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SHORT-TERM MISSION

TO

RADA WATER SUPPLY AND SANITATION PROJECT

AND

DHAMAR HEALTH IMPROVEMENT AND WASTE DISPOSAL PROJECT

INVENTORY

OF

TRAINING INSTITUTES IN THE YEMEN REPUBLIC

PERIOD: NOVEMBER 11 - DECEMBER 4, 1990

AGRO VISION HOLLAND/DHV/EUROCONSULT

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PERIOD: NOVEMBER 11 - DECEMBER 4, 1990

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#### TABLE OF CONTENTS

	<u>Pa</u>	ge
I	INTRODUCTION	1
II	TRAINING NEEDS	3
III	TRAINING INSTITUTES AND OPPORTUNITIES	4
	Management and Organization	4
	Administration	4
	Sanitation and Health Education	6
	Maintenance and Repair	10
	Computerization	12
	Literacy and Language	14
4 1717V70		
ANNEXES		
Annex 1	Itinerary	
Annex 2	Curricula National Institute for Administrative Science, Sana'a	
Annex 3	Curricula Institute for Administrative Science, Aden	
Annex 4	Curricula Health Manpower Institute, Sana'a	
Annex 5	Curricula Dr. Amin Nasser's Higher Institute of Health Science, Aden	
Annex 6	Curricula Vocational Training Centre, Sana'a	
Annex 7	Curricula Vocational Training Institute, Aden	
Annex 8	Curricula Sanitary Engineering, Sana'a University	
Annex 9	Curricula Sana'a International School, Computerization	
Annex 10	Curricula Language Centre Sana'a University	
Annex 11	Curricula Sana'a International School, English Language	



#### I. INTRODUCTION

- 1.1 From November 11 till December 4,1990 Mrs. Maria Naus paid a short-term visit to both the Rada Water Supply and Sanitation Project and the Dhamar Health Improvement and Waste Disposal Project in the Yemen Republic. The purpose of the mission was to prepare an inventory of existing in-country training institutes in the fields of specialization covered by both projects. In this respect it is noted that the identification of in-country training was mainly focussed on Municipality staff.
- 1.2 The mission was carried out on basis of the following Terms of Reference:
  - to discuss with Project Management of both Projects the training needs for counterpart staff;
  - to identify training institutes in the country providing theoretical and practical training courses for Project staff;
  - to collect available training curricula from those institutes with relevant training opportunities;
  - to determine for each course the qualifications required for admittance;
  - to investigate possibilities with regard to tailor-made training courses.
- 1.3 During the initial days of the mission discussions were held with both Project Management and their counterparts in order to determine existing needs and requirements for training of available project staff. In this respect the job descriptions of each individual staff member, which have been prepared in the initial project period, were used. The training needs are described in Chapter II of this report.
- 1.4 In consultation with both Project Management, the Royal Netherlands Embassy at Sana'a, the Ministry of Labour and Vocational Training and the Ministry of Housing and Urban Planning various Training Institutes were identified and visited. The institutes are contained in Chapter III.
- 1.5 The institutes mentioned in Chapter III provide training to Yemen staff on different education levels. Several institutes can provide tailor-made training courses. These are arranged on request as soon as specific training needs of the potential candidates have been identified.
- 1.6. Training opportunities in the fields of communication, use of audio visual means, extension, etc. are only available at a very limited scale. Standard training courses in project management and

programme administration do hardly exist in the country. In general, the educational level required for admittance is intermediate or even a higher level. Therefore, the need exists for training in these fields, for which only basic education is a requirement in order to create more opportunities in certain specializations for primary school leavers.

- 1.7 The intermediate training organizations AmidEast and Team International were visited. However, these organizations only mediate with regard to international training courses and are not involved in the organization of in-country training programmes.
- 1.8 Due to the restricted time available some training institutes in Yemen could not be visited, amongst which, the Commercial Secondary Program Institute, Sana'a, the Faculty of Commerce of the University Sana'a, the Vocational Training Institute at Dhamar (due to absence of staff), the Adult Education Centre at Rada, the Commercial Training Centre at Aden and the Private Institute for Administrative and Technical Education in Taiz. It is recommended that these institutes will be visited in the near future.
- 1.9 Consultant's itinerary is attached as Annex 1. During the visits paid to the institutes training curricula were discussed. Examples of standard education programmes and curricula of tailor-made training programmes provided by the various training institutes are attached as Annex 2 up to and including 11.
- 1.6 Prior to departure from the Republic of Yemen the first findings were presented in draft to both projects for discussion.



#### II. TRAINING NEEDS

2.1 In consultation with the Management of both projects and on the basis of the experience and qualifications of present staff members and the job descriptions training needs in the following fields of specialization were identified:

#### Management and Organization:

- high level and low level training for all departments on general management and organization;

#### Administration:

- personnel management and organization;
- financial/administrative management and organization;
- bookkeeping;
- accountancy;
- business administration;
- financial control;
- typing;
- computerization skills, word processing and data base;
- personnel filing;
- cardex system.

#### Sanitation and Health Education:

- short and long term courses on sanitation and environmental health with regard to waste collection and disposal, and sewerage and water supply systems;
- health education skills;
- communicative skills;
- expertise on audio-visual media;
- skills to execute surveys.

#### Maintenance and Repair:

- car mechanics (with emphasis on Daf-trucks);
- electricity with emphasis on the auto-electrical system;
- plumbing;
- welding (electric, gas- and oxy-acetylene welding);
- road maintenance and surface drainage;
- applied engineering.

#### Language skills:

- English language training at various levels;
- literacy training in Arabic language.
- 2.2 From discussions with project staff it became clear that the majority has received basic education up to the level of secondary school. Only few management staff members have received university education at the level of Bachelor of Science.

III. TRAINING INSTITUTES AND OPPORTUNITIES

#### III. TRAINING INSTITUTES

- 3.1 Consultant has paid visits to various training institutes in Sana'a and Aden. The following fields of training are distinguished:
  - Management and Organization;
  - Administration;
  - Sanitation and Health Education;
  - Maintenance and Repair;
  - Computerization;
  - Literacy and Language Skills.

#### MANAGEMENT AND ORGANIZATION

#### 3.2 National Institute for Administrative Science (NIAS)

This Institute was established in 1970 and presents various training programmes in the fields of project organization, management and administration. During the initial years the training programmes were organized for Government employees. Since early 1980 also employees from private companies were allowed to attend the training courses. The Institute is situated along Justice Road and can be reached by telephone number 74017.

The Institute provides a one-year training in general project management and administration with the purpose for the participants to gain knowledge and expertise needed to function effectively in a project or programme management position. Topics covered by this management training are, amongst others, problem identification, monitoring and evaluation, planning and budgeting.

The required education level of participants is Bachelor of Science degree in business administration, accountancy, engineering and economy.

#### **ADMINISTRATION**

#### 3.3 National Institute for Administrative Science (NIAS)

In addition to the high level education training course on management and organization this Institute provides various training courses to employees with intermediate and secondary education. The training courses in administration are distinguished in three categories:

- Accounting (duration 9 months);
- Organization and Personnel (duration 9 months);
- Office Administration (duration 8 months).

In the field of Office Administration three subsequent training programmes of eight months each can be attended. The curricula of the

training courses are contained in the Institute's Programme of Training courses 1991. A summary of the subjects covered by the training is attached as Annex 2. In addition to the above mentioned training programmes courses in typing in the English language are being organized. For the latter course participants should have attended intermediate school. The training courses provided by this Institute are free of charge.

#### Tailor-made Training Course

In addition to the above mentioned standard training courses tailor-made training courses can be arranged by the NIAS Institute on request. Taking into account the education level of the audience training courses at various levels can be arranged. The Institute is also prepared to formulate and present training courses in Dhamar and Rada. The Institute can provide tailor-made training courses in the following subjects: typing, administrative planning, budget preparation and -control, management and organization, business administration/accounting, filing (personnel) and cardex system. The tuition fee involved depends on the number of trainees, but will vary between YR 700 and YR 1,400 per day.

#### 3.4 Institute for Administrative Science, Aden

Dean: Nageeb Azaz (tel: 31406)

Deputy dean: Nasser Hussein Shamsheir

At the Institute for Administrative Science two kinds of standard training courses are presented:

- Training in secretarial and clerical skills;
- Training in administrative skills.

#### <u>Secretarial and clerical skills</u>

Three different training courses in secretarial and clerical skills are being organized at the Institute; i.e. a long-term course (two years), a medium-term course (six months) and a refresher course of three weeks. Furthermore, seminars are organized once a year.

The long-term course provides training in professional secretarial work. The duration of the training course is 24 months. Qualifications needed to enter this course are secondary school and a good knowledge on the English language. The curriculum of the course is attached as Annex 3. The tuition fee of this course arrives at 120 Dinar. Board and lodging are for the account of the participant.

The medium-term course covers training in secretarial and clerical work at a secondary level. The duration of the course is six months. Participants' qualifications required for admission are intermediate school. Tuition fee is 30 Dinar.

The refresher course has the objective to upgrade the secretarial and

typing skills of secretaries with several years of experience at a Governmental or private organization. Modern technologies and new working procedures are being dealt with. The duration of the training course is three weeks. Tuition fee is 60 Dinar per participant.

#### Administrative skills

A long-term training course is organized for staff of middle management level employed by the Government or by private companies. The curriculum contains training in administrative science, law science, English language and business English language. The duration of the training is 24 months. Required qualification for admission is secondary school. Tuition fee is 120 Dinar. Board and lodging are additional costs.

Two medium-term training courses in administration are presented at the institute. The medium-term course in accounting has a duration of nine months. The course covers subjects on management, accounting and statistics. Entry qualification is secondary school. The course in administration and bookkeeping takes six months. It deals with business administration at mediate level. Entry qualification is intermediate school. Tuition fee for the course in accounting is 45 Dinar and for the administration and bookkeeping course is 30 Dinar. Board and lodging expenses are for the account of participants.

Short-term courses are organized at but not by the Institute. At request training facilities of the institute can be made available to organizations and companies to enable them to present a specific tailor-made training course to their staff. The Institute, in this case, provides only the accommodation for the training course. The teachers and the training materials have to be provided by the client.

The training courses presented by the Institute for Administrative Science in Aden are comparable to the courses given at the National Institute for Administrative Science at Sana'a. Curricula of training courses are jointly formulated and exchange of information between both institutes takes place at regular intervals. Before the re-unification of both parts of the country students from the northern part of the country were not allowed to attend training at the Aden Institute. However, since May last year an exchange of trainees takes place whenever deemed useful.

#### SANITATION AND HEALTH EDUCATION

#### 3.5 Health Manpower Institute at Sana'a (HMI)

Director: Dr. Achmed Abdulla Gabir (Tel. 74008/202189)

The Health Manpower Institute trains people to become:

- Sanitarian;
- Medical assistant;
- Laboratory technician;
- X-ray technician;
- Pharmaceutical technician;
- Medical technician;
- Nurse:
- Midwife.

