LIST OF LESSONS
Last edition: 15 November 2012

Lessons may be updated or changed during the course.
Use the latest updated version.
Submit the assignments without delay.
Do not send more than one lesson in one e-mail.

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Issued on 15 October 2012
Lesson 07 updated on 26 October 2012
Lessons 06, 07, 22 updated or changed on 11 November 2012
Lesson 22 corrected on 15 November 2012
Lesson 01

Biomedical Technology, Epidemiology and Food Safety
Global Network CENTAUR
20 points

Visit http://centaur.vri.cz and go through the web page, namely CGN Information 2010 and 2012, Written by/for CGN and Reports and documents. Be aware of discussion on mycobacteria as a public health risk and CGN minireviews. This matter is important both for professionals (veterinarians, surgeons, farmers, public health and food safety inspectors, researchers, farmers) and non-professionals (sufferers from chronic inflammatory diseases, parents, and everybody, who is responsible for own health).

Register yourself online according to your fields of interest (unlimited number of fields, but 23 and 27 are obligatory for GRP participants). Note GRP 2013 in the affiliation box.

ASSIGNMENT 01

Describe in 250 to 500 words what information was new and interesting to you, if any. In the case that you had previously already registered on the CGN website, mention it at the beginning of your essay and evaluate the significance of such information from your point of view. Attach your essay to the e-mail.

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Lesson 02

Communication: an important way to successful collaboration
20 points

Download and read the document and prepare your e-mail signature.
Other recommended readings:
http://www.mindtools.com/CommSkll/WritingSkills.htm
http://www.communicationpractices.org/
http://www.answers.com/topic/written-communication
http://www.hostreview.com/blog/general_information/articles/091214-top-10-email-safety-tips

ASSIGNMENT 02

One of the above mentioned recommended readings presents ten bulleted tips. According to the first letter of your surname find a key number on the keyboard of a mobile (5 for Johnson or Keller or Lendl). Copy the whole tip of order related by your surname to a footer of word document (arial 8) and describe in 270 to 300 words the main messages you consider important for smooth communication. Were all the recommendations known to you or did some of them surprise you? Attach your essay to the e-mail as requested in the Invitation, and use your e-mail signature in the e-mail body.

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Lesson 03

Good Laboratory Practice
40 points

See Annex I of the following document:

Read also:
http://www.oecd.org/document/63/0,3343,en_2649_34381_2346175_1_1_1_1,00.html
http://en.wikipedia.org/wiki/Good_Laboratory_Practice
http://www.niehs.nih.gov/research/resources/bioethics/whatis.cfm
http://www.wellcome.ac.uk/About-us/Policy/Policy-and-position-statements/WTD002753.htm
Proposals for Safeguarding Good Scientific Practice

ASSIGNMENT 03

Write the answers directly into the e-mail body.

03.1 Title of Annex I Section II of the DIRECTIVE 2004/10/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL.

03.2 Find the full titles of two EC Good laboratory Practice product oriented directives on feeding stuffs (Council Directive 87/153/EEC and Commission Directive 94/40/EC) in English, Spanish and French (use html versions). Write all the titles directly into the e-mail body with two free lines between them.

03.3 Text of the 2nd bullet point of the Publication Practice published in Guidelines on good research practice (Welcome Trust, updated in November 2005).

03.4 What is the title of a chapter which begins on page 5 of “A guide to good research practice”, the booklet published by Monash University?

Find out information about the course “Ethics, good research practice and practical research methods” held at Monash University. Please give:

03.5 what is the course code?
03.6 The e-mail address of a course coordinator
03.7 URL address of Additional information on the Postgraduate Unit (link to Postgraduate Coursework Programs, Information for Current Students)

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Lesson 04

Microbiology: laboratory safety and skills
30 points

For basic instruction on laboratory safety, microbiological skills and laboratory equipment using text, photos, simulations and videos, visit the website [http://www.microeguide.com/](http://www.microeguide.com/)

Visit as many chapters as you are interested in. Participants, who are not working in microbiology, can appreciate the format and design of instructions.

**ASSIGNMENT 04**

Comment on the lecture, note the most important information, describe the main problems needed be solved and if you have ever experienced any practices that differ from the rules described.

Your essay should contain at least 250 words. Attach your essay to the e-mail.

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Lesson 05

How to write a paper in the format and style of a scientific journal
50 points

John Crowther, International Atomic Energy Agency, Vienna
*Writing a Scientific Paper for Publication*

Greg Anderson, Biology Department, Bates College, Lewiston, USA
*How to write a paper in a scientific journal style and format*
On-line resources for biology (with the kind permission of the author)

Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication
*html version*
*pdf version*

Peter Mason, Pamela Wright and Luu Ngoc Hoat
*Writing and Publishing a Scientific Article*

Remember:
It is not necessary to memorise all the information but to know that it exists, and be able to find it, if and when required.

