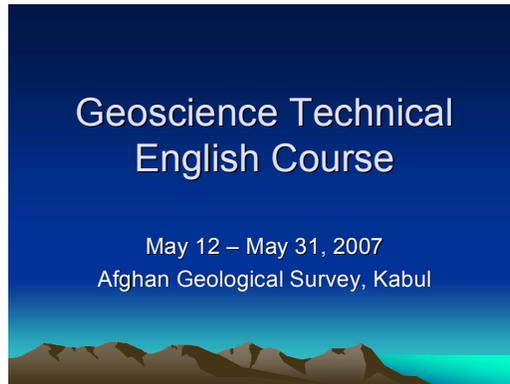


**Curriculum Guide for Geosciences Technical English Course**  
**Course Instructor: Stephanie Smith**



**Introduction**

This curriculum is based on a course taught in 18 class periods from May 12 – May 31, 2007 in Kabul, Afghanistan for 25 participants from the Afghan Geological Survey and the Ministry of Mines and Industries. Participants had mid-high intermediate level English language skills. All participants completed pre-test, and answered questions about course expectations and previous professional experience. The course material was provided to the course instructor and curriculum designer, Stephanie Smith, by USGS. It contains 443 geoscience words with the definitions. Pictures and diagrams were obtained from internet research by the course instructor to illustrate each one of the words. The words are divided into 15 thematic sessions with an average of 30 words per session. It is possible that future teaching of the Geoscience Technical English material will follow a different format and schedule based on the decision of the local trainers and the needs of the participants. It will however, be taught using a participatory approach with similar methodology and techniques used in this initial GTE course by instructor Stephanie Smith.

The course schedule and order of sessions can be adapted and changed as needed. The lessons are not progressive (i.e. each one building on the past lessons), and therefore can be taught independently of one another. The focus of this course is to use the English vocabulary in the course material (glossary) to communicate concepts in geology that the Afghan engineers already comprehend. In addition to correctly pronouncing and using the words in oral communication, Afghan engineers should be able to understand the words when spoken by others, recognize the written English words in text, and also write them in coherent, full sentences in English upon completion of this course. Future courses taught by Afghan trainers must incorporate background information based on their knowledge of and professional experience pertaining to each subject to enhance the lessons. Connections between personal experience and new information are the foundation of effective adult learning.

Concurrently, a Training of Trainers course was held in the afternoons for 6 participants of the GTE course. The objective of the TOT course was that the 6 trainers would learn how to teach the GTE course to colleagues in the future. As part of a teaching practicum, each trainer taught 2 full sessions of the GTE course with a trainer partner. After each

teaching session, the trainers were evaluated by their peers and the instructor based on criteria established during the TOT course.

**\*See Training of Trainers Course Description (Appendix T-1)**

The daily GTE course schedule is a guideline. It is a flexible model that can be rearranged in any order, as the lessons are not progressive. The participants must have sufficient time and preparation to take all steps necessary to complete the grading criteria to the best of each participant's ability (~ 250 pts total possible for the GTE Course), including 3 exams, 2 grammar homework assignments, 1 class presentation, 1 assignment with the voice recorders and cassettes, and participation during daily group work. This requires at least one full class day (9:00-12:00) to teach each session, and one full class day for a review (no new material) before each exam. Finally, each participant has the right to receive timely and constructive feedback from the instructor on their performance for each assignment. This model schedule was revised several times during the course based on participant needs and scheduling for the GTE trainer practicum teaching sessions.

**\* See GTE Course Schedule (Appendix 1-A)**

### Daily Step-by-Step Curriculum:

#### Day 1

**Objectives for Day 1**  
Participants will:

- Introduce themselves and be introduced to the instructor.
- Understand course expectations of participants and instructor.
- Understand overall course objectives.
- Establish norms.
- Understand course assessment (testing).
- Receive graded pre-tests.
- Discuss Train the Trainers Course.
- Unscramble and recognize 15 themes of Glossary.

**Overall Course Objectives**

- Using participatory, experience-based method, participants will be able to:
  - read,
  - write,
  - speak, and
  - understand the definition of... 443 Geoscience vocabulary words in English.