In view of the ongoing projects in the Yemen Republic in the fields of sanitation and health education, including solid waste collection and disposal, water supply, sewerage and surface drainage, the training course for sanitarians is important.

#### Sanitarian Training Course

The sanitarian training programme covers the following subjects; health (anatomy/physiology, communicable diseases, biology), sanitation (waste disposal, water supply, sewerage), and environmental supervision (food inspection and vector control). Included in the training is also report writing, evaluation, usage of books etc.

The training course does not cover the following subjects:

- behaviour science/communicative skills;
- organization and management;
- research, supervision/evaluation of projects.

The sanitarian training course consists of 70 per cent theory and 30 per cent practice. As part of the course participants receive practical training at a Governmental institution such as the Ministry of Housing and Urban Planning and also at private companies such as the fish factory in Hodeidah, Sana'a airport, etc. Annex 4 contains the curriculum of the sanitarian training course. The duration of the course is three years. Entry requirements are intermediate school. Allin cost involved is YR 20,000 to 25,000 per year per participant, depending on the number of participants per course. Presently several students from Dhamar attend the training of sanitarians at the H.M.I. in Sana'a.

Until last year the H.M.I. organized twice per year a training course for assistant sanitarians. These training courses were given on request of the Ministry of Housing and Urban Planning and the army. The content of the training was adapted to special demands of those institutes. No official degree can be obtained after successful attendance of the assistant sanitarian course. As the remuneration of assistant sanitarians is relatively very low, many participants try to find employment in other fields of specialization. On the basis of this experience the Institute terminated the presentation of the nine-month assistant training course.

#### Tailor-made Training Courses

On request tailor-made training courses can be arranged by H.M.I. The majority of such courses cover the fields of health supervision, health education, community participation, training of trainers, sanitation, monitoring, etc. Special tailor-made training courses for women with minor education are also being arranged. Because women often have not been able to receive sufficient education to attend a standard training at one of the institutes in Yemen, the H.M.I. branch at Hodeidah organize special training for women on public health, sanitation, health inside/outside the house, etc. This training was given to women only, and the minimum education level needed was primary school. The duration of the course was three months. Upon completion of this training these women were allowed to enter the midwife training course.

Branch offices of H.M.I. are presently established in the cities of Hodeidah, Taiz (qualified nurse/midwife training opportunities), Dhamar (qualified nurse training) and Aden.

#### 3.6 Dr. Amin Nasser's Higher Institute of Health Science, Aden

Dean: Agmed Mohammed Shabooti

The Higher Institute of Health Science at Aden provides following training courses:

- medical assistant;
- professional nurse;
- laboratory technician;
- pharmacy technician;
- radiography technician;
- public health;
- anaesthetic technician;
- operation theatre technician;
- statistics technician;
- community midwife;
- senior community midwife;
- nurse midwife;
- assistant nurse.

#### Public Health Inspection

The training course in public health inspection is of most interest for the projects in Dhamar and Rada. More information on this training course was collected during the visit to this Institute. A summary of the detailed curriculum of this training course is attached as Annex 5. Public health inspectors are trained in order to execute inspection on buildings (water, sanitary fitting, dry refuse disposal, drainage etc.), food handling premises, slaughterhouses, factories and workshops, insects and vermin, water supplies, drainage and sewage disposal, seaports and airports, and collection and disposal of dry refuse. They are trained to identify and report on dangerous situations

and to improve situations and provide preventive messages. Besides that the participants are trained on use of technical equipment necessary to execute their jobs. Training in management, coordination and health education is also covered by the course. The training course consists of theory and practice. During the last year of the training students have to work in the field to gain practical experience. Qualifications needed is secondary school. Prior to admittance students have to pass an theoretical entrance exam, in which the knowledge on physics, biology, mathematics and chemistry is tested. After this theoretical exam the student is also interviewed. A good knowledge of the English language is necessary to attend the training course. In the first year of the training course English and Arabic language is used, in the second and third year only the English language is used. The duration of the training is three years.

Costs involved: 60 Dinars per year, per person (this includes also food and accommodation).

#### Tailor-made Training Courses

In particular during the vacation months July and August short term training courses can be arranged by the Institute on request. However, it should be noted that the minimum number of participants is set at five. In general the Institute is well organized and very well equipped. The Institute has several very qualified and experienced trainers. The library was also very well furnished.

# 3.7 Ministry of Housing and Urban Planning and Environment Protection Council

The Environmental Health Division of the Ministry of Housing and Urban Planning and the Environment Protection Council provide training courses and seminars in the field of sanitation on request of projects. Subjects being dealt with are, amongst others, waste disposal and collection, landfill, health education, community participation, vector control, etc. The training is often given through workshops organized at one of the project sites. A prerequisite is that terms of reference are formulated by the project concerned on the basis of which a brief training can be arranged. Active participation of experts (expatriate as well as local) in the presentation of such training is always required.

The Environmental Health Education Department of MHUP supports in different ways the information flow on environmental health aspects to the population through the media.

#### MAINTENANCE AND REPAIR

#### 3.8 Vocational Training Centre, Sana'a

Director: Abbas Y. Al-Shahari (tel. 200492)

The Vocational Training Centre provides standard courses in seven sections:

- automobile section, mechanics and electricity;
- electricity section;
- carpentry section;
- welding and filing section, training electric, gas and oxyacetylene welding;
- mechanic section;
- building section;
- sanitation/plumbing section.

The automobile section includes only a short training on the electrical aspects of vehicles. Specialized training in repair and maintenance of, for example, DAF trucks is not yet possible.

On the average one third of the training consists of theory and two third of practical training in small workshops. In addition to specialized training in the different sections general training in the English language, religion, Arabic and sociology is included. Further information on the training program is contained in Annex 6. The duration of the courses is two years. The entry qualifications are secondary school. Tuition fee is not charged and students receive a daily allowance of YR 150 plus three meals per day and free accommodation.

#### Tailor-made Training Courses

Special training can be arranged in the fields of plumbing and welding. Due to shortage of classrooms and workshops this is not possible for the other specializations. The cost of such special designed training courses depends on the number of attendants.

The training institute is well organized. Workshops are well equipped. In general the attendance is high in the morning as well as in the afternoon.

### 3.9 Vocational Training Institute, Aden;

Director: Mohammed Mokbil Nagi (tel. 81185/82468)

The Vocational Training Institute in Aden provides training courses in the following eight different fields of specialization:

- building;
- carpentry;

- body/car repair/sheet metal work/welding;
- jewelry/goldsmith;
- English course.

Per course a maximum of 33 students are accepted. Special courses can be arranged on request. Training courses are also attended by students from Dhamar and Rada. After completion of the course the participants are generally considered to be sufficiently qualified to find employment with projects in the country, such as the Rada Water Supply and Sanitation and the Dhamar Health Improvement and Waste Disposal projects. The duration of all technical training courses is three years. Qualifications required is secondary school. No tuition fee is charged but YR 150 per month per participant is charged to cover the cost of board and lodging.

#### 3.11 Faculty of Engineering, Sana'a University.

Course Instructor is Mr. Veenstra.

The Faculty of Civil Engineering of the Sana'a University in cooperation with the Dutch International Institute for Hydraulic and Environmental Engineering provide post-graduate courses in Sanitary Engineering. The target group is professionals involved in the water sector in Yemen, especially in the fields of water supply and distribution as well as collection and disposal of waste water and solid waste. The short course will provide participants with a basic understanding of chemistry, micro-biology and unit operations and processes relevant in the field of sanitary engineering, as well as strengthening of practical knowledge on design, operation and management of sanitary engineering works, such as water supply systems, sanitation schemes and solid waste handling and disposal. The course will be organized from March 2 till June 13 and from September 14 till December 12, 1991. The complete curriculum will become available in Qualifications needed 1991. is a Bachelor Degree Engineering. Annex 8 contains more information on this course.

In case the number of students entering the course is not sufficient, also persons with a secondary education will be accepted, however as auditor only. The attendants must have a good knowledge of this language as the course is presented in the English language. The course is free of charge. An allowance of YR 200 per student per day is provided for to cover travelling, board and lodging expenses.

#### COMPUTERIZATION

#### 3.12 Sana's International School

Director: Duane Root (Tel. 234437)

Sana'a International School provides following training on computerization skills:

- automobile, mechanics and a very small part of electricity;
- general mechanics;
- radio/television;
- air-conditioning/refrigerator;
- electricity;
- plumbing.

The Institute provides a two-year training course for students with intermediate education and a one-year course for labourers. The first course provides theoretic (50 %) and practical training (50 %). The course is presented in the mornings as well as in the afternoons for seven hours per day. The course for labourers mainly consists of theoretic training and is presented in the afternoons.

The sections of general mechanics and plumbing provide training on the different processes of welding and plumbing. The automobile section provides theoretic and practical training in repair and maintenance of vehicles. Furthermore, this training includes repair and maintenance of water pumps.

The tuition fee of above mentioned training courses is 60 Dinars per student per year. In every section theoretical and practical training is given. The training curricula include training in the Arabic and English languages, sociology, mathematics, drawing, technology, science and practice. Additional information on vocational training is contained in Annex 7.

#### Tailor-made Training Course

Special training can be arranged on request for minimal 15 persons during the afternoons. Cost involved is also 60 Dinar, excluding cost of board and lodging.

The Institute has neither sufficient qualified training specialists nor sufficient training materials and equipment.

#### 3.10 Sana'a Technical School

Director: Yahiy Abdullah Amer (Tel. 200523)

The Sana'a Technical School provides training in the following technical subjects:

- electrical;
- architectural;
- lathing;
- mechanical;
- road making;
- air-conditioning;
- carpentry workshop(intern usage);
- surveying/leveling (supporting);
- forgery;

- key boarding/typing/word processing;
- word processing/word perfect 5.0;
- spreadsheet/lotus 1-2-3;
- data base/data base III+
- desk top publishing;
- ms dos;
- managing your hard drive.

More information on the training courses is given in the curricula which are contained in Annex 9.

Qualification needed: - for all courses good knowledge of English. Before training starts a placement test will be taken. The students will be divided in groups according their educational level.

Duration: - each course will take 33 hours, during 11 weeks;

- the courses ms-dos and managing your hard drive will take 9 hours each.

Costs involved: - the key boarding course cost YR 2,400, per person, 33 hours:

- word processing, spreadsheet, desk top publishing courses cost YR 3,200, per person,33 hours;
- ms-dos and managing your hard drive courses cost YR 900, per person, 9 hours.

The training courses will take place with a minimum of 10 and a maximum of 14 students.

Special training can be arranged on request.

#### 3.13 Computer World, Sana'a

Director: Alaghil Abdulla (Tel. 207721)

The private company "Computer World" provides in cooperation with the Sana'a International School computer training courses in the English language. The company itself also organizes these courses in the Arabic word processing. The program used is Arabic Word. The company has its own training accommodation, which is also used by the International School. Sufficient training materials are available.

Duration: - each course will take 33 hours, over a period of 11 weeks;

- the courses ms-dos and managing your hard drive will take 9 hours each.