Other important reading is available at:
*Collaborative writing in the laboratory*
*A painless guide to statistics*
*Experimental design worksheet*
*San Francisco Edit Newsletters*
*Instructions for authors of the journal Veterinarni Medicina*

**ASSIGNMENT 05**

05.1 Did you receive enough information in Lesson 05? Are you now able to deliver a 20 minute lecture to your colleagues summarising the structure of an original paper? Summarise the knowledge from this lesson and prepare the PowerPoint presentation for your 20 minute lecture, describing the main sections of the original paper to be published in a peer reviewed journal. Attach the presentation with the file name GRP 2013-NAME-05

05.2 In the e-mail body list the titles of parts II A., II. A. 1. and II. A. 2. of the Ethical Considerations in the Conduct and Reporting of Research in the pdf version of the document “Uniform Requirements for Manuscripts submitted to Biomedical Journals: Writing and Editing for Biomedical Publication”.

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Lesson 06

Web of Knowledge
40 points (additional 30 points for assignments 06.5 to 06.10)

http://isiwebofknowledge.com/

Visit the portal and pay special attention to Web of Science databases


What does it offer? – Why should it matter to you?

ASSIGNMENT 06

06.1 How many titles are indexed in the database?
06.2 How many articles are added every week?
06.3 What is the ISI IMPACT FACTOR definition (Find the answer in Presentations & More – Essays and White Papers – Journal Citation Reports).
06.4 List the Web of Science’s seven databases that contain information gathered from thousands of scholarly journals in all areas of research (Find the answer in the Web of Science Tutorial).

Additional assignments for those, who have access to the Web of Science database (check availability in the university library or research institutions in your city). Select the period 2006-2011 for your search; and use the Author Search to find papers from a prominent scientific author that you are aware of:

06.5 Selected name and initials, affiliation (address).
06.6 Number of results found for the above author.
06.7 List of the five most frequently cited papers from the results found (use the References format as required by the journal Biological Research).
06.8 Impact factor 2010 of the journal Biological Research.
06.9 Impact factors for 2010 and 2011 of three journals of your choice. (title, ISSN, IF 2010, IF 2011).
06.10 Where were you are able to gain access to the Web of Science database?

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Lesson 07

PubMed database
60 points

Find out information about different databases (PubMed, MEDLINE, PubMedCentral, BioMedCentral, etc.)

ASSIGNMENT 07
Updated 2012-10-26

Write all answers in one document (all in arial 10) and attach it to an e-mail:

07.1 State (1000 words max.) the general characteristics of the different databases you know, compare the number of journals indexed, the possibilities offered and anything else you consider important.

07.2 Using the advanced search option in PubMed activate the limits: from 1 January 2010 to 31. 12. 2011, use filters Other animals (Species), REVIEW (Article types), English (Languages), MEDLINE (Journal categories), sorted by recently added Search for papers containing the word (in title or abstract) “influenza”. Copy the search profile from the appropriate box on a new page of your assignment Copy the first three lines (Display settings, Results, Filters activated) with data Leave two lines free, than type REFERENCES and list from search results the five papers most recently added. Use the Reference List format required by Biological Research, the official journal of the Chilean Biological Society.

07.3 Do you understand the difficulty with the use of key words? Go back to the PubMed, clear all limits and filters, and present the numbers of records retrieved for chick chick* chicks chicken in a two columns four rows word table on the next page of your assignment. Align the table to the centre under the capture with the best title you can suggest.
Lesson 08

MyNCBI
25 points

Visit and be aware of
The NCBI Handbook
My NCBI Help
Training and Tutorials

ASSIGNMENT 08

Describe your experience with MyNCBI (800 words max.).
Attach your essay to an e-mail.

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Lesson 09
TO BE UPDATED
Learn EndNote®
40 points

Visit the website

ENDNOTE

and learn how to use the most important tool for references management and manuscripts preparation.

ASSIGNMENT 09

Write in the e-mail body, how many different Reference Types, EndNote includes?

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Lesson 10

How to write a dissertation
10 points

Download, save and be aware of The Dissertation Bulletin

ASSIGNMENT 10

10.1 Copy into the e-mail body, the 1st bullet of seven listed as “Misconceptions about the Supervisor’s Role”.
10.2 Add a note if you were aware what the bullet in the text editor WORD means? Yes/No
Lesson 11

European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers
10 points

The European Charter for Researchers. The Code of Conduct for the Recruitment of Researchers
Open, print and read the document.

ASSIGNMENT 11

List the titles of Sections 1, 2 and 3 of the Annex (in the e-mail body).

