

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Dental Hygiene</u>
COURSE RUBRIC AND NUMBER	<u>DHYG 1215</u>
COURSE TITLE	<u>Community Dentistry</u>
COURSE CREDIT HOURS	<u>2 2 : 1</u> Credits Lec Lab

I. Catalog Description

Studies the principles and concepts of community public health and dental health education emphasizing community assessment, educational planning, implementation, and evaluation including methods and materials used in teaching dental health education in various community settings. A grade of "C" or better is required in this course to take the next course. **Prerequisites: DHYG 2161 and ENGL 1301 and PSYC 2301 or PSYC 2314 or PSYC 2319. Corequisites: DHYG 1207 and DHYG 2231 and DHYG 2262 and PHIL 2306. (2:1). Lab fee.**

II. Course Objectives

- A. Unit I (Public Health Overview, Factors Affecting the Practice of Dentistry, & Public Health Principles)
 - 1. Define community dentistry, and discuss its history.
 - 2. Synthesize auxiliary federal and state government roles.
 - 3. Differentiate federal and state programs.
 - 4. Differentiate various fee-for service options.
Synthesize social factors.
 - 5. Describe the core function of public health.
 - a. Assessment
 - b. Policy development
 - c. Assurance
 - 6. Explain the role of surveys in dentistry.
 - 7. Explain the ASTDD's 7-step model for state and local agencies.
 - 8. Define the acronym WHO and state its purpose.
 - 9. Contrast private sector health care from public sector health process of care.
 - 10. Contrast the differences of personal VS community health care.
- B. Unit II (Planning for Community Dental Programs & Dental Health Education)
 - 1. Identify presentation sites.
 - 2. Design lesson plans.
 - 3. Identify audio-visual and support materials.
 - 4. Describes proposed presentation.
 - 5. Synthesize basic dental health education concepts.
 - 6. Compare various dental health educational programs.
 - 7. Differentiate the Community planning stages.
 - 8. Synthesize preventive dentistry measures.
 - 9. Differentiate goals and objectives.
 - 10. Perform dress rehearsal to peers for critique presentation.

11. Define and Discuss Health Promotion.
12. Discuss the purpose and strategies of community based health promotion.
13. Describe and discuss rationales and strategies for promoting Oral Health.
14. Discuss global and national goals for oral health.
15. Explain the rationale for populations' knowledge and attitudes about oral health.
16. Describe the "empty vessel" approach to dental health education.
17. Discuss the dental "professionals" role in promoting water fluoridation.
18. Perform original presentation at selected sites.
19. Practice active listening.
20. Prepare reports utilizing word processor.

C. Unit III (Program evaluation, Evaluating Dental Literature and Research)

1. Define program evaluation.
2. Identify components of program evaluation.
3. Define community dental health research.
4. Interpret results of a clinical study.
5. Describe criteria for research design.
6. Prepare reports utilizing word processor.
7. Judge the qualities of scientific journal using the following criteria:
 - a. Peer reviewed
 - b. Sponsorship
 - c. Editorial board, advisor board or consultants
 - d. Nature of the paper
 - e. Advertising style
 - f. Production standards
8. Define the following key terms:
 - a. Peer-reviewed journal
 - b. Research protocol
 - c. Study design
 - d. Prevalence studies
 - e. Cross-sectional studies
 - f. Longitudinal Cohort studies
 - g. Prospective studies
 - h. Retrospective studies
 - i. Experimental study designs
 - j. Non-experimental study designs
 - k. Clinical trials
 - l. Field trials
 - m. Demonstration studies
 - n. Case control studies
 - o. Human trials
 - p. Descriptive surveys
9. Conduct a literature search using computer technology and the Index to Dental Literature.
10. Identify essentials of research design in an article from a peer-reviewed journal.

