

In the Name of God

Section I:

Title: Community Oral Health

Degree: M.Sc.

Introduction

Community Oral Health was considered as a dental specialty in 1951 and has been established in many of accredited universities around the world for 30 years. Based on the community oral health basics, developed countries especially in Scandinavia, have achieved a great deal of improvements in controlling oral diseases and oral health promotion in their communities.

According to the latest revision of curriculum of Dentistry in Iran in 2000, it was approved that community oral health departments should be established in every School of Dentistry. The first PhD joint educational program in community oral health was initiated with the cooperation of World Health Organization (WHO) and Helsinki University, in School of Dentistry of Shahid Beheshti University of Medical Sciences in 2003 to provide university instructors for the above mentioned departments.

Some efforts were made in some Schools of Dentistry all over the country to set up a M.Sc. program in Community oral health; however, Tehran University of Medical Sciences is the pioneer in this regard and succeeded in program establishment and acceptance of trainees.

Definition

Community Oral Health (COH) is concerned with the oral health of a population rather than individuals and has been defined as the science and art of preventing oral diseases, promoting oral health and improving the quality of life through the organized efforts of society. The discipline covers a wide range and includes such topics as prevention, management, policy making, planning, implementation and evaluation of dental services in the community. Successful completion of the course leads to a specialty or M.Sc. (Master of Science) degree.

The Aim of the Course

The aim of this educational program is to train dentists with M.Sc. degree in community oral health that are at world standard level in their knowledge, attitude and scientific competencies and can provide high quality educational and research activities and also play an active role in oral health policy making.

Mission and Vision

To reduce the burden of oral diseases and to improve oral health of societies based on the managerial, educational and research competencies of the graduates, with special emphasis on prevention. All the graduates will be also able to play an active role in universities and research centers for designing oral health programs.

General Competencies

Including:

- Communicative competencies: Building a network and developing and maintaining trustful and inspiring relationship with patients and colleagues.
- Helping decision makers and patients to make informed decisions.
- Looking for the different contributions from other disciplines and working with peers and colleagues from other departments and cross-organization.
- Writing and reporting:
- Write in a clear, concise, organized, and convincing manner

- Critical thinking: Identifies rules or principles that explain facts, data, or other information; analyzes information and makes correct inferences or draws accurate conclusions.
- Problem solving
- Professionalism

Specific Competencies and Skills (Special Qualifications)

1. Research skills to perform Oral health surveillances
2. Assessing the evidence on oral health and dental interventions, programs and services
3. Policy and strategy development and implementation
4. Strategic leadership and collaborative work for Oral health improvement
5. To protect populations of oral health hazards
6. Developing and monitoring quality dental services
7. Educating Dental Public Health
8. Appropriate decision-making and judgment
9. Appropriate attitudes, ethical understanding and legal responsibilities

The Terms and Conditions of Admission to the Course

- 1- Bachelor's degree in dentistry
- 2- IELTS (min: 6) or TOEFL (min: 550)
- 3- Entrance examination:
 - Written exam (multiple-choice questions): 70% of total score
 - Interview: 30% of total score

Educational Strategies, Methods and Techniques

One of the main objectives of the educational program is to improve the students' attitudes toward life-long learning and problem solving competencies. To achieve this, modern educational methods such as "problem based learning", student based techniques and active learning will be used and encouraged.

Number and Type of Credits and Tables of the Courses

The program is continuous over two years with a core of compulsory subjects (20 credits) plus some course options (13 credits) to be selected according to the student's areas of interest. Each student will complete research training, usually through the production of a master's level thesis (original research-based) and writing an article related to that. The thesis should be on one of the essential community oral health topics and is equivalent to 10 credits.

Table of Elective Courses for M.Sc. in Community Oral Health

Code	Course Name	No. of Credits	Educational Duration (hours)			
			Theoretical	Practical	Workshop	Total
1	Medical Ethics	1	17	-	-	17
2	Complementary Dentistry	2	34	-	-	34
3	Basic Epidemiology	2	34	-	-	34
4	Basic Biostatistics	4	34	68	-	102
5	Demography	1	17	-	-	17
6	Basic Preventive Dentistry	2	17	34	-	51
7	Medical Informatics Systems	1	9	17	-	26
8	Medical Education	2	-	-	102	102
Total		13	162	119	102	383

