístico». En *La palabra vertida. Investigaciones en torno a la traducción*. Madrid: Ed. Complutense, pp. 679-688.

- **Additional Bibliography:**

CABRÉ, M. T. (1999). *La terminología: representación y comunicación. Barcelona: IULA, UPF.* Especialmente, páginas: 69-173.

CABRÉ, M. T. (2000): «Elements for a theory of terminology: Towards an alternative paradigm». En *Terminology International Journal of Theoretical and Applied Issues in Specialized Communication*, 6, 1, pp. 1-23.

CABRÉ, M. T. (2001): «Variació per tema. El discurs especialitzat o la variació funcional determinada per la temàtica: noves perspectives». En *Caplletra. Revista Internacional de Filologia*, 25, páginas 173-194.

CIASPUCCIO, G. (1997): «Lingüística y divulgación de la ciencia». En *Quark. Ciencia. Medicina. Comunicación y Cultura*, núm. 7. Barcelona. Abril-junio.