D. Unit IV (Biostatistics)

1. Define terminology related to biostatistics.
 - a. Biostatistics
 - b. Variables
 - c. Base-line data
 - d. Follow-up data
 - e. Data Analysis
 - f. Statistics
 - g. Parameters
 - h. Nominal
 - i. Ordinal

- j. Interval
 - k. Ordered Array
 - l. Frequency Distribution
 - m. Intervals
 - n. Cumulative Frequency
 - o. Tables, Graphs
 - p. Mean, Median, Mode, Range
 - q. Central Tendency
 - r. Dispersion
 - s. Arabic symbols for biostatistics
 - t. Frequency Polygon
 - u. Normal curve
 - v. Skewed curve
 - w. Correlation
 - x. Scattergrams
 - y. Negative and Positive Scattergrams
 - z. Statistical significance
 - aa. Population
 - Bb Sample
2. Discuss why it is important to control variables.
 3. Differentiate between base-line and follow-up data.
 4. Compare statistics and parameters.
 5. Utilize Arabic symbols used in biostatistics.
 6. Provide examples of nominal, ordinal, interval scales.
 7. List two ways of collecting data.
 8. Prepare an ordered array.
 9. Construct a frequency distribution.
 10. Construct a cumulative frequency distribution.
 11. Group data in different intervals.
 12. State the disadvantages of grouping data.
 13. Identify the parts of tables and graphs.
 14. Compare three common graphs.
 15. Construct tables and graphs.
 16. Define three measurements of dispersion used with central tendency.
 17. Apply range, mean, median and mode.
 18. Interpret a frequency polygon or a normal and skewed curve.
 19. Describe the relationship between a skewed curve and the mean.
 20. Identify and interpret scattergrams.
 21. Predict a correlation based on interpretation of a scattergram.
 22. Compare negative, positive, or no correlation scattergrams.

E. Unit V. (Epidemiology)

Upon satisfactory completion of this unit the student will be able to:

1. Define terminology related to epidemiology.
2. Describe three approaches to studying disease in a population.
3. Give example of incidence and prevalence.
4. Differentiate between a blind and double blind study.
5. List the four uses of indices.
 - a. Prevalence
 - b. Incidence
 - c. Defining the needs of the population.
6. List four types of indices.
 - a. Caries
 - b. Periodontal diseases
 - c. Plaque and Calculus (OHI)
 - d. Other conditions

7. Describe three considerations concerning caries indices.
8. Differentiate caries prevalence, incidence, and severity.
9. Describe the criteria for the “Anglo-Saxon” approach to diagnosing pit and fissure caries.
10. Compare DMF, def, and DMFS indices.
11. State six limitations of the DMF index.
12. Describe the criteria for diagnosing root surface caries.
13. Obtain caries indices.
14. Compare classes of inspections.
15. Differentiate intra-examiner and inter-examiner reliability.
16. Compare the use of oral hygiene indices in private practice and community dental health programs.
17. Differentiate between periodontal indices that measure reversible and irreversible conditions.
18. Describe the criteria for indices.
19. Apply individual assessments to group index.
20. Prepare an ordered array, mean, median and mode of individual assessments.

F. UNIT VI. (Principles of Prevention)

Upon satisfactory completion of this unit the student will be able to:

1. Describe why dentistry has emerged as a preventive oriented science.
2. List three ways society can decrease health costs while improving health.
3. Differentiate between primary, secondary, and tertiary prevention.
4. Describe the role of a dental hygienist in providing primary, secondary, and tertiary preventive care.
5. Draw the multifactorial theory of disease as it relates to total health.
6. Review the dental caries process.
7. Discuss current approaches to preventing caries.
8. Appraise the effectiveness of oral hygiene procedures in preventing caries and periodontal disease.
9. Differentiate between systemic and topical fluoride.
10. Discuss sealants as a preventive mechanism.
11. Review the following programs:
 - a. community water fluoridation
 - b. Fluoride mouthrinse programs
 - c. Fluoride supplements programs
 - d. Sealant programs
12. Relate the six characteristics of public health programs to those listed above.
13. Rate preventive community dental health programs.
14. Discuss the dental hygienist’s role in community dental health programs.