Costs involved: - the key boarding course cost YR 2,400, per person, 33 hours;

- word processing, spreadsheet, desk top publishing courses cost YR 3,200, per person,33 hours;
- ms-dos and managing your hard drive courses cost YR 900, per person, 9 hours.

The training courses will take place with a minimum of 10 and a maximum of 14 students. Special training can be arranged on request.

#### 3.14 Yemen Computer Company Ltd, Sana'a

Director: Abdulla A. Zabarah (Tel. 208811)

The Yemen Computer Company provides training courses on:

- word processing, English and Arabic;
- advanced word processing, English and Arabic;
- introduction to Lotus 1-2-3, English and Arabic;
- Lotus 1-2-3, English and Arabic;
- advanced Lotus 1-2-3, English and Arabic;
- Word Perfect 5.0, 4.2, English and Arabic;
- advanced Word Perfect 5.0, 4.2, English and Arabic;

The software program used for the Word Perfect program in Arabic is zacher and can be used on every IBM compatible computer.

Training courses on Word Processing and Lotus 1-2-3 are given on regular basis. Before entering Word Processing and Lotus 1-2-3 training courses an introduction course on PC use has to be followed.

Qualifications needed: good knowledge on English and/or Arabic language. The tuition fee is YR 1,400 per person. Duration of the course is 25 hours to be presented in a period of three weeks. Training facilities and accommodation are being made available by the company.

The training on word perfect 5.0 and 4.2 can only be arranged on request. The minimum number of persons involved in the training is 6. Costs of the special training has to be arranged in coordination with the director of the company.

#### LITERACY AND LANGUAGE SKILLS

#### 3.15 Language Centre University of Sana'a (Tel. 200515)

Director: Dr. Mohammed Dahoud

The Language Centre of the Sana'a University organizes non academic courses in the English language, which are need-orientated courses of a functional nature, to learn people to understand, read, write and speak English in their day-to-day situation.

The following levels of education are distinguished:

- Elementary Course in English for Beginners (level I);
- Elementary Course in English for Beginners (level II);
- Lower Intermediate Course in English;
- Intermediate Course in English;
- Upper Intermediate Course in English;
- Advanced Course in English.

For each course a different qualification is needed. To attend the Elementary Course in English for Beginners students have to be literate in Arabic. Before attending the training course placement tests are taken to assess the knowledge of the English language of potential course candidates. On the basis of the results of such placement tests the most suitable course will be selected for each candidate. All six courses are being presented by Arab speaking teachers. The courses can start at any time during the year and the average duration is 14 weeks. The minimal number of students per course is 8 to 10. The courses start as soon as enough people are available to attend the course.

The tuition fee per participant varies between YR 40 and 65 per hour, depending on the number of participants. In addition to the tuition fee cost of travelling, board and lodging have to be covered by the participants. Annex 10 contains more information on the standard courses.

#### Tailor-made Technical Language Training

Special training courses in Technical English for staff working in the technical section of ongoing projects in the country can be arranged by the Language Centre on request. Prior to starting with the Technical English a short course in basic English is given to upgrade the attendants' knowledge of this language.

Such tailor-made training courses can be presented in the morning as well as in the afternoon. The intensive training course takes four hours per day, while the non-intensive training only is presented during two hours daily. Experience learns that on average the duration of the Technical English course does not exceed four months.

#### 3.17 Sana'a International School

Director: Duane Root (Tel. 234437)

At the Sana's International school following training possibilities are available:

- basic English I;
- basic English II;
- intermediate English;
- advanced English;
- business English;

The attendance of students in the different training courses is divided according to the knowledge on English language. The training course Basic English I is for students with little or no English language skills. During this course Arabic and English language will be the teaching-medium. During all other courses the English language will be the teaching-medium.

The training course on business English is primarily for clerical staff and is designed for improvement in office efficiency, widening the scope of clerical/secretarial staff and supervisors, and improvement in the ability to communicate in English. More detailed information on the curricula of the different courses is given in Annex 11. In general it is observed that the entry requirements for the courses in English at the International School is higher compared to the courses given by the Language Centre of the Sana'a University. The teachers of the International school have in general good qualifications and relevant experience in teaching. Their native language is English.

Each training course takes 33 hours, divided over 11 weeks. Tuition fee is YR 2,400 per person. A minimum attendance of 10 and a maximum of 14 students is required.

#### Tailor-made Training

Special training can be arranged on request. Training courses on technical English language for staff of the workshop department of the projects can be arranged. Besides training on technical English language related to spare-part manuals they have to follow a basic English language course. Training courses can also be held in Dhamar or Rada, provided training accommodation can be made available. The fees of the tailor-made training courses are comparable with the fees for the standard courses.

#### 3.18 The Literacy and Adult Education Organization, Sana'a

The Literacy and Adult Education Organization was visited in order to get information on literacy training in Yemen. The organization has seven training centers in Yemen providing training in various fields, amongst which, literacy, type writing, handicraft for women, and some technical fields, such as carpentry, mechanics, building and electricity.

Training centers have been established in Amran, Yarim, Al-Gheida, Sada'a, Hagga, Rada and Al Turba.

## **ITINERARY**

DATE	SUBJECT	PERSONS
11-11-1990	Departure for Yemen	
12-11-1990	Meeting at Netherlands Embassy	Mr. Schouten; Mr. Jurriens; Mrs. Zimmerman.
	Departure Dhamar	III.S. ZIMMCIMON,
13-11-1990	Discussion with Team Leader Dhamar Health and Waste Disposal Project	Mrs. Sheena Crawford
	Discussion with Manager Waste Disposal Department	Mr. Aghmed Hizaam
14-11-1990	Discussion with Waste Disposal Advisor of Dhamar Project	Mr. Piet Verbeek
15-11-1990	Departure Rada Meeting with Expatriate and Yemeni Staff of Rada Water Supply and Sanitation Project Discussion with Teamleader	Mr. D. de Gier
17-11-1990	Departure Sana'a	
18-11-1990	Meeting with President Director of the Literacy and Adult Education Organization	Mr. Sayid Farah
19-11-1990	Meeting with the director of the Health Manpower Institute  Meeting with the Director of	Dr. Achmed Abdulla Qahir
	Language Centre University of Sana'a	Dr. Mohammed Dahoud
	Meeting with the Dean Faculty of Education	Dr. Azza Ghanim
20-11-1990	Meeting with Training Advisor Amid East	Mrs. Saborah Zabarah
	Meeting with Deputy of General Department of Education Inspection, Min. of Education	Mr. Abu Bakker
	Coordinator of the Technical Board	Mr. Abdul Ez

	Meeting at the Environment Protection Council with Environmental Health Scientist	Mr. Hussein El- Gunied
21-11-1990	Meeting at the Environment Protection Council with Expatriate Advisor Meeting at National Institute for Administrative Science with Chief Higher Study Section	Mr. H. Klaver Mr. Othman Kasim
	Meeting with Consultant of the Institut fur Entwicklingszu- sammenarbeit	Mr. Elias Jammal
22-11-1990	Meeting at National Institute for Administrative Science with Vice Dean	Mr. Moutahar El Kirbi
24-11-1990	Meeting at the Vocational Training Centre with Chief Carpentry Department Meeting at the Ministry of	Mr. Yahia Yahia al Heimi
	Labour and Vocational Training with the Advisor of the Minister	Mr. Heithman
	Meeting at the Vocational Training Centre with the Director	Eng. Abbas Y. Al-Shahari
25-11-1990	Meeting with the Training Advisor UNDP	Mrs. Fatima Al Harazi
	Meeting with the Director of Sana'a International School	Mr. Duane Root
	Meeting with the Director of Computer World	Mr. A'aghil Abdulla
	Meeting with the Director of Yemen Computer Company LTD	Mr. Abdulamalik A. Zabarah
	Meeting with CSO Manager	Mr. Abdulla A. Ibrahim
	Meeting with Head Training Section USAID	Abdul Lativ
	Meeting with Team International	Norma Mr. Soheil K. Shaath

26-11-1990	Meeting with Director General at Ministry of Housing and Urban Planning Meeting with Head Waste Collection Department	Mr. Moassib Mr. Mohammed Mursid Al Khalani
	Meeting with Director General Environmental Health Education Department	Dr. Hamed M. Al Hamly
	Meeting with Course Instructor Faculty of Engineering, University of Sana'a	Mr. Veenstra
	Departure Rada	
27-11-1990	Meeting with Director Technical Secondary School, Sana'a (by Mr.de Gier and Gidey of the Rada Project)	Mr. Yahiy Abdullah Amer
	Departure Aden Meeting at Aden Governorate Deputy Min. Env. Health Education Director Urban Planning and Housing	
28-11-1990	Meeting at Dr. Nasser's Higher Institute of Health Science Dean	Mr. Aghmed Mohammed
	Deputy Dean	Shabooti Mr. Saheh Ali Saleh
	Meeting with the director of Vocational Training Institute	Mr.Mohammed Mokbil Nagi
29-11-1990	Meeting with the Deputy Director Scientific Institute for Administration	Mr.Nasser Hussein Shamsheir
	Departure Rada	
30-11-1990 1-12-1990 2-12-1990	Report Writing Report Writing Report Writing	
3-12-1990	Departure Sana'a Departure Netherlands	

Summary of the Curricula of the Training Programmes Provided by the National Institute for Administrative Science.

1. Training Programme on Accounting

Subjects:

- Principles in Accounting;
- Financial and Supply Management;
- Mathematics:
- General Administration.
- 2. Training Programme on Accounting (only for people working at the Military Forces)

Subjects:

- Principles of Office Administration;
- Government Accounting;
- United System of Accounting;
- Companies Accounting.
- 3. Training Programme on Organization and Personnel Management

Subjects:

- Organization;
- General Administration;
- Personnel Management;
- Administrative Communication;
- Rates of Performance:
- Preparation of Reports;
- Identification of Training and Training-needs for employees.
- 4. Training Programmes in Office Administration (Three courses of different educational level are provided)

Subjects:

- Office Administration;
- Typing in English and Arabic language.
- 5. Training Course in Typing

Subjects:

- English Typing;
- Commercial Terminology;
- Introduction to Accounting.

## Two Year Diploma Course For Secretarial and Clerical Work

## The Curriculum

## Level I

1st	Semester		Semester ^
1.			English Language ( Mid Level)
2.	Arabic Language /	2.	Arabic Language
3.	Correspondence	3.	Documents Organization
4.	Typing (In Arabic)	4.	Typing (In Arabic)
5.	Shorthand (In Arabic)	5.	Typing (In English)
 6.	Principles of Management	6.	Principles of Secretarial
7.	Principles of Mathematics.	7.	Shorthand (In Arabic)
8.	Labour Law and and Civil Service.	8.	Principles of Statistics
		9.	Principles of Economics.

