

Competencies for the Masters Degree in Dental Hygiene Program Graduate

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Introduction

Competence is an acceptable, measurable defined level of special skill and knowledge derived from education, experience, role modeling and overall socialization. To be competent a person with a master of science in dental hygiene must perform at or above the acceptable defined standard.

Competencies for the Masters Degree in Dental Hygiene Program Graduate identifies and organizes the knowledge, skill, behaviors and attitudes that graduates must attain to assume roles as educators, administrators/managers, community health educators, marketers, and researchers in a variety of environments. The Competencies in this document serve as the foundation for the selection of course content, sequencing of courses, intra-and extra-mural learning activities, faculty communication and decision-making, and outcomes assessment. As such, the Competencies serve as a framework for curriculum development, implementation and evaluation. The document is viewed as a method of communicating and operationalizing the standards that the faculty, the profession, employers, and society have deemed important for a person with a master of science in dental hygiene degree to possess in order to assume leadership in the various dimensions of healthcare.

Domains. The organization of the document flows from the general categories that comprise the central domains of the curriculum, to the specific behaviors that reflect the foundational abilities expected of students at the course level(See Figure 1). The *domains* should be viewed as themes or broad categories of professional focus that transcend numerous courses and learning activities. The concept of domains is intended to encourage threads of consistency, emphasis and focus that develop and advance throughout the curriculum. In this document, domains are labeled:

- I. Professional Leadership and Advancement
- II. Role Specialization
 - A. Management
 - B. Education
 - C. Community Health
 - D. Marketing

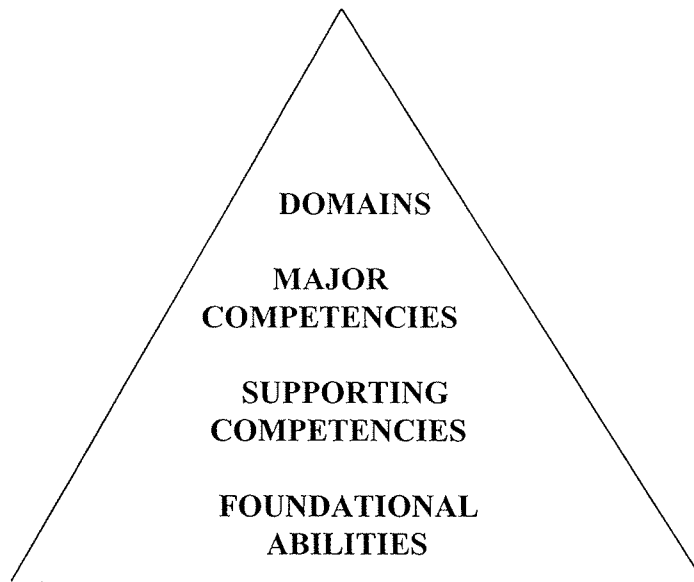


Figure 1. Organization of Competencies for the Masters Degree in Dental Hygiene Program Graduate.

Major Competencies. Within each domain, major competencies expected of the program graduate are identified. A *major competency* is the ability to perform or provide a particular complex professional activity which is intellectual, affective and/or psychomotor in nature. For example, “the dental hygienist must be able to systematically collect, analyze and record data on a sample using methods consistent with research principles.” The complexity of this behavior suggests that multiple and more specific supportive and foundational abilities are required to enable the performance of any major competency. In this document, major competencies are numbered 1-14. An overview of the domains and the major competencies is displayed in Figure 2.

Supporting Competencies. Specific abilities, called *supporting competencies*, must be mastered in order to carry out major competencies. Examples of supporting competencies include the ability to “critique the professional literature,” “obtain consultations with a statistician as appropriate,” or “establish expected outcomes related to the investigation.” Mastery of all supporting competencies related to a service or task is a necessary condition for the acquisition and demonstration of a major competency. While less complex than a major competency, a supporting competency also requires more specific abilities termed foundational knowledge, skills and attitudes. In this document, supporting competencies are numbered 1.1 to 14.4.

Foundational Knowledge, Skills and Attitudes. *Foundational knowledge, skills and attitudes (foundational abilities)* are acquired through formal instruction and practica that provide the information, mentoring and experience needed for satisfactory mastery of supporting competencies.

Foundational knowledge is the ability to use information and correctly answer specific questions when asked, such as on a cognitive-based written examination or during a presentation. *Foundational skill* is the ability to follow specific guidelines or a prescribed process that yields an acceptable result in standardized situations, for example, evaluating a student using established criteria during a practical examination on a lab partner or periodontal probing in the clinical setting. *Foundational attitudes* are positive intellectual and behavioral actions, such as addressing a culturally different student's need for freedom from anxiety and stress prior to proceeding with the planned activity.