Table of Compulsory Courses for M.Sc. in Community Oral Health

Code	Course Name	No. of Credits	Educational Duration (hours)			
			Theoretical	Practical	Internship	Total
1	Advanced Epidemiology	2	17	34	-	51
2	Health Economics	1	17	-	-	17
3	Advanced Biostatistics	2	17	34	-	51
4	New Topics in Community Oral Health	1	17	-	-	17
5	Health Sociology	1	17	-	-	17
6	Advanced Preventive Dentistry	2	17	34	-	51
7	Behavioral Sciences	2	17	34	-	51
8	Basic Management	1	17	-	-	17
9	Financial Management	1	17	-	-	17
10	Management of Health Systems	2	17	34	-	51
11	Oral Health Care Systems in Iran and the World	1	17	-	-	17
12	Community Oral Health in Field	2	-	-	136	136
13	Community Oral Health in Dental Clinic (Preventive Dentistry in Clinic)	2	-	68	-	68
Total		20	187	238	136	561

Thesis

Code	Course Name	No. of Credits
1.	Thesis (1)	2
2.	Thesis (2)	2
3.	Thesis (3)*	6
Total		10
* Student should write an article related to thesis.		

Ethical Issues

The graduates should,

- Observe the Patient's Bill of Rights when working with patients.
- Strictly observe Bio-safety and Patient Safety Rules* concerning the patients, personnel and workplace.
- Observe the Rulebook for Dress Code.
- Carefully preserve resources and equipment.
- Truly respect faculty members, staff, classmates and other students and work for creating an intimate and respectful atmosphere.
- Observe social and professional ethical considerations in criticism.

* Bio-safety and Patient Safety Rules will be set out by the Educational Department and will be available to the students.

Section II

Medical Ethics

Code of the Course: 01

Number of Credits: 01

Type of the Course: Theoretical

Prerequisite: None

Principle Objective of the Course:

Improving knowledge of students about medical ethics, general medical and dental rules and basics of office of dentistry management.

Course Description:

In this course students will be taught about general medical and dental rules and basics of medical ethics.

Main Topics (17 hours):

1. Orientation in general medical rules and regulations;
2. Orientation in legal medicine, forensic medicine/dentistry;
3. Orientation in basic principles of health care ethics when evaluating the merits and difficulties of medical procedures;
4. Orientation in basic principles of medical ethics concerning the relationship of medical professionals with patients and their relatives, colleagues and society;
5. Orientation in basic principles of dental office management including methods of recording and collecting data related to patients medical/dental examination and so on;
6. Orientation in basic principles of medical decision making related to patient chief complaint and situation; and,
7. Orientation in ethical rules in research and article writing (Nuremberg code of ethics)

Principal Reference(s):

1. Smith T. *Ethics in Medical Research*. A handbook of good practice. Cambridge University Press, 1999.
2. Loewy EH. *Textbook of Medical Ethics*. New York, Plenum Medical Book Company, 1989:4.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics.

Complementary Dentistry

Code of the Course: 02

Number of Credits: 02

Type of the Course: Theoretical

Prerequisite: None

Principle Objective of the Course:

Improving knowledge of students about new topics in dental specialties with an approach to community oral health, oral disease process and new methods of prevention and treatment.

Course Description:

In any of the course topics students will be taught about new subjects in dental specialties.

Main Topics (34 hours):

1. Operative dentistry- endodontics- pediatrics:
 - Immunology and microbiology of dental caries
 - New dental filling materials
 - New methods and materials in prevention
 - New methods of oral hygiene instructions and caries control
2. Periodontics:
 - Immunology and microbiology of periodontal diseases
 - New tooth brushing methods
 - New materials and devices for plaque control and oral hygiene
3. Oral and maxillofacial surgery, oral medicine, oral pathology:
 - Infection control
 - Prevalent oral diseases
 - Oral cancer
 - Oro-dental trauma
4. Oral and maxillofacial radiology
 - Protection against radiation

Principal Reference(s):

1. Newman MG, et al, *Caranza's Clinical Periodontology*, 12th edition, Elsevier 2014
2. Proffit WR, et al, *Contemporary Orthodontics*, 5th edition, Elsevier, 2013
3. Roberson TM, et al, *Art and Science of Operative Dentistry*, 6th edition, 2013
4. McDonald, *Dentistry for the Child and Adolescent*, 9th Edition, 2011
5. Pharoah W, *Oral Radiology Principles and Interpretation*, 6th Edition, 2009
6. Greenburg & Glick, *Burket's Oral Medicine (Diagnosis & Treatment)*, 11th edition, 2008
7. Peterson, *Contemporary Oral and Maxillofacial Surgery*, 5th edition, 2008
8. Neville, *Oral and Maxillofacial Pathology*, 3rd edition, 2009

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics

Basic Epidemiology

Code of the Course: 03

Number of Credits: 02

Type of the Course: Theoretical

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge about application and interpretation of principles of epidemiology based on the population needs.