## Level II

## 3rd Semester

·		
1.S	ec. & Office Managers Section	2. Documents Organization Section
1.	English Language	1. English Language
2.	Arabic Language	<ol><li>Sec. Practice in English (documentation)</li></ol>
3.	Typing (in Arabic)	3. Filing Administrative Org.
4.	Typing (in English)	4. Filing Technical Org.(1)
s.	Computer	5. Office Equipment
6.	Documents Organization	6. Microfilm
7.	Secretarial Practice (1)	7. Reports and Reporting
8.	Reports & Reporting	
		•
3.	Shorthand Section	4. Typing and Word Processing Section
1.	English Language	1. English Language
2.	Typing (in Arabic)	2. Typing (in Arabic)
3.	Typing (in English)	3. Typing (in English)
4.	Shorthand (in Arabic)	4. Office Equipment
5.	Shorthand (in English)	5. Reports and Reporting
6.	Office equipment	6. Computer (1) data entry
	·	7. Telex.

## 4th Semester

1. S	ec. & Office Managers Section	2.	Document Organization Section
1.	English Language	1.	English Language
2.	Technical Abbreviation (in English)	2.	Technical Abbreviation (in English)
3.	Typing (in Arabic)	3.	Filing Technical Org.(2)
4.	Typing (in English)	4.	Automation Filing
5.	Office equipment	5.	Administrative Behaviour.
6.	Secretarial Practice (2)	6.	In-field Training.
7.	Administrative Behaviour		
8.	In-field Training.		

3.	Shorthand Section	4. Typing & Word Processing Section
1.	English Language (Converstations)	1. English language
2.	Typing (in Arabic)	2. Typing ( in Arabic)
3.	Typing (in English)	3. Typing (in English)
4.	Shorthand (in Arabic)	4. Computer (2)
5.	Shorthand (in English)	5. Administative Behaviour
6.	Administrative Behaviour '	6. In-field Training.
7.	In-Field Training	

#### COMPREHENSIVE CURRICULA

## A.SECRETARIAL PRACTICE(Personal Secretary)

- 1. Introduction
- 2. Secretary (entrance )
- Kinds of secretary (general, specialized and personal)
- 4. Personal Secretary (Definition,importance,qualities and responsibilites)
- 5. Regulation of telephone calls (techniques)
  (Importance of telephone, telephone equipment, telephone indexes, main rules of using telephone, kinds of telephone calls, manners of speaking on telephone, rules of demanding telephone calls, rules of replying telephone calls, sorting calls, samples of problems and cases that the secretary exposed and its solutions.)
- 6. Receptions' Organization
  (Importance,types,agenda visitors levels,secretary's role samples of visiors' problems and their solutions)
- 7. Meetings (Importance, types, agenda, rules, organizing meetings, secretary's role before, in meeting day and after, reports)
- 8. President's travels
  (reasons of travels, main informations about the
  journey, administrative responsibilities, president's
  documents, agenda, journey plan , secretary's role
  before, in travel and after return to his office)
- 9. Communications (Business letters, reports, memoranda, etc, mail services, telegrams, cables, telex, petty cash)
- 10. Summarizing of reports, articles, etc.

#### B- RECORDS MANAGEMENT

- 1- Introduction
- 2- Documentation (entrance)
- 3- Types of documents
- 4- Organization (definition, importance)
- 5- Filing :Clerks
- 6- Filing:administrative organization
- 7- Filing:technical organization (practice) (How to run a good filing system)
  - -Classification
  - -Coding
  - -Indexing
  - -rcords manual
  - -records storage, filing rules, filing systems
  - -rcovery(geting back)
  - -circulation
  - -selection and separation
  - -transfer to central archives
  - -destruction
- 8 -File equipment
  - -filing boxes, cardex
  - -filing cabinets
  - -new technology
- 9 Microphotography
- 10 Organization development and modernization

#### C-OFFICE MANAGEMENT

- 1- Introduction
- 2- Modern Office (entrance)
- 3- Scientific structure of modern office
- 4- Office accomodation and nature factors;
  - Light
  - Ventilation
  - Temperature
  - Noise
  - colours
- 5- Modern office objectives
- 6- Main types of modern office
- 7- Office Machinery and equipment

(Tyewriters, word processing, dictating machine, accounting machine, furniume, filing and cardex, mail equipment, photocopier, duplicators, addressing, etc...)

- 8- Telecommunication (Telephone, telex and facsimile)
- 9- Relationship to types of work, purchase, control and maintenance
- 10- Modernization of office equipment

Health Manpower Institute, Sana'a.

Curricula of the Training Programme of Sanitarian.

First Year

Subject	Theory	Practice	Laboratory
Islamic Religion	78		
Arabic Language	108		
English Language	142		
Society	36		
Mathematics	108		
Biology	36		
Physics	36		
Chemistry	36		
Dissection	54		
Sanitary engineering			
and Drawing	108	41	
Environmental health	90	111	
Germs and Parasites	36		10
Education Schemes	36		
Total Number of Periods	918	152	10

### Second Year

Subjects	Theory	Practice	Laboratory
School Health	72	70	
Waste Disposal	36	50	
Vector Control	108	50	10
Food Hygiene	74	100	
Endemic Diseases	74	30	
First Aid and Nursing	36	10	
Nutrition	36		
Arabic Language	54		
English Language	108		
Health Education	36	20	
Statistics and			
Administration	36	10	
Report writing and			
Education Schemes	54		
Total Number of Periods	720	340	10

Third Year

Subject	Theory	Practice	Laboratory
English Language	72	10.100 J. 274 11 11 11 11 11 11 11 11 11 11 11 11 11	
Meat, Poultry and Fish			
Hygiene	144	45	
Milk Hygiene	36		
Health Education	108	120	
Malaria Control	36	60	
Insecticides	36	30	
Report Writing and			
Education Schemes	36		
Quarantines	36	40	
Bilharzia Control	36	60	
Laboratory	36	40	
Environmental Health		59	
Health Survey		50	
-			
Total Number of Periods	576	504	0

#### Institute Of Health Manpower Development

Department Of Public Health

Curriculum Of Training For 
Public Health Inspectors Course.

### The Objectives Of Training Of The Public Health Inspectors Course.

### Overall Aim:

At the end of the three years training course the graduate, should have the knowledge, skills and attitudes to enable him to work as a public - health inspector in-charge of a department of environmental health or public health unit in a governorate or province level and be able to train Health Guidars and other primary health workers and students assigned in his department.

#### Course Objectives

- 1- <u>Inspection</u>. That at the end of the course graduates are able to:

  <u>During inspection of any building:</u>
- 1.1. determine whether the owners have the correct license.
- 1.2. evaluate and critize building plans.
- 1.3. assess the adequacy of the following:-

a- Structeral soundness.

b- Ventilation.

b- Lighting.

d- Sanitary fittings.

e- Drainage.

f- Water.

g- Dry refuse disposal.

h- Population density.

#### For food handling premises:

- 1.4. recognize unhygienic premises used for food preparation that pose a potential health risk.
- 1.5. assess the cleanliness and condition of equipment and utensils.
- 1.6. assess the standard of personal hygiene of staff e.g. food handlers.
- 1.7. recognize spoiled or contaminated foods and detect adulterated foods.
- 1.8. Collect appropriate samples of food for laboratory investigation and interpret results of laboratory tests.

#### For slaughter houses:

- 1.9. recognize diseased meat by inspection of earcases and viscera.
- 1110. evaluate methods of meat transportation and storage.
- 1.11. inspect structural condition of slaughter house in respect of site, drainage, lighting, ventilation, pleaning etc.

### For Factories and workshops:

- 1.12. recognize potential hazards of industrial machinery, noise and chemicals.
- 1.13. assess the adequacy of protective clothing and safety guards.
- 1.14. check sanitary of the factories and workshops eg.
  - cleanliness over crowding ventilation light washing facilities for workers refrectory toilers etc.

#### For insect and vermin inspections:

- 1.15. recognize different species of insects and rodents of medical importance.
- 1.16. detect insect breeding places.
- 1.17. recognize evidence of the presence of insects and rodents.
- 1.18. recognize the formulation and application of the respective types of insecticides and pesticides.

### For water supplies:

- 1.19. collect adequate water samples for laboratory testing and interpret results of bacter ological analysis and assay of salt and sulphate and nitrate levels.
- 1.20. assess the turbidity of water.
- 1.21. appraise the siting of rural wells, tanks etc with reference to potenial source of contamination.
- 1.22. estimate the structural soundness of walls etc eg. brick lining, straining, sourrounding and coverage.

#### For drainage and sewage disposal:

- 1.23. evaluate the positioning of the drainage pipes eg. soil pipes, service pipes, antisyphonage pipes.
- 1.24. recognize construction defects in inspection chambers, gully traps, sealed traps, septic tanks, cess pools, soakage pits, latrines (pit, bucket, aqua-privy) and main sewers.
- 1.25. test new and old drains.
- 1.26. be able to advise on construction of appropriate latrin in rural areas.

### For seaports and airports:

- 1.27. check validity of vaccination certificates and exemptions.
- 1.28. ensure ships free of rodents.
- 1.29. assess the quality of ships water supplies and persibable cargoes.
- 1.30 ensure correct quarantine procedures are carried out and general international health regulations are observed.
- 1.31. recognize the major signs and symptoms of communicable, tropical and occupational diseases and takes the appropriate action.

### For collection and disposal of dry refuse:

- 1.32. recognize analysis of the different types of refuse eg. Domestic refuse Industrial refuse.
- 1.33. recognize different ways of collection eg. from houses, markets, streets, factories and other institutions, and encourges the community to dispose refuse in hygienic way.
- 1.34. recognize the different types of disposal eg. crude inaveration, control tipping, composting etc.
- 1.35. bc able to advise the villagers on hygienic ways of refuse disposal.

#### 2- Corrective:

That at the end of the course graduates are able to:

- 2.1. report any detected faults in buildings or breaches in health.
- 2.2. suspervise correction of detected faults of changes in procedures following breaches in health regulations.
- 2.3. advise on ways of correcting faults changing procedures or solving problems indentified during routine public health inspection.
- 2.4. present a case in court when a breach in public health regulations has been detected.
- 2.5. seize unwholesome foods and issue appropriate decumentation.
- 2.6. safety d 'younwhole-some foods.
- 2.7. control hawkers with respect to personal hygiene and food hygiene.
- 2.8. disinfect and decontaminate infested premises eg. fumigation.
- 2.9. disinfect water supplies in rural areas.
- 2.10. use appropriate measures to prevent use of a contaminated water supplies.

(4)

#### 3- Preventative:

That at end of the course the graduates are able to:

- 3.1. advise on proper ways of home disinfection and sterilization of water eg. boiling, filtration.
- 3.2. advise, supervise and carry out construction of water and sewage facilities.
- 3.3. supervise insect and rodent control in the community
- 3.4. trace the source of outbreaks of infectious disease by interviewing cases and contacts and collecting appropriate samples.
- 3.5. teach the following in a primary health institutions or the home or public places;
  - a- personal hygiene and hygienic handling of foods.
  - b- basic principles of environmental sanitation.
  - c- basic principles of nutrition and how to select an adequate dist from readily available sources.
  - d- the advantages of breast feeding and proper weaning practices.
  - e- methods for the prevention of communicable and tropical diseases common in the area eg. malaria, diarrhoea, schistosomiasis etc.
  - f- oral rehydration of mild to moderate diarrhoea cases.
  - g- the importance of regular visits to clinic and health centres.
- 3.6. be able to offer first aid in cases of emergencies.