#### Materials Needed

1. GTE Course Material (Thematic Glossary with pictures), one placed at each seat
2. Participant portfolios, one placed at each seat (including notebook, pens, cassettes)
3. Course schedule, one placed at each seat (Appendix 1-A)
4. Blank name tags, one placed at each seat
5. Prepared attendance sheet with all participant names and space to mark “X” for each day of the course
6. Participant expectations document cut into pieces: each expectation written by a participant in pre-course interview on 1 piece of paper (Appendix 1-B)
7. 1-2 White boards + WB markers and eraser
8. Flip chart paper

9. Tape, scissors
10. PPT presentation on laptop + video projector, or print-out of daily objectives
11. Graded pre-tests
12. Handouts: 5 sheets of scrambled words (titles of each of 15 sessions in glossary) (Appendix 1-C)

### **Step 1: Opening ceremony – local authorities and colleagues**

9:00-9:30

- Minister Adel, Mines and Industries
- Mr. Wasy, President of Afghan Geological Survey
- Yama Wardak, Local Training Coordinator
- Stephanie Smith, Course Instructor

Stephanie:

“Welcome to the Geoscience Technical English Course. This is not a classroom in a primary school. You will not be punished for talking or disrupting class. We are a group of adult professionals. You are the experts. I am here as a facilitator in your learning. In this course, you will learn from your own experiences, and from each other, not just from the instructor (me). I am here to learn from you all, to hear your experience, and to help you in the best way that I can. In this course, your job will be to ask questions, participate, and share your own experiences. Finally, everyone here **MUST** respect each other, and feel comfortable to make mistakes, and to give wrong answers. We learn best through our mistakes, and it is better to try and give a wrong answer than to sit quietly in fear. So please, respect your colleagues, and don’t be afraid to be wrong!”

### **Step 2: Introduce your partner**

9:30-10:00

- Instructor writes 3 things on the white board: 1-Name, 2-Position (job), 3-Time you first became interested in you job / field of geology
- Tell the participants that we are going to introduce another person in the course to the rest of the class. Ask a participant to read the 3 things on the board.
- Ask the participants to turn to the person next to them, and take 2 minutes to find out the 3 pieces of information about their partner. After 2 minutes, tell them that they are going to tell the rest of the class about their partner.
- **PARTICIPANTS INTRODUCE PARTNER TO THE REST OF THE CLASS**
- Note: Course instructor is also partner with one participant, and this participant introduces the course instructor, and the instructor introduces partner

### **Step 3: Clarifying Expectations**

10:00-10:15

- Instructor passes out pieces of paper with course expectations written by participants. Each participant receives one piece of paper. There are no names on the papers, so each expectation is anonymous.
- One by one, each participant reads course expectations written by an anonymous participant.

- Finally, instructor shows PPT slide with overall course objectives, and clarifies any questions or misunderstandings about the GTE Course.

#### **Step 4: Establishing Norms**

10:15-10:30

- Instructor tells the class that they are adults, and that they are going to establish course “norms” for themselves
- Ask one volunteer to come write on a flip-chart paper with the title “Norms”
- Ask the class to give ideas about what they think should be the norms for this course (i.e. turn off cell phone, respect other participants when they are talking...)
- When the participants are satisfied that the list is complete, have participants read the list, and tape it on the wall.

#### **TEA BREAK**

10:30-10:45

#### **Step 4: Review course schedules, receive graded Pre-tests**

10:45-11:15

- Instructor hands back graded pre-tests
- Review course schedules/syllabus as a class, have participants read each section, select one participant to read a few sentences or small sections, then select a new participant to read.
- Instructor clarifies any questions or misunderstandings about the course schedule, grading, requirements, etc.

#### **Step 5: Participants inspect personal course materials**

11:15-11:30

- Instructor asks participants to open plastic folders (portfolios), and asks participants to describe to the class what is inside them.
- Ensure that each participant has the correct materials.
- Ask participants to open GTE Course Material (glossary) to table of contents page.
- Have participants read each Session title, and tell the class what page it is on, and have the class turn to that page in the glossary.

#### **Step 6: Activity-Word Scramble**

11:30-12:00

- Divide participants into 5 groups, by counting 1-2-3-4-5 around the room.
- Have 1's stand up and move to one corner, 2's stand up and move to another corner, etc. so that each group (1-5) is sitting together.
- Hand out 1 sheet to each group, and give them 10 minutes to work with the words and unscramble them. Tell the participants that these are all words from the GTE Course, and can be found in the glossary. Let them use the glossary to help them identify the words.