Course Description:

Definition, principles and introduction of epidemiology and being familiar with designing epidemiologic studies in community oral health.

Main Topics (34 hours):

1. Basic principles:
 - Definition and introduction
 - Strategy design in epidemiologic studies
 - Statistical correlations and disease prevalence
2. Types of epidemiologic studies:
 - Descriptive studies
 - Case-control studies
 - Cohort studies
 - Interventional studies

Principal Reference(s):

Gordis L, *Epidemiology*, 4th edition, Philadelphia, Saunders Elsevier, 2008.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics.
- Brief student assessments by quizzes.

Basic Statistics

Code of the Course: 04

Number of Credits: 04

Type of the Course: Theoretical (02 units) and Practical (02 units)

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge and understanding regarding statistical content of books and research reports, as well as promoting their competencies in application of statistical analyses.

Course Description:

Students will be taught about definition and principles of biostatistics, application of statistics in community oral health and statistical tests/software used in oral health research.

Main Topics (theoretical- 34 hours):

1. Basic principles
2. Descriptive statistics
3. Simple analyses
4. Distribution
5. Quantitative description of observations
6. Probabilities
7. Normal distribution
8. Estimation
9. Testing hypotheses

Main Topics (practical- 68 hours):

- Group work and exercise on theoretical topics

Principal Reference(s):

Rosner, *Fundamentals of Biostatistics*, 7th ed. Brooks/Cole, Boston, MA, 2011.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presentation.
- Brief student assessments by quizzes.

Demography

Code of the Course: 05

Number of Credits: 01

Type of the Course: Theoretical

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge about distribution, characteristics, and movements of populations in order to plan health programs coincide with their needs and facilities.

Course Description:

Students will be trained on definition and principles of demography and application of this science in community oral health.

Main Topics (17 hours):

1. Definitions
2. Methods: statistics, classical studies of populations
3. Population distribution by place of residence, age, gender
4. Population distribution by occupation
5. Population movements
6. Mortality
7. Types and reasons of immigration
8. Internal and external immigrations
9. Population growth

Principal Reference(s):

Roland D, *Demographic Methods and Concepts*, 1st ed., Oxford University Press, 2003.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics.

Medical Informatics Systems

Code of the Course: 06

Number of Credits: 02

Type of the Course: Theoretical (01 unit) and Practical (01 unit)

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge and practice on preventive dentistry including risk factors of oral diseases (with a focus on dental caries) and how to control them.

Course Description:

Students will be trained on oral disease process and the related factors, levels of prevention, methods and programs for oral disease prevention in community level.

Main Topics (theoretical- 17 hours):

1. Introduction and definitions
2. Levels of prevention
3. Plaque and oral disease
4. Cariology
5. Primary care in societies for prevention of oral disease
6. Fluoride therapy and fissure sealants
7. Role of nutrition and diet
 - In prevention of dental caries
 - In prevention of periodontal diseases
8. Caries activity tests
9. Disclosing agents
10. Chemical plaque control
11. Mechanical plaque control
12. Tooth brushing methods
13. Dentifrices
14. Vaccination against dental caries/ dental caries immunology

Topics (practical- 34 hours):

- Group work and discussion on theoretical topics.

Principal Reference(s):

Fejerskov and Kidd, *Dental Caries, the Disease and Its Clinical Management*, 2nd ed., Blackwell, 2003.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics

Medical Informatics Systems

Code of the Course: 07

Number of Credits: 01

Type of the Course: Theoretical (0.5 unit) and Practical (0.5 unit)

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge and performance about computer and software, search engines, search strategies and medical data banks.

Course Description:

Students will be trained on computer, software, search engines and electronic library systems in order to be used in their subject area.