### 4- Technical:

That at the end of the course the graduates are able to:

- 4.1. use and maintain the following equipments:
  - a- all types of spray equipment used in the community
  - b- a lactometer.
  - c- portable water laboratory.
  - d- kerosene refrigerator (e.g. replace wick ).
  - e- swing fog machine.
  - f- sterilizer and autoclave.
  - g- PH meter.
  - i- chlorine comparator
  - h- slide and movie projector.
- 4.2. be able to advise on hygienic design and alteration of a simple house.

(5)

### 5- Administrative:

That at the end of the course graduates are able to:

- 5.1. supervise and train unskilled labourers working in the field of sanitation, disinfection, disinfestation and related work.
- 5.2. keep adequate records and statistics.
- 5.3. write weekly, menthly and terminal reports.
- 5.4. maintain an accurate inventory of stores and maintain adequate supplies of materials and equipment.
- 5.4. maintain an accurate inventory of stores and maintain adequate supplies of materials and equipment.
- 5.5. to participate with other members of primary health care team in the training of PMC activities.
- 5.6. participate in the appraisal of needs and solutions in environmental health in collaboration with appropriate governorate, departments or members of the community.

(6)

### Entery Requirements:

#### 1- Academic:

- a- Direct entery: A candinate should hold a general secondary certificate (Scientific section) or its equivalent.
- b- In Sorvicer Assistant health inspector + 9 years schooling + 4 years service
  - + success in enterance examination and interview or -
  - Assistant health inspector + 8 years schooling + 6 years service + success in enterance examination and interview.
- 2- Age:- Not less than 18 years when admitted to the course
- 3- Medical Fittiness
- 4- Duration of the course:

The course is of three years duration which comprises lectures, practicals, demonstrations, field visits and oractical with environmental health departments for professional training.

- 5- Language of instruction: Mainly English.
- 6- Awards: At the end of the course succeeful candidates are awarded the diploma for the Public Health Inspectors.

### 7- Methods of Instruction:

- a- Lecture
- b- Group discussion
- c- Assignment sheets
- d- demonstration in class-room
- e- audio visual aids: -
  - 1- Films
  - 2- Film-strips
  - 3- Posters.
- f- Books and journals
- h- Practical Training in environmental health departments.
- i- Practical Training in rural areas.
- j- Field visits to MCH Centres, Malaria section, E.P.I. Centres, water installations, Port health department and Air-port etc.

### 8- Teaching Facilities:

### a- Personnel:

- 1- Sanitarian Tutors
- 2- Ingincers.
- 3- Physicians.

### b- Physical:

- 1- Class rooms
- 2- Library
- 3- Field Training Areas.

### 9- Qualifying Evalution:

- a- Written examinations:
- 1- Essay type examinations
- 2- M.C.Q. Examinations
- b- Practical examinations
- c- Oral examination (viva)

### 10- Distribution Of Time:

### - Holidays:

- Fridays	52 days.
- Students official holidays	38 days.
- Students annual holidays	30 days
Total holidays:	120 days.

- Total working days 365 120 = 245 days.
- Total working hours 245 X 5 = 1225 hours.
- Total hours per Trimester 1225 3 = 408 hours
- Number of hours per day for theory. 5 hours.
- O Number of hours per day for practical 6 hours.

### First Year Curriculum

### Contents:

- 1. Physics
- 2. Chemistry
- 3. Mathematics
- 4. Biology
- 5. Elementary Building Construction
- 6. Ventilation
- 7. Anatomy and Physiology of
- 8. Elements/Public Health and Personal Hygiene
- 9. Workshop Practice.
- 10. English Language
- 11. Drainage
- 12. Sanitary Fitting
- 13. Technical Drawings
- 14. First Aid
- 15. Social Sciences
- 16. Physical Training

Department Of Public Health
First Year Curriculum Hours

1. Physics 2 40 — 40 24 16 2. Chemistry 1 17 — 17 14 3 3. Nathematics 2 52 — 52 28 24 4. Biology 2 34 — 34 28 6 5. Elementry Building Construction. 4 66 24 — 90 50 40 6 Ventilation 2 36 16 — 52 28 24 7. Anatomy & Physiology 3 36 — 36 36 —	Subjects		Theery	Demonstration and Visits	Practical	Total No of hours	1st Trimester	2nd Trinester	3rd Trimester	
3. Natheratics 2 52 52 28 24  4. Biology 2 34 34 28 6  5. Elementry Building Construction. 4 66 24 - 90 50 40  6 Ventilation 2 36 16 - 52 28 24  7. Anatomy & Physiology 3 36 - 36 36 - 26  8. Elements of Pub. Health & 2 20 - 20 20 - 20  9. Morkshop practic 4 20 - 60 80 56 24  10. English Language. 2 60 - 60 30 30 11  11. Drainage 4 40 18 - 58 - 58 to 19  12. Sanitary Fittings 4 34 20 - 54 - 54 in 19  13. Technical Drawings 4 20 - 46 66 - 66  14. First Aid 2 16 8 - 24 - 24 constant 15. Social Science 1 12 - 12 12 - 28  16. Physical Training 2 - 28 28 28 - 10  Total No. Hours: 503 86 134 723 354 369 504	1. Physics	2	40			40	24	16		
4. Biology 2 34 — 34 28 6  5. Elementry Building Construction. 4 66 24 — 90 50 40  6 Ventilation 2 36 16 — 52 28 24 55 56 7     7. Anatomy & Physiology 3 36 — 36 36 — 66 7     8. Elements of Pub. Health & 2 20 — 20 20 — 60 80 56 24 65 7     10. Englsih Language. 2 60 — 60 80 56 24 65 7     11. Drainage 4 40 18 — 58 — 58 7     12. Sanitary Fittings 4 34 20 — 54 — 54     13. Technical Drawings 4 20 — 46 66 — 66 6     14. First Aid 2 16 8 — 24 — 24     15. Social Science 1 12 — 12 12 — 64     16. Physical Training 2 — 28 28 28 —   Total No. Hours: 503 86 134 723 354 369 504     No. of weeks of each	2. Chemistry	1	17			17	14	3		
4. Biology 2 34 — 34 28 6  5. Elementry Building Construction. 4 66 24 — 90 50 40  6 Ventilation 2 36 16 — 52 28 24 55 56 66 7	3. Nathematics	2	52	-		52	28	24		
ction.4       66       24       —       90       50       40       s         6 Ventilation       2       36       16       —       52       28       24       but         7. Anatomy & Physiology       3       36       —       36       36       17       30       30       11       17       36       30       10       10       10       10       10       10       10       10       10       10       10       10       10       10 <td>4. Biology</td> <td>2</td> <td>34</td> <td>_</td> <td><b>—</b> '</td> <td>34</td> <td>28</td> <td>6</td> <td></td> <td></td>	4. Biology	2	34	_	<b>—</b> '	34	28	6		
8. Elements of Pub. Haliff & 2 20 — 60 80 56 24 Elements of Pub. Haliff & 2 20 — 60 80 56 24 Elements of Pub. Haliff & 2 20 — 60 80 56 24 Elements of Pub. Haliff & 2 20 — 60 80 56 24 Elements of Pub. Haliff & 2 20 — 60 80 56 24 Elements of Pub. Haliff & 20 — 60 80 56 24 Elements of Pub. Haliff & 20 — 60 80 56 24 Elements of Pub. Haliff & 20 — 60 80 56 24 Elements of Pub. Haliff & 20 — 60 80 56 24 Elements of Pub. Haliff & 20 — 60 80 56 24 Elements of Pub. Haliff & 20 — 58 — 58 Elements of Pub. Haliff & 20 — 58 — 58 Elements of Pub. Haliff & 20 — 60 80 56 24 Elements of Pub. Haliff & 20 — 60 80 80 80 80 80 80 80 80 80 80	-		66	24		90	50	40	<b>™</b>	
8. Elements of Pub. Health & 2 20 — 60 80 56 24 Elements of Pub. Health & 2 20 — 60 80 56 24 Elements of Pub. Health & 20 — 60 80 80 80 80 80 80 80 80 80 80 80 80 80	6 Ventilation	2	36	16	·	52	28	24	ment	
8. Elements of Pub. Health & 2 20 — 20 — 20 — 20 — 20 — 20 — 20 —	7. Anatomy & Physiology	3	36			36	36		pert	
10. Englsih Language. 2 60 — — 60 30 30 57 7 7 7 11. Prainage 4 40 18 — 58 — 58 7 8 7 8 7 12. Sanitary Fittings 4 34 20 — 54 — 54 17 17 17 17 17 17 17 17 17 17 17 17 17		2	20			20	20			
10. English Language. 2 60 60 30 30 57 7 7 7 11. Prainage 4 40 18 - 58 - 58 7 8 7 8 7 12. Sanitary Fittings 4 34 20 - 54 - 54 17 17 17 17 17 17 17 17 17 17 17 17 17	9. Workshop practic	4	20	<del></del>	60	80	56	24	PhGi	
11. Drainage	10. Englsih Language.	2	60			60	30	30		
13. Technical Drawings	11. Prainage	4	40	18		58	-	58	at	
14. First Aid       2       16       8       —       24       —       24       —       —       24       —       —       —       24       —	12. Sanitary Fittings	4.	34	20		54		54	uju	
16. Physical Training 2 — — 28 28 28 —  Total No. Hours: 503 86 134 723 354 369 504  No. of weeks of each	13. Technical Drawings	1	20		46	66		66	Traj	
16. Physical Training 2 — — 28 28 28 —  Total No. Hours: 503 86 134 723 354 369 504  No. of weeks of each	14. First Aid	2	16	8	-	24		24	ical	
Total No. Hours: 503 86 134 723 354 369 504 No. of weeks of each	15. Social Science	1	12		-	12	12	-	Pract	
No. of weeks of each	16. Physical Training	2			28	28	28			
	Total No. Hours:		503	86	134	723	354	369	504	
Frimcsters: 14 15 12	No. of weeks of each									
	Promosters:						14	15	12	

### Page 10

### Contents :

1.⊪	•	Camp	Sanitation

SECOND YEAR CURRICULUM

- 2. Sewage Disposal
- 3. Water Supply
- 4. Food Control
- 5. Entomology
- 6. Public Cleansing
- 7. Nutrition
- 8. Bacteriology and Parasitology
- 9. Laboratory Works
- 10. Public Health Legislation
- 11. Inspection of Building Premises
- 12. English Language
- 13. Physical Training
- 14. Social Sciences

# Department Of Public Health Second Year Curriculum Hours

Subjects		Theory	Demonstrations and Vists	Practical	Total No. of hours	1st Trimester	2nd Trimester	3rd Trimestor	Remarks
1. Camp Sanitation	2	30	10		40	28		12	
2. Sewage Disposal	3	50	14		64	42		22	
3. Water Supply	2	36	12	_	43	28		20	
4. Food Control	3	50	28	_	78	45		33	
5. Entomology & Rodents	3	67	18	-	85	42	Dept.	43	
6. Public Cleansing	3	60	20	_	80	42	H. D	38	
7. Nutrition	1	8	8		16		a. La	16	
8. Bacteriology & Parasitology	2	46	12		58	28	nment	30	
9. Laboratory Morks	2	8		18	26	-	Environmental	26	
10. Public Health Legislation	2	30	_		30	30	a,t	_	
11. Inspection of Build. Premises	3 4	36		76	112	56	Training	56	
12. English Language	3	70	_	<b>-</b>	70	42		28	
13. Social Sciences	1	13			13	-	Practice,1	13	
14. Physical Training	2			28	28	_	ė;	28	
Total No. of Hours		503	122	122	748	383	480	365	·
No. of Weeks of each trimest	er,					14	13	14	

### Public Health Inspectors

### Thir Year Curriculum

### Contents:

- 1. Communicable Disease
- 2. Social Health
- 3. Meat Hygiene and Meat Inspection
- 4. Port Health & Quarantine & International Health Regulations
- 5. Health Education
- 6. Principles of Psychology
- 7. Occupational Hygiene
- 8. Public Health Administration
- 9. Inspection of Building Premises
- 10. M.C.H. and Family Planning
- 11. Vital statistics and health statistics
- 12. Social Sciences.
- 13. Physical Training.