Course objectives, which are found in the course syllabi, are designed to delineate *Foundational Knowledge, Skills and Attitudes*. The dental hygiene core courses and the multidisciplinary courses in the specialization provide the instruction at the foundational level. Didactic, small and large group, library, computer, seminar, laboratory, internship/externship, case-based and simulations provide psychomotor, critical thinking, research, and problem solving experiences that enable students to acquire and demonstrate competence in a variety of settings. The inclusion of any specific foundational ability in the curriculum is based on its direct support of one or more of the Supporting and Major Competencies. *Foundational abilities* are listed as course objectives and found in the course outlines. Therefore, *foundational abilities* are not listed in this document.

Summary

This document is designed to direct the educational process for masters degree candidates as one step to assuring employers and the public of educated, competent dental hygienists who are capable depending on their specialty, of providing educational, managerial, community-based and marketing services in a variety of environments. These competencies define a standard of performance for a new graduate, rather than predict the higher level of performance that will be attained by masters level dental hygienists over their career lifetime. Implementation and evaluation of *Competencies for the Masters Degree in Dental Hygiene Program Graduate* rests with the faculty responsible for the educational programs within the Gene W. Hirschfeld School of Dental Hygiene at Old Dominion University. Ultimately, the true measure of the value of a competency-based education will be the quality of the graduates, the satisfaction of the employers, and the oral health status of the populations served.

I. Leadership and Professional Advancement

To advance the oral health of the population and to increase the knowledge base of the profession, the masters level hygienist must be able to derive relevance from a rapidly changing environment. Knowledge of the scientific method ensures that actions taken by the dental hygienist are based on scientific evidence, and not merely on ritual, tradition, intuition or personal preference. An understanding of leadership allows the dental hygienist to advance the goals of the profession both as an individual and via groups. Therefore analytical, problem solving, critical thinking and decision-making skills are essential to possess.

1. Professional Behavior. Professional behavior encompasses many components including leadership, positive verbal and nonverbal communication, attitudes, interpersonal skills, attention to feedback, protocol adherence, thorough and complete documentation, and time management. The graduate must be able to assume the role of a leader within a group.

Specifically, the graduate must be able to:

- 1.1 Assume responsibility and accountability for actions, according to protocol, policies and procedures
- 1.2 Provide accurate, consistent, and complete documentation when serving in leadership roles.
- 1.3 Identify personal and professional goals, attitudes, and philosophies.

- 1.4 Manage several tasks simultaneously
- 1.5 Organize and manage time to achieve goals in an efficient manner.
- 1.6 Use concepts of leadership in a variety of roles and settings.

2. Ethical and Legal Behavior. The graduate must be able to discern and manage the ethical and legal issues faced in specialized roles.

Specifically, the graduate must be able to:

- 2.1 Integrate the ADHA Code of Ethics in all professional endeavors.
- 2.2 Adhere to local, state and federal laws, recommendations, and regulations for actions and services.
- 2.3 Serve all clients without discrimination, appreciating the diversity of the population.
- 2.4 Apply principles of risk management to manage and prevent liability.

3. Problem-Solving, Critical Thinking & Decision Making. The graduate must be able to systematically collect, analyze and record data using methods consistent with research principles.

Specifically, the graduate must be able to:

- 3.1 Generate evidence-based knowledge from electronic data bases, the library or original research.
- 3.2 Critically analyze published reports of research and apply this

- information to decision making.
- 3.3 Evaluate the safety and efficacy of oral health products, interventions, and treatments.
- 3.4 Develop a research proposal that is scientifically sound, ethically defensible and realistic in terms of human and material resources.
- 3.5 Evaluate professional issues and scientific literature in order to make evidence-based decisions that advance the profession of dental hygiene.

4. Professional Advancement:

The graduate must be able to improve the knowledge, skills and values of the profession.

Specifically, the graduate must be able to:

- 4.1 Assume responsibility for professional growth of self and others through lifelong learning.
- 4.2 Use technology to advance the profession and health of society.
- 4.3 Advance the values of the profession through leadership roles, service activities and affiliations with professional and public organizations globally.
- 4.4 Assume specialized roles within dental hygiene.
- 4.5 Marshall political, economic, and organizational support to achieve goals.

5. Education and Communication.

The graduate must be able to facilitate and participate in the exchange of ideas and information.

Specifically, the graduate must be able to:

- 5.1 Use educational theory and teaching principles to develop and present information to diverse populations.
- 5.2 Work with others who differ culturally.
- 5.3 Interact effectively using verbal, nonverbal, written and electronic communication skills.
- 5.4 Adapt to cross-cultural environments.
- 5.5 Use technology to access and transfer information electronically.

II. Role Specialization

The graduate provides managerial, educational, community-based and marketing expertise to dental hygiene programs, public health programs, the oral care products industry and/or the insurance industry. The graduate applies principles from the biomedical, educational, managerial, public health and psychosocial sciences to serve diverse populations.

A. Role Specialization: Management

Growth in dental hygiene programs has increased the demand for persons capable of managing all facets of these programs. Furthermore, businesses and industry need dental hygienists with management skills to coordinate operations.

6. Management. The graduate must be able to use critical decision making skills to reach conclusions about human and material resources, based on available assessment data.