Main Topics (theoretical- 9 hours):

1. Personal computer
 - Different components of a PC hardware: Importance and function
2. Operation system (Windows): History, characteristics, installation and setting
 - Operational programs

Main Topics (practical- 17 hours):

1. Important data bases
 - Principles and terminology
 - Electronic references: Journals, text books, etc.
 - Medline, Embase, Biological Abstracts
2. Internet
 - Information networks
 - Browsers: Different aspects and settings
 - Search engines
 - Important websites in the subject area

Principal Reference(s):

Edward H et al., *Medical Informatics: Computer Applications in Health Care and Biomedicine*. (Last edition)

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics.
- Quizzes.

Medical Education

Code of the Course: 08

Number of Credits: 02

Type of the Course: Workshop

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge about medical education, methods of improving quality of education and student evaluation as well as research in medical education.

Course Description:

Students will be trained on different methods of education, learning theories, educational strategies, and evaluation methods.

Main Topics (workshop- 102 hours):

1. Introduction
2. Modern methods of medical education
3. Learning and training models
4. Educational strategies
5. Course planning
6. Lesson planning
7. Educational objectives
8. Management of an educational course
9. Student evaluation: Evaluation in field, Clinical evaluation
10. Workshop evaluation
11. Evaluation of teacher

Principal Reference(s):

Kieran Walsh, *Oxford Textbook of Medical Education*, 1st edition, Oxford university press, UK, 2013

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics.
- Quizzes.

Advanced Epidemiology

Code of the Course: 09

Number of Credits: 01

Type of the Course: Theoretical (01 unit) and Practical (01 unit)

Prerequisite: Basics of Epidemiology

Principle Objective of the Course:

Improving students' knowledge and performance about application and interpretation of principles of epidemiology based on the population needs.

Course Description:

Training students on how to apply principles of epidemiology in assessing population needs and solving their health problems.

Topics (theoretical- 17 hours, practical- 34 hours):

1. Analyzing epidemiologic data
2. Epidemiologic studies: Evaluating the role of chance
3. Epidemiologic studies: Evaluating the role of bias
4. Epidemiologic studies: Evaluating the role confounding factors
5. Epidemiology in disease control
6. Screening

Principal Reference(s):

Gordis L, Epidemiology, 4th edition, Philadelphia, Saunders Elsevier, 2008.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics.
- Brief student assessments by quizzes.

Health Economics

Code of the Course: 10

Number of Credits: 01

Type of the Course: Theoretical

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge about theories and rules of economics in oral health care systems and their application in health system.

Course Description:

Training students on how to apply principles of health economics in assessing health programs.

Topics (theoretical- 17 hours):

1. Introduction
2. Treatment need and demand
3. Customer/ provider behavior
4. Supply and demand balance
5. Economic evaluation
6. Insurance

Principal Reference(s):

Tuominen R, *Health Economics in Dentistry*, University of Michigan, 1994.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics
- Quizzes.

Advanced Biostatistics

Code of the Course: 11

Number of Credits: 02

Type of the Course: Theoretical (01 unit) and Practical (01 unit)

Prerequisite: Basic Biostatistics

Principle Objective of the Course:

Improving students' knowledge and performance about indirect measurement of health in populations for designing, implementing and evaluation of health programs and application of theoretical subjects in oral health research.

Course Description:

Training students on how to apply principles of biostatistics in field studies.

Topics (theoretical- 17 hours):

1. Analysis of variance
2. Correlation
3. Health indices
4. Different statistical analyses in epidemiologic studies

Topics (practical- 34 hours):

- Group work and practice on theoretical topics

Principal Reference(s):

Rosner, *Fundamentals of Biostatistics*, 7th ed. Brooks/Cole, Boston, MA, 2011

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics
- Quizzes.

New Topics in Community Oral Health

Code of the Course: 12

Number of Credits: 01

Type of the Course: Theoretical

Prerequisite: None

Principle Objective of the Course:

To improve students' knowledge in new applied topics on community oral health

Course Description:

To study new topics in oral health

Topics (theoretical- 17 hours):

1. New topics on oral health of preschool children
2. New topics on oral health of school children
3. New oral health indices
4. New topics on oral health of elderly
5. New oral health guidelines

Principal Reference(s):

New articles and guidelines in community oral health.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics.