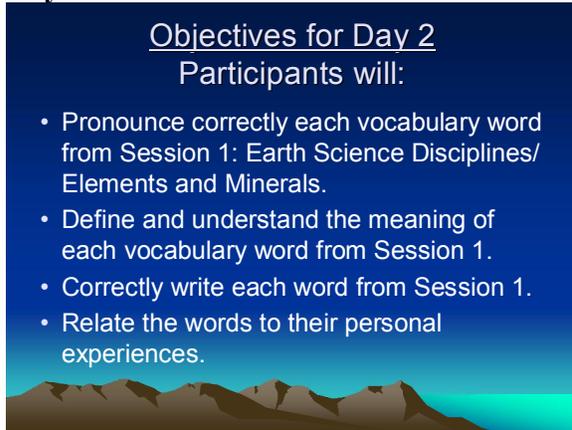
- Instructor circulates to check up with each group.
- After 10 minutes, have each group read the words that they had found, instructor correctly writes them on the white board as the groups share them.
- Ask participants where these words can be found in the course material (Answer: Titles of each of thematic sessions 1-15 in the table of contents)

### **Step 7: Homework assignment**

11:50-12:00

- Ask participants to refer to schedule to see what lesson is tomorrow (Session 1). Have participants study Session 1 for homework.

### **Day 2**



Objectives for Day 2  
Participants will:

- Pronounce correctly each vocabulary word from Session 1: Earth Science Disciplines/ Elements and Minerals.
- Define and understand the meaning of each vocabulary word from Session 1.
- Correctly write each word from Session 1.
- Relate the words to their personal experiences.

### **Materials Needed**

1. PPT presentation on laptop + video projector, or print-out of daily objectives
2. 1 plastic bag with 13 small squares of paper, each square with the first letter of one of the Earth Science Disciplines from Session 1 (13 total) (Appendix 2-A)
3. 1 plastic bag with 22 small squares of paper, each with the atomic number and symbol of one of the Elements and Minerals from Session 1 (22 total) (Appendix 2-A)
4. 5 print-outs of the Periodic Table of Elements; the 22 Elements and Minerals from Session 1 must be entirely blanked out of the table leaving white spaces where they should be. (Appendix 2-B)
5. 1-2 White boards + WB markers and eraser
6. Flip chart paper
7. Tape, scissors
8. 25 print outs of Practice Exercise, Session 1 (Appendix 2-C)

### **Step 1: Read Day 2 Objectives**

9:00-9:10

- Instructor asks participant to read Day 2 objectives
- Attendance sheet
- Enforce name tag use for first week
- Handouts, schedules and graded pre-tests to new students not present on first day

### **Step 2: Pronunciation: Earth Science Disciplines**

9:10-9:20

- Call names of participants to pull a square of paper out of plastic bag with letters. Tell the participants that they must say the word of the Earth Science Discipline from Session 1 that begins with that letter. (Glossaries closed)\*
- Instructor helps participants if they cannot think of the word
- Repeat this activity 2 times, correct pronunciation and have whole class repeat

### **Step 3: Pair work: Earth Science Disciplines**

9:20-9:35

- Have participants open books to Session 1, and turn to the person next to them.
- Partners read the 13 words and definitions to each other, each taking turns so that each person reads 1 full set of words and definitions to their partners.
- After 10 minutes, participants close books.

### **Step 4: Definitions: Earth Science Disciplines**

9:35-10:00

- Have participants close books and repeat the activity with the letters in the plastic bag.
- This time, when the participant says the word for the letter that he/she pulls out of the bag, he/she also gets to select a classmate to define this word.
- If the chosen participant cannot define the word, ask him/her to open the book and read it.

### **Step 5: Elements and Minerals**

10:00-10:30

- Ask participants to draw squares out of the bag, and name the element or mineral that corresponds to the atomic number and symbol on the square.
- Repeat this activity 2 times.

### **TEA BREAK**

10:30-10:45

### **Step 6: Group work: The Periodic Table of Elements**

10:45-11:05

- Divide participants into 5 groups of 5
- Hand out 1 print out of Periodic Table of Elements to each group, with the 22 elements and minerals from Session 1 blanked out.
- Instruct the groups to work together to fill in each missing element on the Periodic Table. They must write the full name of the element in the box.
- After groups have been working for about 5 minutes, inform them that after another 10 minutes, each group must present on 2 elements of their choice, 5 minutes maximum per group, telling the class what some example uses are for these elements in life.

**Step 7: Group Presentations**

11:05-11:50

- Each group presents for 5 minutes on 2 elements and example uses for the elements in life.
- Going in order of the Periodic Table, each group also writes 2-3 of the elements on the white board, spelled correctly, that they filled into the blanks on the table.
- Other groups check their work.

**Step 8: Homework**

11:50-12:00

- Each person in the class must prepare a brief, 3 minute (5-7 sentences) presentation on their personal experience with an Earth Science Discipline.
- Hand out practice exercise for Session 1.