


Faculty of Agriculture, Cairo University



Scientific Thinking and Writing (201 AGR)

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Course Objectives

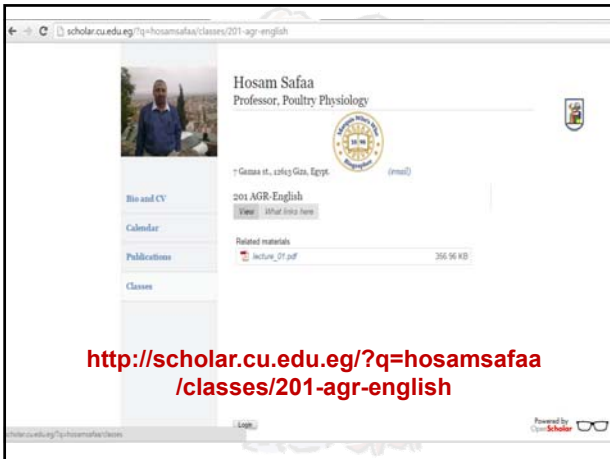
- Improve participants concept of thinking.
- Increase participants research competencies.
- Enhance participants communication skills.
- Acquire participants scientific writing skills.
- Promote participants ability to make an effective presentation.
- Encourage participants public speaking, discussion and interviews abilities.

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Scientific Thinking and Writing

Monday	Lecturer	Lecture Title
3/10/2016	Prof. Hosam Safaa	Introduction
10/10/2016	Dr. Fatma Mohamed	Interview and discussion skills
17/10/2016	Prof. Hosam Safaa	Thinking and Scientific Thinking
24/10/2016	Prof. Hosam Safaa	Communication: Theory and Application
31/10/2016	Dr. Fatma Mohamed	Time management
7/11/2016	Dr. Fatma Mohamed	Team management
14/11/2016	Dr. Osama Galal	Midterm exam
21/11/2016	Dr. Osama Galal	CV writing
28/11/2016	Dr. Osama Galal	Presentation skills
5/12/2016	Dr. Osama Galal	Poster preparation
12/12/2016	Prof. Hosam Safaa	Scientific Writing
19/12/2016	Prof. Hosam Safaa	Types and Evaluation of Scientific Writing
26/12/2016	Oral Exam	Oral Exam

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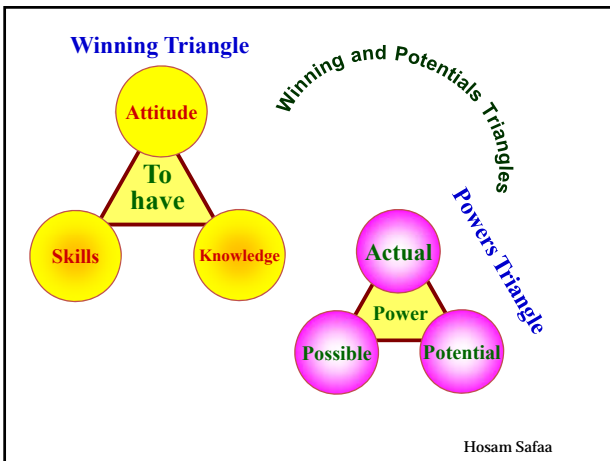


<http://scholar.cu.edu.eg/?q=hosamsafaa/classes/201-agr-english>

Course assessments

- Final term exam: 60%
- Mid-term exam: 10%
- Activities and reports: 20%
- Oral exam: 10%

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Characteristics of Left Side

Sequential processing	Language focus	Verbal explanation
Search activities	Uni-task	Logical thinking
Serious in facing problems	Details preferences	Limited experience

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Characteristics of Right Side

Great image	Mental images	Visual explanation
Installation activities	Multi-tasks	Sense thinking production
Unserious in facing problems	General ideas	Unlimited experiences

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Is thinking could be learned?

Thinking is a skill (De Bono, 1994). Everybody could improves thinking by training, practice, and learning. Thinking seems to be like driving. Both are skills.

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WHAT IS MEANT BY THINKING?

Thinking is a mental series of activities (efforts) in response to stimulator(s) which takes different shapes such as comparison, analysis and assessment.

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أنواع التفكير

Types of Thinking

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Types of Thinking

Each group has to search for an Arabic translation, definition(s), concept, example(s) for the following thinking types:

- | | |
|---------------------------|---------------|
| 1- Main or principle | 6- Vertical |
| 2- Divergent | 7- Logical |
| 3- Convergent | 8- Critic |
| 4- Creative or innovative | 9- Scientific |
| 5- Lateral | |

Submission deadline: 24th October 2016
Submit by hand or send via email with your name and Student ID to: 201agr.en@gmail.com

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Skills of Thinking

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Skills of Thinking



Each group has to search for an Arabic translation, definition(s), concept, example(s) for the following thinking skills:

1- Planning	7- Application
2- Identify goals	8- Analysis
3- Manipulation and organizing	9- Classification
4- Description	10- Comparison
5- Summarizing	11- Assembly
6- Conjunction	12- Evaluation

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Skills of Thinking



Each group has to search for an Arabic translation, definition(s), concept, example(s) for the following thinking skills:

13- Recognition of errors	19- Hypothesis
14- Reconstruction	20- Experimentation
15- Deduction	21- Fluency
16- Induction	22- Flexibility
17- Interpretation	23- Originality
18- Observation	24- Expansion or elaboration

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Knowledge and Scientific Research

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How do we reach knowledge?

- Chance
- Trial & Error
- Authority & Traditional
- Speculation, Argumentation & Dialogue
- Scientific Method

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Scientific Research Goals

- Phenomena description
- Phenomena Explanation
- Phenomena Prediction
- Phenomena Control

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Principal Characteristics of Scientific Research

- 1) Objectivity
- 2) Verification
- 3) Generalizability
- 4) Testability
- 5) Precision & Confidence
- 6) Induction & Deduction
- 7) Predictability
- 8) Variability
- 9) Flexibility
- 10) Targeted/Purposiveness

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THANKS FOR ATTENTION



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