G. UNIT VII. (Health Care Delivery and Finance)

Upon satisfactory completion of this unit the student will be able to:

1. Compare the financing of private sector health care to public sector health care.
2. Define the following key terms:
 - a. Grants
 - b. Service organizations
 - c. Foundations
 - d. Medicare
 - a. Medicaid
 - b. Early Periodic Screening Diagnosis and Treatment
 - c. Maternal and Child Health Grants
 - d. Block grants
3. Analyze the cost of a community dental health program.
4. Plan to secure financing for a community dental health program.
5. Debate the prospect of national health care.

F. UNIT VIII. (Healthy Dental Practice)

Upon satisfactory completion of this unit the student will be able to:

1. State and relate the guidelines and regulations for infection control practices.
2. Define the role of OSHA in regards to dentistry.
3. Discuss OSHA regulations as they apply to dentistry, and explain the ADA's position in regards to OSHA's guidelines and regulations.
4. Discuss the "position," policy holders' share in reference to infectious diseases and the dental provider.
5. Explain what is expected of the dentistry in regards to water, mercury and dental amalgam safety issues.

G. UNIT IX. (Community Dental Health Project)

Upon satisfactory completion of this unit the student will be able to:

1. Develop objectives for a community health program.
2. Survey a target population.
3. Analyze survey data.
4. Formulate a program based on survey data.
5. Plan a community dental health program with a group, based on survey analysis.
6. Implement program operation that supports program plan.
7. Prepares a budget and cost analysis of a community dental health program.
8. Compile follow-up data for the purpose of appraising the effectiveness of a program.
9. Interpret data using biostatistics.
10. Communicate in a culturally diverse, multi-disciplinary environment.
11. Appraise a community dental health program.
12. Utilize existing facilities for implementation of program.
13. Conduct basic research on all aspects of a community dental health program.
14. Describes attitudinal changes in agency, staff, clients and learners.
15. Prepare a timeline to meet program objectives.
16. Submit written reports for each module to track progress of the community dental health program.
17. Conduct oral health screenings and/or administer questionnaires for the collection of baseline data.
18. Communicate with all individuals involved with the community dental health program.
19. Coordinate schedules, equipment, staffing for all dimensions of the program.

III. THECB Learning Outcomes (WECM)

1. Design a community dental health educational program that meets the needs of a target population.
2. Differentiate the governmental, sociological, environmental, and cultural concerns of the community.
3. Describe the principles and concepts of community dental health education and evaluation.

IV. Evaluation

Students will participate in community projects as a requirement of this course. Projects will consist, but not limited to the following:

- Classroom Oral Health Practices Education in the schools a minimum of 3 hours.
- Participation at one health fair.
- Assessment to Implementation of a Community Dental Health Project as described in course objectives and modules. Major Project. Required of all students.
- Participation in a sealant program. 3 hours minimum.
- Participation in a smoking cessation program. 3 hours minimum.
- Participation in Oral Health Promotion at the Rio Grande Campus by designing, creating and exhibiting a project in the dental hygiene hall board. (bonus = 5 points above the final quizzes grade).
NOTE: If the sealant and smoking cessation programs are not approved, those minimum hours will be made up classroom presentations or oral health promotions within the El Paso/Juarez community.

- A. Grading for the above with the exception of major project = 15%
- B. Quizzes = 20%
- C. Exams = 15%
- D. Written and Oral Presentation of Major Project = 45%
- E. Attendance = 5%
- F. **Final grade will be lowered ONE Letter Grade after 3 tardiness or absences.**
- G. Service Learning Certificate will be awarded for students completing 18 hours of service for any of the other participatory activities above and beyond the minimum required. Student may earn 20 points towards their final grade for performing service as part of the Service Learning Program.

***ALL THE AFOREMENTIONED EVALUATION REQUIREMENTS MUST BE MET IN ORDER TO RECEIVE A PASSING GRADE FOR THIS COURSE. ALL MODULULAR OBJECTIVES WILL FALL UNDER THIS REQUIREMENT.**

- H. Letter Grades:
 - A = 93 AND ABOVE
 - B = 83-92
 - C = 75-82
 - F = ANYTHING BELOW A 75

V. Disability Statement (American with/Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.