# Department of Public Health Third Year Curriculum Hours

Subjects		Theory	Demonstrations and Visits	Practical	Total No. of hrs.	1st Trimester	2nd Trimestor	3rd Trimester	Remarks
. 1. Communicable Diseases	4	64		12	76	38		38	
2. Social Health	2	45	_	_	45	28		17	
3. Meat Hygiene & Meat- Inspect <b>i</b> on.	2	39	_	30	69	28	13	41	
4. Port Health & International Health Regulations.	2	42	8		50	28	Dopartment	22	
5. Health Education	2	38	8		46	28	H. Do	18	
6. Principles of Psychology	1	20		******	20	14		6	
7. Occupational Hygiene		50	10		60	30	mente	30	
8. Public Health Administration	on 1	24	4		28	14	Enironmental	14	
9. Insp. of Building Premises	4	_		104	104	52	At	52	
10. MCH and Family Planning	1	12	15	-	27	14	Trainin $_{\mathcal{C}}$	13	
11. Vital Statistics	1	30	6		36	<b>1</b> 8		18	
12. Social Sciences	1	13			13	13	Practicel	-	
13. Physical Training	2			2/	24	_	뚃	24	
Total No. of Hours:		377	51	170	598	305	624	293	
No. of weeks of each Trimester:	·					13	15	13	

### SANA'A VTC CURRICULA - STUDY HOURS

		PERIODS	PER WEEK	
	YL	√R 1	YEA	R 2
SUBJECTS	SESSIONS	HR.MIN.	SESSIONS	HR.MIN.
		1		<u> </u>
ENGLISH	2	1h30m	2	1h30m
MATHEMATICS	2	1h30m	2	1h30m
INDUSTRIAL DRAWING	3	2h15m	3	2h15m
MATERIALS SCIENCE	1	45m		
BASICS OF ELECTRICITY			1	45m
OR MECHANICS				
TECHNOLOGY		[	1	45m
PRACTICAL TRAINING	23	23h	23	23h
SUB-TOTAL	31	29h	32	29h45m
			1	
RELIGION	3	2h15m	3	2h15m
ARABIC	3	2h15m	3	2h15m
SOCIOLOGY	2	1h30m	2	1h30m
SUB-TOTAL	8	6h	8	6h
TOTAL	39	35h	40	35h45m

NOTE: Theory lessons are for 45 minute periods. Practical lessons are 60 minute periods.

Source: Colin Chapman: The Vocational Training and Technical Education System in the Yemen Arab Republic (Y.A.R.), June 1985

### CURRICULA VOCATIONAL TRAINING INSTITUTE, ADEN

SUBJECTS	PERIODS
ARABIC LANGUAGE	144
ENGLISH LANGUAGE	108
SOCIOLOGY	72
MATHEMATICS	144
DRAWING	216
TECHNOLOGY	504
WORKSHOP	1,296
SCIENCE	108

۲ مارس (أذار) ۱۹۹۱ ــ ۱۳ يونيو (حزيران) ۱۹۹۱ ۱۶ سبتمبر (أيلول) ۱۹۹۱ ــ ۱۲ ديسمبر (كانون الأول) ۱ 2 March '91 - 13 Juni '91 17 September '91 - 12 December '91

جامعة صنعاء كلية الهندسة المدنية Sana'a University
Faculty of Civil Engineering

بالتمارن مع المعهد الدول للهندسة الهيدورليكية وهندسة المئتة in collaboration with International Institute for Hydraulic and Environmental Engineering





## POST-GRADUATE COURSES,

#### خلفية الدورة وأهدافها

تقدم دورة الدراسات العليا في الهندسة الصحية التدريب لهؤلاء الذين تتعلق مجالات أعمالهم بقطاع الماء في الجمهورية العربية اليمنية، وخاصة في مجالات إمدادات وتوزيع الماء، وكذلك جمع مياه الصرف والتخلص منها وجمع الخلفات الصلبة والتخلص منها.

هذه الدورة النصيرة ستقدم المشترك بها مايل:

 ه تفهم أساسي الكيمياء، والميكرو بيولوجي، وتشغيل الوحدات والعمليات المعاقة بمجال الهندسة الصحية.

 م تقو ية العرفة التطبيقية فيمايتعلق بتصميم وتشغيل وإدارة تجهيزات ومرافق الهندسة الصحية ، مثل أنظمة إمدادات المياء ، والبرامج الصحية ومعاملة المخلفات الصلية والتخلص منها .

هذه الدورة ستنظم مرتين:

من ۲ مارس (آذار) حتى ۱۲ يونيو (حزيران) ۱۹۹۱

ومن ۱۱ سبتمبر (أيلول) حتى ۱۲ ديسمبر (كانون الأول) ۱۹۹۱

والدورة هي شرة البادرة التي اتخذتها جامعة صنعاه اوضع نظام متين الأساس للجرامج الدراسية للطلاب والخريجين في الهيدر واوجيا والهندسة الصحية. و وضع برامح كهذه يعتبر ضرورياً لقابلة التزايد السريم في مشاكل إمدادات الياه واستغلالها في الجمهورية العربية اليمنية. وقد أسفرت هذه البادرة عن قيام الحكومة الهولندية بتنظيم مشروع تدريبي عن المياه يستغرق ٢ سنوات، و يشمل بخلاف دورة الهيدر ولوجيا التطبيقية الدورات الأتية:

دورات الدراسات العايا في:

 الهيدورلوجيا العامة
 انتظام استغلال الياه والهيدر واوجيا
 الهندسة الصحبة

 تقوية البرنامج الدراسي قبل التخرج في قسم الهندسة المدنية في التخصصات المائية: الهيدرولوجيا، والهندسة الصحية، وهندسة الرى، والهيدروليكا.

وهذا المشروع تقوم بتنفيذه جامعة صنعاه ، كلية الهندسة ، قسم المهندسة الهيدر وليكية وهندسة الهيدر وليكية وهندسة البيئة بمدينة دلفت ، هولندا ، و بالتشاور مع قسم الجيولوجيا بكلية العلوم ، وقسم الأراضي والياه بكلية الزراعة .

#### Background and objectives

The post-graduate courses in Sanitary Engineering provide training to all those professionals involved in the water sector of the Republic of Yemen, especially in the fields of water supply and distribution as well as collection and disposal of waste water and solid waste.

The short course will provide participants with

a basic understanding of chemistry, microbiology and unit operations and processes relevant in the field of sanitary engineering
 a strengthening of practical knowledge on design, operation and management of sanitary engineering works such as water supply systems, sanitation schemes and solid waster handing and disposal.

The course will be held twice: from March 2 to June 13, 1991 and from September 14 to December 12, 1991

The course is a result of an initiative taken by Sana'a. University to implement a well-founded graduate and postgraduate educational programme in Hydrology and Sanitary Engineering, The establishment of such a programma was considered essential in order to deal adequately with the rapidly growing water supply and water management problems in the Republic of Yemen. The initiative has resulted in a three-year water training project funded by the Netherlands Government, which apart from the course in Applied Hydrology, includes:

- Postgraduate courses in: General Hydrology
  - Water Management and Hydrology
- Sanitary Engineering
- Strengthening the undergraduate study programme of the Civil Engineering Department for the water specializations

Hydrology, Sanitary Engineering, Irrigation and Hydraulic Engineering. This project is carried out by Sana'a University, Faculty of Engineering, Civil Engineering Department in collaboration with IIIE, the International Institute for Hydraulic and Environmental Engineering, Delft, The Netherlands and inconsultation with the Faculty of Science, Geology Department and the Faculty of Agriculture, Land and Water Department.

#### Outline of the Course in Sanitary Engineering

The course programme consist of a preparatory part, lectures, exercises, fieldwork and computer work. Physical and theoretical backgrounds will be discussed to the extent required to understand their application in the Yemini water environment. The programme will cover the following subjects:

#### General subjects (10%)

- Technical English
- Mathematics
- Statistics
- Applied informatics
- Project management Engineering economy

#### Basic subjects (25%)

- Microbiology
- Chemistry Hydrology
- Applied hydraulies
- Public health

#### Sanitary Engineering (25%)

- Water and waste water quality Process technology
- Unit operations: aeration
  - sedimentation

#### Water supply:

- Water resources identification
- Water treatment: disinfection
  - softening

filtration

- Groundwater flow and recovery
- Water transport and distribution
- Water pumping stations

#### Sanitation:

- Low cost sanitation
- Waste water collection.
- Waste water freatment
- Solid waste management

#### Design Exercises (30%)

- Water treatment
- Water distribution network
- Low cost sanitation.
- Waste water collection.
- · Waste water treatment Pumping station

Fieldwork and Fieldtrips (10%) Several fieldworks and fieldtrips will be organised on water quality monitoring, sanitation, water distribution and solid waste management.

For participants who are deficient in prior to the start of the course will be

### Organization and faculty

The course is part of the postgraduate educational programme of Sana'a University and is carried out by Faculty of Engineering, Civil Engineering Department in consultation with the Faculty of Science, Geology Department and the Faculty of Agriculture, Department of Soil and Water, The course organization and lecturing

programme is carried out in collaboration with IIII, the International Institute for Hydraulic and Environmental Engineering, Defft, The Netherlands.

The lecturing programme will be conducted by local university staff. local experts from authorities and ministries, expatriate experts working in various water projects and foreign Jecturers.

Course content, course execution, participant admission and participant evaluation is the responsibility of the Dean of the Faculty of Engineering.

The Faculty of Engineering will appoint an Advisory Committee which will consist of representatives from the Faculties of Engineering, Science and Agriculture, various ministries and tota. This committee will be consulted by the Dean of the Faculty of Enginerring on the admission of participants, course contents and syllabi. In its meeting at the end of the course the committee. will review the participants' study results.