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Lesson 12

How to avoid plagiarism
30 points

Visit Avoiding Plagiarism and read:
- Overview
- Is It Plagiarism?
- Safe Practices
- Plagiarism Exercise
- Best Practices for Teachers

Paraphrase Exercising

Brian Martin
Plagiarism and Responsibility
Journal of Tertiary Educational Administration, volume 6, number 2, October 1984, pp. 83-90

ASSIGNMENT 12

Find three examples of plagiarism in science described on the internet, write the URL address of the source(s) of information and add your own short comment (in the e-mail body).

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Lesson 13

Quality management tools: Standard operating procedures and laboratory records

40 points

Standard Operating Procedures are written documents that describe in great detail, the routine procedures to be followed for a specific operation, analysis, or action. Consistent use of an approved Standard Operating Procedure ensures conformation to organisational practices, reduced work effort, a reduction in error rates and improved data comparability, credibility and defensibility. Standard Operating Procedures also serve as a training resource and a readily available reference or documentation of proper procedures. Visit [http://www.epa.gov/quality/sops.html](http://www.epa.gov/quality/sops.html) and carefully read the “Frequent Questions about Standard Operating Procedures”.

Other recommended reading:
- [Laboratory Specific Standard Operating Procedures: Development Information and Directions](http://centaur.vri.cz/news/prilohy/pril769.pdf)
- [Experimental Design Worksheet](http://centaur.vri.cz/news/prilohy/pril769.pdf)
- [Guidelines for Keeping a Laboratory Record](http://www.vri.cz/userfiles/file/hide/GRP/18_Laboratory_notebooks.pdf)

**ASSIGNMENT 13**

Write the answers in the e-mail body.

13.1 What is the title of APPENDIX E (page 47) in the U.S. Environmental Protection Agency document “Guidance for Preparing Standard Operating Procedures (G-6)”.

13.2 A flowchart definition from one of the recommended reading documents.

13.3 Define a difference between SOP and laboratory record.

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Lesson 14

Supercourse Epidemiology - Internet - Global Health
20 points

http://www.pitt.edu/~super1/
Visit Supercourse lectures relating to your major interest.

**ASSIGNMENT 14**

As an attachment, list the selected and visited lectures and add your short (100 words maximum) evaluation or comments on Supercourse.

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Lesson 15

Biological research in developing countries: some hotspots
50 points

Harinder P. S. Makkar, International Atomic Energy Agency, Vienna

Biological research in developing countries: some hotspots

ASSIGNMENT 15

Write a short essay (500 to 750 words) indicating which problems described in the presentation concern you and your country, if any; and your constructive suggestions to solve them. Attach the file to an e-mail.

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Lesson 16

Powerpoint presentations
30 points

Find some interesting information on the internet on how to prepare a Powerpoint presentation

ASSIGNMENT 16

In the e-mail body include links to the three to five pieces of information you have found and read and which you consider to be important. The title should be presented as a hyperlink with the URL address inserted. Add at least 10 principles on how to prepare a good PowerPoint presentation, according to your opinion e.g. slides should have at least 40 lines, use as much colours as possible, each slide should be animated in a different way, etc. (don't follow the above mentioned principles too closely, find your own, correct)
Lesson 17

Journal of Infection in Developing Countries
50 points

Visit http://www.jidc.org

ASSIGNMENT 17

- Search the Journal of Infection in Developing Countries web page for any key word of your interest. Avoid keywords used by your colleagues already; retrieval of the same papers will not be accepted.
- Download three papers in pdf format.
- In the e-mail body include the key word used and the bibliographic references of selected papers in Acta veterinaria Brno format.
- Copy the title, authors without affiliation, the abstract and key words from the full paper into the WORD file, using a new page for each paper.
- Change all font sizes to arial 10
- Insert an upper border line between the abstract and key words
- Insert your first and last names into the header, align to right, convert to arial 9, with the surname in bold
- Insert pagination to the centre of the footer, arial 9
- attach the file to an e-mail as assignment 17
Lesson 18

Journal of Visualized Experiments
20 points

Visit [http://www.jove.com](http://www.jove.com) and select any video article you are interested in.

**ASSIGNMENT 18**

List the sections used in the journal and find the number of video articles in each section. Write it in the e-mail body.

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Lesson 19

Book shopping
30 points

Visit http://www.Amazon.com

ASSIGNMENT 19

As an exercise search for a book written by Kazda on mycobacteria, published in 2009

Write directly into the e-mail body:
19.1 the title of this book
19.2 first and last name of the second editor
19.3 the publisher of the book.

In addition, find the original paper written by Kazda et al. in 1990 (information is not available from Amazon) and write:
19.4 the name of the new species of mycobacterium discovered by the authors in New Zealand
19.5 who is the second author of this paper?
19.6 what was the affiliation of the first author?

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Lesson 20

What can be learnt from the web site
30 points

Open the following link and find out how many visits to the web page Veterinarni Medicina have been recorded. Do not count the countries, but mark the contents of the table, copy (CTRL-C) and paste to the EXCEL table (CTRL-V). You’ll know the number of countries in seconds.