Health Sociology

Code of the Course: 13

Number of Credits: 01

Type of the Course: Theoretical

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge in health sociology in order to promote health behaviors in the society and improve oral health of populations.

Course description:

Training students on how to apply principles of health sociology in oral health promotion of the populations.

Topics (theoretical- 17 hours):

1. Social background of oral health
2. Oral health services provided in different societies
3. Improving oral health in populations
4. Special need groups in populations
5. Professional communication

Principal Reference(s):

Kent G, Crochet R. *Achieving oral Health: The Social Context of Dental Care*. Wright, 1998

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics

Advanced Preventive Dentistry

Code of the Course: 14

Number of Credits: 02

Type of the Course: Theoretical (01 unit) and Practical (01 unit)

Prerequisite: Basic Preventive Dentistry

Principle Objective of the Course:

Improving students' knowledge and practice on preventive dentistry: risk factors of oral diseases (other than dental caries) and how to control them.

Course Description:

Students will be trained on oral disease prevention in different target groups.

Main Topics (theoretical- 17 hours):

1. Prevention and control of periodontal diseases
2. Oral health promotion
3. Prevention of oral-maxillofacial traumatic injuries
4. Prevention of malocclusion
5. Oral cancer prevention
6. Preventive orthodontics
7. Prevention in elderly
8. Oral hygiene in 21st century

Topics (practical- 34 hours):

- Group work and discussion on theoretical topics

Principal Reference(s):

1. Murray J, Nunn J, Steele J. *Prevention of Oral Disease*, 4th edition, Oxford University Press, 2003.
2. Daly B, Batchelor P, Treasure E, Watt R. *Essential Dental Public Health*, 2nd edition, Oxford University Press, 2013.
3. Fejerskov and Kidd, *Dental Caries, the Disease and Its Clinical Management*, 2nd ed., Blackwell, 2003.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics
- Quizzes

Behavioral Sciences

Code of the Course: 15

Number of Credits: 02

Type of the Course: Theoretical (01 unit) and Practical (01 unit)

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge and practice on the principles of oral health promotion, oral hygiene instructions, health psychology and its application in society, and the principles of behavioral sciences in oral health planning.

Course Description:

Students will be trained on behavioral sciences and their application in different oral health promotion programs.

Main Topics (theoretical- 17 hours):

1. Oral health promotion
 - Introduction
 - Ottawa charter
 - Oral health promotion models
 - Human behavior and health
 - Social revolutions and health promotion
 - Forming social health policies
 - Assessing oral health promotion programs
2. Health psychology
 - Application of communication skills
 - Psychological factors in oral health problems
 - Psychology of growth
 - Psychology of child/ special need children
 - Social pathology
 - Social psychological reactions and oral health diseases
3. Oral health education
 - Introduction
 - Aims and principles
 - Methods
 - evaluation

Topics (practical- 34 hours):

- Group work and discussion on theoretical topics

Principal Reference(s):

Daly B, Batchelor P, Treasure E, Watt R. *Essential Dental Public Health*, 2nd edition, Oxford University Press, 2013.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics.

- Quizzes.

Basic Management

Code of the Course: 16

Number of Credits: 01

Type of the Course: Theoretical

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge on the principles modern management.

Course Description:

Students will be trained on principles of applied management for oral health planning to improve oral health of population.

Main Topics (theoretical- 17 hours):

1. Theoretical and practical principles of management
2. Planning
3. Organization
4. Leadership
5. Supervision
6. Problem solving
7. Innovation/ creativity
8. Constructional evolution
9. Quality control

Principal Reference(s):

Daly B, Batchelor P, Treasure E, Watt R. Essential dental public health, 2nd edition, Oxford University Press, 2013.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics
- Quizzes

Financial Management

Code of the Course: 17

Number of Credits: 01

Type of the Course: Theoretical

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge on the financial management of oral health systems.

Course Description:

Students will be trained on principles of applied financial management to be used in oral health promotion programs.

Main Topics (theoretical- 17 hours):

1. Introduction
2. Definition
3. Principles
4. Classification
5. Methods
6. Budgeting
7. Costs

Principal Reference(s):

Zelman W, Mccue M, Glick N. Financial management of health care organizations, 3rd edition, Wiley, 2009.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics
- Quizzes

Management of Health Systems

Code of the Course: 18

Number of Credits: 02

Type of the Course: Theoretical

Prerequisite: Basic Management- Financial Management

Principle Objective of the Course:

Improving students' knowledge on the management and critical evaluation of health systems.