#### Certificates

At the end of the course a transcript will be offered, stating the performance of the participant during the course. In addition, successful participants will receive the "Certificate of Successful Completion". Requirements for the certificate are regular and active participation in all course activities i.e. lectures, exercises, fieldtrips and fieldwork, together with satisfactory results for the course work and examinations. In case a participant does not show regular attendance, he/she may be dismissed from the course.

#### Application and admission

The course will be open to

- B.Sc. holders actively working in the water sector of Yemen.
- Non-B.Sc. holders with proven experience in water engineering.
- Teaching assistants and assistant lecturers who wish further specialization in the water. disciplines.

Applications for admission can be directed to the Dean of the Civil Engineering Department, Sana'a University, no later than 6 weeks before the start of the course, using the application form provided. Upon admission, participants will receive perfinent course information, including the course handbook.

Participants who already have a unalification for one or more course. items can be exempted after passing a test. Compensating activities have to be carried out.

The course may be cancelled if less than 15 admissible participants have registered.

### English, intensive language training compulsory. For all admitted participants a training course on feelinical Einglish is compulsory during five afternoons prior to the start of the course. During the regular course programme additional time will be reserved for technical English training.

#### Practical information

Participation in the course is free of charge. However, as a rule participants have to provide their own writing materials, lodging, meals and transport. Transport and lodging during fieldwork will be provided by the course management. A daily allowance may be provided to participants who have their normal residence outside Sana'a.

The course will be conducted at the new buildings of the Faculty of Engineering of Sana'a University. Participants will have free access to all regular student facilities such as the library, reading room, cafeteria, mosque and the course study room. Use of the laboratory and computer facilities is restricted to the course programme. Dormitory and transport facilities are not offered and will be the responsibility of the participants.

One full course week involves not more than 27 lecture hours, which in principle will be conducted on:

Saturday till Wednesday from 7,30-10,30 hours 11.00-13.30 hours Thursday from 7,30-12,00 hours

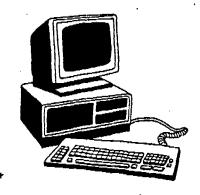
Some lectures and exercises may be held in the afternoon after 14.00 hours. These will be announced in advance.

#### HIE, Delft

The aim of the International Institute for Hydraulic and Environmental Engineering, tttF, is to transfer scientific knowledge and technological know-how related to civil and invironmental engineering to professionals, especially from developing countries, tttE organizes

regular one-year post-graduate courses which lead to either an M.Sc. degree or an IIIF diploma. IIIE also organizes short tailor-made and regular postgraduate courses in The Netherlands as well as abroad, and takes part in projects in various countries to develop local training facilities.

### COMMUNITY EDUCATION COURSE OFFERINGS



COMPUTERS - Apple II GS
Typing/ Keyboarding
Word Processing

A new comprehensive multipurpose course encompassing beginning typing and word processing will be taught on the latest Apple II GS series personal computers. This is an easy to learn and easy to use course - even if you have never used a computer or typewriter before!

Each participant will be assigned an individual Apple II GS computer. Basic computer concepts, such as loading disks, saving work to the disk, function keys of computers, etc. will be taught as well as typing, keyboarding and basic word processing concepts. It is expected that at the end of this course, the student will understand basic computer functions, be able to type by touch and perform basic word processing tasks.

The instructor for this class is Mrs. Trisha Berberian. Mrs. Berberian has over 13 years of office management experience. Her degree is in Business Administration from Louisiana Tech University in Ruston, Louisiana, USA. Prior to her move to Yemen, she owned and operated her own computer training and desktop publishing company for over two years.

Course instruction will be held in the Computer Room of Sanaa International School. A total of 33 hours of class instruction will be given. Students are expected to attend each class session. A Certificate of Achievement will be awarded to each student upon mastery of the course objectives. Bus transportation to and from Sanaa International School can be arranged.

- Class size is limited to 11 students.
- Class instruction will total 33 hours.
- Dates and times of classes will be arranged in cooperation with interested participants.
- Cost for the class is YR2400, payable with registration.
- Bus service fee (if transportation is needed) YR300.

### COMMUNITY EDUCATION COURSE OFFERINGS



**COMPUTERS - IBM** 

Word Processing

WordPerfect 5.0

This course is designed for the beginner in word processing. A prerequisite to this course is the ability to type by touch (no "hunting & pecking"). WordPerfect 5.0 will be the software program of choice.

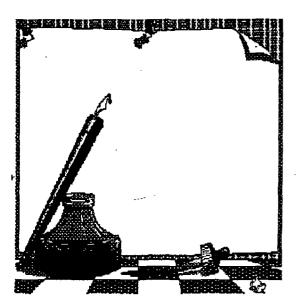
WordPerfect is a "state of the art" word processing program available on IBM, Apple, and MacIntosh computers. In American business, this is the word processing program most used and is rated as one of the very best. Each participant will be assigned an individual IBM or IBM compatible computer. No prior knowledge of computers is necessary. Basic computer concepts, such as loading disks, saving work to the disk, function keys of computers, etc. will be taught prior to working with WordPerfect 5.0. It is expected that at the end of this course, the student will be able to perform basic computer and word processing skills for letters, reports, presentations, etc.

The instructor for this class is Mrs. Trisha Berberian. Mrs. Berberian has over 13 years of office management experience. Her degree is in Business Administration from Louisiana Tech University in Ruston, Louisiana, USA. Prior to her move to Yemen, she owned and operated her own computer training and desktop publishing company for over two years.

Course instruction will be given on IBM or IBM-compatible computers. Classes times and dates will be arranged in cooperation with interested participants. This class will consist of 33 hours of class instruction. A Certificate of Achievement will be awarded each student upon mastery of the course objectives.

- Class size is limited to 11 students.
- Cost for the class is YR3200 (this cost includes computer rental)
- Dates for the class will be announced after consulting with interested participants.
- Bus service fee (if transportation is needed) YR300.

### COMMUNITY EDUCATION COURSE OFFERINGS



COMPUTERS

Desktop Publishing

Aldus Pagemaker

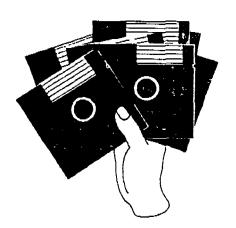
Just a few years ago, publishing required expensive typesetting equipment and a team of professionals. Mixing text and art on the page required considerable skill. Publishing was considered more of an art than a science due to the elite publishing equipment and artistic ability required. Desktop publishing puts this publishing

power into the hands of virtually anyone with a microcomputer. Through the use of the computer keyboard and mouse, integrating text and art is nearly effortless. Desktop publishing is a term generally reserved for a microcomputer running some form of publishing package that fully integrates text and art and provides common layout tools for design.

This course is intended for the beginning student who wishes to learn a practical approach to desktop publishing for everyday tasks. The student will learn the capabilities of desktop publishing with step-by-step examples. Instruction will include thorough explanations of the software (Pagemaker) concepts and commands with "hands on" procedures to help turn these concepts and features into action on your computer. Practical help will be given in producing bulletins, newsletters, letterheads, publications, business cards, and other types of business and personal written communications. Proficiency in WordPerfect 5.0 is required to enroll in this class.

- Class size is limited to 10 students.
- Instruction will be given on IBM or IBM-compatible computers.
- Class instruction will total 33 hours.
- Dates and times of classes will be arranged after consulting with interested participants.
- Total cost for this course is YR3200.
- Bus transportation to and from class settings can be provided for an additional fee of YR300.

### COMMUNITY EDUCATION COURSE OFFERINGS



COMPUTERS - IBM

Data Base

dBase III+

dBase III Plus is one of the most powerful and sophisticated data base management programs available today. Common uses of data bases are as simple as address files, mailing lists, or recipe files, or more complicated uses such as accounting, and many other business applications. Many users feel that

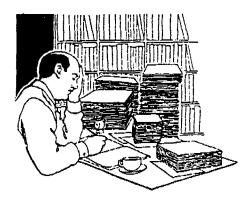
using any data base program is more difficult than learning to use a word processor or spreadsheet. Data base software is frequently used for applications involving calculations, transfers of information, and decision-making processes that would be complicated and difficult even if you did not have to master new concepts at the same time. This course will help you surmount these barriers. You will begin doing productive work with your data base program almost immediately.

Instruction will begin with introduction of the essential data base management concepts that will underlie all of your work and will continue to the general strategies and specific commands that you can use to maintain a system composed of one or more related data base files and to extract useful information from the data. You do not need any prior experience with data base management systems to enroll in this class. However you should feel comfortable with a computer keyboard layout and know the location and usage of special keys.

The instructor for this class is Mrs. Trisha Berberian. Mrs. Berberian has over 13 years of office management experience. Her degree is in Business Administration from Louisiana Tech University in Ruston, Louisiana, USA. Prior to her move to Yemen, she owned and operated her own computer training and desktop publishing company.

- Course instruction will be given on IBM or IBM-compatible computers.
- Class size is limited to 10 students.
- Class instruction will total 33 hours.
- Cost for this course is YR3200.
- Bus service fee (if transportation is needed) YR300

### COMMUNITY EDUCATION COURSE OFFERINGS



**COMPUTERS - IBM** 

Spreadsheet Lotus 1-2-3

The spreadsheet is an electronic worksheet that lets you work with numbers and formulas and leaves the calculations to the computer. Anyone who works with numbers-financial statements, gradebooks, or home

budgets can be more productive using a computer spreadsheet program. Some advantages include: easy correction and update capabilities, complex calculation capabilities, sharing information with other documents without retyping, time saving, and accuracy.

Lotus 1-2-3 is one of the most powerful and popular spreadsheet programs in the world. This course will start with learning basic functions and continue into worksheet applications, designing tables, editing worksheets, using a database, creating charts, using macros, and other spreadsheet applications of interest to the student.

The instructor for this class is Mrs. Trisha Berbezian. Mrs. Berberian has over 13 years of office management experience. Her degree is in Business Administration from Louisiana Tech University in Ruston, Louisiana, USA. Prior to her move to Yemen, she owned and operated her own computer training and desktop publishing company for over two years.

Class instruction will be on IBM or IBM-compatible computers. A total of 33 hours of instruction will be given. A Certificate of Achievement will be awarded each student upon mastery of the course objectives. Bus transportation to the class location can be arranged.

- Class size is limited to 10 students.
- Dates and times of classes will be arranged in cooperation with interested participants.
- Total cost of this class (including computer rental) YR3200.
- Bus service fee (if transportation is needed) YR300.

### COMMUNITY EDUCATION COURSE OFFERINGS



**COMPUTERS - IBM** 

### Managing Your Hard Drive

This short mini-course (9 hours) is designed specifically to help you with management of your hard disk drive. Instruction will start with a review of MS-DOS capabilities and quickly progress into a practical, "hands on"

workshop. Some of the topics that will be covered are: loading programs onto the hard drive, organizing files within subdirectories, creating and utilizing a menu, and understanding file trees.

Instruction will be given on IBM or IBM-compatible computers. The nine hours of instruction will be divided into three class sessions. Bus transportation can be provided to class settings.