Specifically, the graduate must be able to:

- 6.1 Create a vision and mission for the organization.
- 6.2 Obtain consultations as appropriate prior to decision-making
- 6.3 Motivate personnel to achieve the mission of the organization
- 6.4 Resolve conflicts
- 6.5 Coordinate a work group to achieve predetermined goals.

7. Planning and Organizing. The graduate must be able, through collaboration with others, to formulate comprehensive strategic plans.

- 7.1 Analyze and interpret the environment using a SWOT Model.
- 7.2 Formulate goals, strategic initiatives and objectives, and establish expected outcomes related to established goals and resources.
- 7.3 Prioritize, delegate and assign work as delineated in a plan.
- 7.4 Prepare policy statements and develop strategies for implementation and evaluation.

8. Quality Improvement. The graduate must be able to monitor the quality of the personnel and program being managed.

- 8.1 Develop and evaluate quality improvement methods.
- 8.2 Apply a best practices philosophy in the management of human and material resources.
- 8.3 Develop, monitor and revise a budget.

B. Role Specialization: Education

Demographic trends and growth in the number of dental hygiene programs all point to a severe shortage of dental hygiene educators capable of integrating technical and theoretical information, planning curriculum and functioning successfully as a teacher-scholar so that society continues to benefit from quality dental hygiene care.

9. Educational Concepts. The graduate must be able to provide quality, cost-effective education designed to assist clients in achieving goals.

Specifically, the graduate must be able to:

- 9.1 Educate diverse students to achieve personal and career goals.
- 9.2 Use media, technology, and the Internet to enhance the quality and effectiveness of instruction.
- 9.3 Demonstrate a variety of instructional strategies for inclass and distance education settings.
- 9.4 Counsel students facing academic and career challenges.
- 9.5 Advise and mentor students and colleagues.

10. Assessment and Evaluation. The graduate must be able to evaluate the effectiveness of educational services and modify as needed.

Specifically, the dental hygiene graduate must be able to:

- 10.1 Determine the outcomes of instruction using assessment indices, instruments, examination techniques, and client self-report.
- 10.2 Compare actual outcomes to expected outcomes, reevaluate goals, and services when expected outcomes are not achieved.
- 10.3 Develop and maintain an advising program.
- 10.4 Determine client satisfaction with education received.
- 10.5 Determine employer satisfaction with employee (alumnae)

C. Role Specialization: Community Health

Trends toward consumerism, self-care, disease prevention, health promotion and healthy lifestyles means that clients, wherever they might be, want and need information on oral health and disease. Teaching and health promotion strategies are directed toward helping diverse populations achieve oral wellness in community-based settings.

11. Community-Based Communication. The graduate must be able to promote the values of oral and general health to the public and organizations within and outside the profession.

Specifically, the graduate must be able to:

- 11.1 Identify factors that can be used to motivate groups toward health promotion, disease prevention

and/or health maintenance.

- 11.2 Educate other individuals and/or organizations about assessment, access and delivery of oral health care.
- 11.3 Present educational information to diverse client populations, in a variety of settings using appropriate teaching and learning strategies.
- 11.4 Develop and implement a plan, including a budget to address a community oral need.
- 11.5 Incorporate the standards and culture of the population when planning community-based oral health programs.

12. Community Involvement. The graduate must be able to initiate and lead health promotion and disease prevention activities for diverse populations in a variety of settings.

Specifically, the graduate must be able to:

- 12.1 Assess community oral health needs, risks and available resources and evaluate outcomes for health improvement and access to the healthcare system.
- 12.2 Plan, implement, and evaluate community oral health education and services in a variety of settings.
- 12.3 Use screening, education and referral to introduce consumers to the healthcare system.
- 12.4 Plan dental hygiene services as an integral component of total health in a variety of settings.
- 12.5 Access resources to meet community-based oral health needs.

- 12.6 Work with stakeholders in the community to achieve goals.

D. Specialized Role: Marketing

To be successful, an organization or product must be able to differentiate itself from the competition, provide good customer service, respond to the ever changing market and influence consumer decision making. The dynamics of the marketplace and public relations strategies need to be used creatively in marketing programs, services or products.

13. Target Marketing. The graduate must be able to design mass communication messages about the value of a program, service, or product to groups.

Specifically, the graduate must be able to:

- 13.1 Develop a marketing plan with a budget and an evaluation method.
- 13.2 Analyze methods for marketing and promoting an organization, services or product.
- 13.3 Market programs, services, products to diverse consumers.
- 13.4 Use technology to reach target populations within a marketing strategy.
- 13.5 Incorporate the standards and culture of the target population into the marketing strategy.

14. Marketing Research. The graduate must be able to use and generate research findings for

position the product in the life of the consumer.

- 14.1 Identify the wants and needs of the client.
- 14.2 Identify internal and external audiences, strategies and tactics.
- 14.3 Develop a branding strategy for a specific program, service or product.
- 14.4 Position a new program, service or product via direct marketing, television, radio, billboards, print, sponsorship.

Figure 2. COMPETENCIES