ASSIGNMENT 20

Write in the e-mail body:
20.1 Through what time span has it been recording the visits to the web page Veterinarni Medicina?
20.2 How many visits have been recorded?
20.3 How many different countries visiting the web page Veterinarni Medicina did you find?
20.4.1 How many papers have been published by M. Kaevska between 2000 to 2011 according to the Publication database at http://www.vri.cz?
20.4.2 What is the paper by Kaevska et al. published in a journal with highest impact factor? Use a format conforming to the Instructions for Authors of the journal Veterinarni Medicina.
20.5 In which department does M. Kaevska work in?
20.6 What OIE Reference Laboratories operate at the Veterinary Research Institute, Brno?

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Lesson 21

Add to your bookmarks
65 points

http://www.doaj.org
http://www.biomedcentral.com
http://www.sciencemag.org/archive
http://www.plos.org/journals/index.html
http://www.cdc.gov
http://univ.cc/world.php
http://direct.bl.uk/bld/Home.do
http://www.nato.int/science/index.html
http://members.tripod.com/~lklivingston/essay
http://www.rockportinstitute.com/resumes.html
http://abacus.bates.edu/~ganderso/biology/resources/writing/HTWtoc.html
http://www.cs.purdue.edu/homes/koopman/essays/abstract.html
http://www.acronymfinder.com
http://grammar.ccc.commnet.edu/grammar/abbreviations.htm
http://acronyms.thefreedictionary.com
http://www.medilexicon.com/medicalabbreviations.php
http://www.tafsforum.org/
http://www.onehealthinitiative.com/

ASSIGNMENT 21

Open new WORD document, follow the next steps and answer the questions:

21.1 Copy all the above URL addresses, visit the web sites and delete from the list all those addresses you already know.
21.2 How many web sites from this lesson were previously unknown to you (as a percentage)?
21.3 What is the Impact factor 2010 of PLoS Pathogens?
21.4 What are deadlines for NATO grant applications in 2012?
21.5 Place here (in the centre of the page, leaving two free lines above with the name below) a copy of the photo of Susan J. Lamont, Charles F. Curtiss Distinguished Professor.
21.6 What is Dr. Lamont's area of research?
21.7 How many universities in Nepal are listed in the Universities Worldwide database?

Using advanced search in British Library Direct:

21.8 How many documents from the journal Veterinarni Medicina did you find?
21.9 How many documents from the journal Veterinary Microbiology and author ‘Rychlik’ did you find?
21.10 Prepare as a word document a table for the number of documents retrieved (Date range: All dates) for
PARATUBERCULOSIS in the article title
PARATUBERCULOSIS as any word
PARATUBERCULOSIS in the article title AND as any word
PARATUBERCULOSIS in the article title OR as any word
and copy the table to the assignment 21

21.11 Using Excel prepare a simple 2D bar graph from 21.10 data and copy it to the assignment 21

Attach the assignment to the e-mail.
Lesson 22

European Food Safety Authority
30 points

Visit the web site European Food Safety Authority (EFSA) and listen to the following EFSA video titles:

- How to identify emerging risks
- Why are bees under threat?
- Data collection and exposure assessment
- Low-dose effects in chemical risk assessment
- EFSA explains risk assessment of food and feed risk
- What are non-food-borne zoonotic diseases? How can they transmit to humans?
- What are food-borne zoonotic pathogens? Why are they important for public health?
- What is antimicrobial resistance? How is it related to food safety?
- How do we communicate risk in the food chain?

More EFSA video titles

ASSIGNMENT 22

Send in the e-mail body:

22.01a How many years does EFSA operate?
22.01b What is EFSA location (full mailing address)
22.02 How many zoonotic diseases are mentioned in the video presentation on non-food-borne diseases?
22.03 What ways of zoonoses transmission do you know from the same presentation?

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Lesson 23

The personal presentation
50 points

Everybody working in research is often addressed to send the curriculum vitae. Job seeking and application for a position, visit to a laboratory abroad and research grant application are the most frequent reasons. Participants in courses and visitors to laboratories and institutes used to be requested to evaluate of the event or to write a memorial record to the guest book.

ASSIGNMENT 23

23.1 Evaluate the GRP 2013 e-course. Attach your comments in a word document, arial 10 (file name GRP2013-NAME-EVALUATION).

23.2 Attach your structured c. v. with your photo as a separate file in pdf format (file name GRP2013-NAME-CV.pdf).

23.3 Attach few photos from your city, country, university, laboratory, free time and hobby activities (each as a separate file named GRP2013-NAME-FIG_number).

23.4 Attach captures (descriptions) of figures as a separate file named GRP2013-NAME-CAPTURES).

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