Course Description:

Students will be trained on scientific methods of health system management, effective utilization of resources and designing structure of health services.

Main Topics (theoretical- 34 hours):

1. Supporting and policy
2. Analyzing current situation
3. Evaluation of priorities
4. Aims and objectives
5. Planning
6. Administration
7. Control and evaluation

Principal Reference(s):

Booyens SW. *Introduction to Health Services Management*, 3rd edition, Juta Company, 2008.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics
- Quizzes

Oral Health Care Systems in Iran and the World

Code of the Course: 19

Number of Credits: 01

Type of the Course: Theoretical

Prerequisite: None

Principle Objective of the Course:

Improving students' knowledge about the oral health care systems in Iran and the world.

Course Description:

Students will be trained on principles of health care services, related charters and different methods of health care provision in countries.

Main Topics (theoretical- 17 hours):

1. introduction
2. history
3. different types of systems
4. dental workforce
5. oral health programs

Principal Reference(s):

Chen M. *Comparing Oral Health Care Systems*, WHO, 1997.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics

Community oral Health in Field

Code of the Course: 20

Number of Credits: 02

Type of the Course: Internship

Prerequisite: All the above mentioned courses

Principle Objective of the Course:

Active attendance in different fields and applying all the learned topics in improving oral health of the population.

Course Description:

Every student is allocated to a supervisor (preferably the supervisor of thesis). The supervisor will choose a field for the student internship period according to his/ her interests, skills, and the topic of the thesis. The field may be a: health center, school, kindergarten and so on. Student will follow a program during the internship, perform different activities and at the end should give a final report to the supervisor.

Main Topics (theoretical- 136 hours):

1. Assessing oral health needs of community
2. Setting goals and objectives for oral health promotion programs
3. Management of oral health services
4. Designing programs to providing oral health for communities
5. Designing programs to improve community oral health
6. Assessing oral health services
7. Quality control in oral health

Principal Reference(s):

Daly B, Batchelor P, Treasure E, Watt R. *Essential dental public health*, 2nd edition, Oxford University Press, 2013.

Student Assessment Practices:

- Being on time in every educational session.
- Group work and presenting related information on one of the course topics.

Community Oral Health in Clinic (Prevention Clinic)

Code of the Course: 21

Number of Credits: 02

Type of the Course: Practical

Prerequisite: All the compulsory courses except code 20 and thesis.

Principle Objective of the Course:

Active attendance in different clinics and learning to provide preventive oral and dental care services.

Course Description:

All new oral disease preventive methods will be taught practically, mainly caries prevention, prevention of periodontal diseases, oral cancer and orthodontic problems. Students will be supervised by oral health specialists.

Main Topics (theoretical- 136 hours):

1. Fluoride therapy
2. Fissure sealants and PRR (Preventive Resin Restoration)
3. Scaling and professional plaque control
4. Preventive orthodontics
5. Oral cancer prevention
6. Oral health instructions

Principal Reference(s):

1. Fejerskov and Kidd, *Dental Caries, the Disease and Its Clinical Management*, 2nd ed, Blackwell, 2003.
2. Newman MG, et al, *Caranza's Clinical Periodontology*, 12th edition, Elsevier 2014
3. Proffit WR, et al, *Contemporary Orthodontics*, 5th edition, Elsevier, 2013
4. Daly B, Batchelor P, Treasure E, Watt R. *Essential Dental Public Health*, 2nd edition, Oxford University Press, 2013.

Student Assessment Practices:

- Being on time in every educational session.
- Achieving the requirements set by supervisors

Thesis

Code of the Course: 22, 23, 24

Number of Credits: 10

Type of the Course: Practical

Prerequisite: Advanced Epidemiology, Advanced Biostatistics

Principle Objective of the Course:

Design and implementation of an oral health research.

Course Description:

Students will design and implement a research proposal, and reports the results as an original research article and a thesis.

Main Topics (theoretical- 136 hours):

1. Designing a research proposal
2. Implementation and data gathering
3. Data analysis
4. Reporting

Student Assessment Practices:

- Assessment and supervision by supervisor (thesis 1 and 2).
- Publishing the research results as an article and defense of the thesis.