The instructor for this class is Mrs. Trisha Berberian. Mrs. Berberian has over 13 years of office management experience. Her degree is in Business Administration from Louisiana Tech University in Ruston, Louisiana, USA. Prior to her move to Yemen, she owned and operated her own computer training and desktop publishing company for over two years.

- Class size is limited to 10 students.
- Class instruction will total 9 hours.
- Dates and times of classes will be arranged in cooperation with interested participants.
- Total cost of this course (including computer rental) YR900.
- Bus service fee (if transportation is needed) YR300.

### COMMUNITY EDUCATION COURSE OFFERINGS



**COMPUTERS - IBM** 

Working With MS-DOS

Do you own an IBM or Compatible Computer? Are you thinking of buying one? Perhaps you work with an IBM or compatible computer in your office. If so, you should become more familiar with the operating system commands. Many persons find the MS-DOS commands to be confusing, difficult, or frustrating.

Sanaa International School is offering a short course to help you become more proficient in the use of DOS to help you put your computer to work. You don't have to be a computer scientist to use DOS well. This course will start you on your way.

Basic DOS terms and concepts will be defined and hands-on examples will show you the major capabilities of DOS. You will be shown how to operate your computer system and manage your files, diskettes, and computer devices with the DOS commands.

The instructor for this class is Mrs. Trisha Berberian. Mrs. Berberian has over 13 years of office management experience. Her degree is in Business Administration from Louisiana Tech University in Ruston, Louisiana, USA. Prior to her move to Yemen, she owned and operated her own computer training and desktop publishing company.

Course instruction will be given on IBM or IBM-compatible computers. Class times and dates will be arranged in cooperation with interested participants. A Certificate of Achievement will be awarded to each student upon mastery of the course objectives.

- Class size is limited to 10 students.
- Class instruction will total 9 hours.
- Dates of classes will be announced.
- Total cost of this course is YR900.

#### 3..3 Non-Credit Courses

#### General Description of the Courses

The non-academic courses in English are need-orientated courses of a functional nature, the emphasis being on the learner's ability to understand, read, write and speak English in their day-to-day situation. These courses are meant for (i) demonstrators, research assistants and assistant lecturers of the University, (ii) employees of outside institutions.

There are at present six courses for six different levels of proficiency in English.

NCE 1: Elementary Course in English for Beginners (Level I)

NCE 2: Elementary Course in English for Beginners (Level II)

NCE 3: Lower Intermediate Course in English

NCE 4: Intermediate Course in English

NCE 5: Upper Intermediate Course in English

NCE 6 : Advanced Course in English

There is also an intensive study skills programme for demonstrators and research assistants who wish to pursue their studies abroad.

NCE SS: Intensive Course in English for Demonstrators and

Research Assistants.

#### Description of the Courses

#### NCE 1: Elementary Course in English for Beginners (Level I)

This course is meant for false beginners i.e. for those who were exposed to some English at school but who for all practical purposes need to make a fresh beginning. Basic grammatical structures are reviewed and essential sentence constructions established. Dictionary work and functional oral/aural skills are emphasized.

### NCE 2 : Elementary Course in English for Beginners (Level II)

This course is intended to enrich and extend the communicative competence acquired by the learners at the end of NCE 1. During this course the students learn how to use English in a wider context at the single paragraph or short discussion level. Controlled writing and reading for information are practised from short texts.

### NCE 3 : Lower Intermediate Course in English

This course gives the learner practice at the discoursal level of longer texts. Writing and oral/aural practice are centred on themes which are introduced to widen the learner's vocabulary and raise functional comprehension.

### NCE 4 : Intermediate Course in English

This course consolidates the skills established in previous courses with particular emphasis on the maintenance of the students' communicative competence. It also extends practice to the world of business where commercial letters, telexes and personal and official correspondence are concentrated upon.

### NCE 5 : Upper Intermediate Course in English

It is intended to give the learners a firm foundation on which they can build their study of English and to develop in them the language skills required for and relevant to a very wide range of communicative situations. The organisation of coherent style and layout is emphasised through wider extensive reading while intensive comprehension is also practised, writing is encouraged at the level of essay.

### NAE 6 : Advanced Course in English

This course is intended to

- (a) sharpen the learner's perception of how punctuation and the right choice of words and structures improve the impact, persuasiveness and accuracy of an expression;
- (b) enable them to have a quick clear understanding of a written or spoken text in English and to draw intelligent inferences from the facts stated in that text;
- (c) develop in them the ability to express themselves in fluent English having a high degree of international intelligibility;
- and (d) to enable them to do well in English proficiency tests meant for people wanting to go abroad for jobs or for higher degrees.

# NCE SS: Intensive Course in English for Demonstrators and Research Assistants

This course is for demonstrators and research assistants who are intending to study abroad in an English - medium University. There are three elements to the course; study skills, general communication skills competence and preparation for either the American TOEFL test or the British ELTS test. One requirement of the course is that there are at least 6 participants with a similar level of competence.

### Entrance Test

Before someone is admitted to a non-credit course, he will be given a test intended to ascertain his level of proficiency in English.

### Tuition Fee for People from Outside the University

Outside institutions will be required to pay tuition fees.

### 3.4 Unit Activities

The English Language Unit is responsible for testing candidates for demonstrators' posts for all the faculties of the University and is also responsible for testing undergraduate candidates for entry to specialist courses such as Education and Medicine.

The Unit has a well-stocked library which is in the process of being computerised and a student self-access room. The Unit makes regular contributions to and is involved with assisting the organisation of the annual, national EFL conference and the Language Centre Culture Week in the University.

Internal seminars and the compilation and editing of the English section of the Journal of Language Studies (see section 6) are features of the Unit's interest in research.

### COMMUNITY EDUCATION COURSE OFFERINGS



#### **ENGLISH LANGUAGE**

### Basic English Language

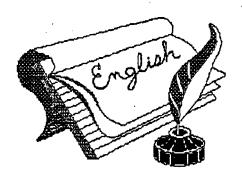
This course requires no prior knowledge of English. Starting with simple greetings and common phrases it will progress into the English alphabet and English writing. The class is designed for eleven (11) weeks with three hour learning sessions. A variety of teaching techniques will be used. At the conclusion of the eleven sessions, the learner will have a fundamental grasp of the English language and be ready to move into more advanced English study.

The instructor for this class is Mr. Robin Warner. Mr. Warner is the Director of the Intensive English Program for Sanaa International School. He has held this position for the past five years. Mr. Warner has a B.A. Degree in Education with honors from the United Kingdom. He has a diploma in Teaching English as a Foreign Language. His Master's Degree is from Seattle Pacific University, USA. Mr. Warner has over 18 years of teaching experience.

Course instruction will be held in the language laboratory of Sanaa International School. Students are expected to attend each session. A Certificate of Achievement will be awarded upon mastery of the course objectives. Bus transportation to and from Sanaa International School can be arranged.

- Class size is limited to 10 students.
- Dates and times of the classes will be arranged in cooperation with interested participants.
- Cost for the class is YR2400, payable with registration.
- Bus service fee (if transportation is needed) YR300.

### COMMUNITY EDUCATION COURSE OFFERINGS



### **ENGLISH LANGUAGE**

Intermediate English

This course is for students who have achieved mastery of the English language beyond Basic I and Basic II levels. Instruction is designed to help students quickly gain a proficiency in both spoken and written English. It is

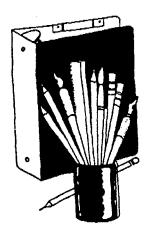
understood that not all the students will start with an equal knowledge level of the English language. Instruction will be tailored to meet the individual needs of each student. A variety of teaching techniques will be used, including lecture, computer assisted instruction, and audio-visual aids. Much attention will be given to pronunciation and grammar. At the conclusion of this course, the learner will have an increased grasp and command of the English language and should be ready to move into more advanced studies.

Class sizes will be limited to ten students to enable a more individualized approach to instruction. Each teacher will be experienced, qualified, and native English speaking. The class consists of 33 class hours.

Course instruction will be held on the campus of Sanaa International School. Upon completion, a Certificate of Achievement will be awarded each participant showing his/her mastery of course objectives. Bus transportation to and from Sanaa International School can be arranged.

- Class size is limited to 10 students.
- Class instruction will total 33 hours.
- Dates and times of classes will be arranged in cooperation with interested participants.
- Total cost of this course is YR2400.
- Bus service fee (if transportation is needed) YR300.

### COMMUNITY EDUCATION COURSE OFFERINGS



#### **ENGLISH LANGUAGE**

### Advanced English

This course is offered to students who wish to improve their English language proficiency. Lessons will be designed to progress quickly into English language fluency. This class should be a valuable aid to those wishing help with the TOEFL Test examination, or for others who desire to improve their English communication skills. A variety

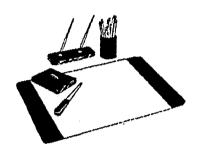
of teaching techniques will be used. At the conclusion of this course the learner should have a greatly increased grasp of the English language, both spoken and written.

Class sizes will be limited to ten students to enable individualized attention. Each teacher will be experienced, qualified, and native English speaking. The class is designed for a minimum of 33 class hours.

Course instruction will be held on the campus of Sanaa International School. Upon completion, a Certificate of Achievement will be awarded each participant showing his/her level of mastery. Bus transportation to and from Sanaa International School can be arranged.

- Class size is limited to 10 students.
- Class instruction will total 33 hours.
- Dates and times of classes will be arranged in cooperation with interested participants.
- Total cost of this course is YR2400.
- Bus service fee (if transportation is needed) YR300.

### COMMUNITY EDUCATION COURSE OFFERINGS



#### **ENGLISH LANGUAGE**

Business Studies and Office Administration Course

This course is primarily for clerical/secretarial staff, and clerical supervisors. The course will be conducted in English; therefore it is a requirement that participants have a reasonable knowledge of the English language.

The primary goals of the course are:

- 1. Improvement in office efficiency;
- 2 Widening the scope of clerical\secretarial staff and clerical supervisors;
- 3. Improvement in the ability, within a work environment, to communicate in English, both orally and in writing.

It is understood that not all students will start with an equal knowledge level of the English Language. Assessment standards will be geared to measuring the degree of improvement which has occurred during the course. A Certificate of Achievement will be awarded showing the degree of mastery of course objectives.

The instructor for this course is Mrs. Paula Bryans. Mrs. Bryans has had considerable experience in the use and development of office and secretarial procedures. Her experience extends from clerical and secretarial work, to management level. More recently, she has been teaching both adults and children. She holds the R. S. A. Certificate for Teaching English as a Foreign Language from the University of Kent at Cambridge. Since her arrival in Yemen last November, she has taught with the British Council, aided in the Intensive English Department in Sanaa International School and is, at present, teaching English at the French School in Sanaa.

Course instruction will be held at the Sanaa International School Campus. Bus transportation can be arranged.

- Class size is limited to 10 students.
- Dates and times of classes will be arranged in cooperation with interested participants.
- Cost for the class is YR2400.
- Bus service fee (if transportation is needed) YR300.