



Wayne County Community College District

COURSE SYLLABUS

DHY 221 Dental Biomaterials

CREDIT HOURS: 3.00

CONTACT HOURS: 60.00

COURSE DESCRIPTION:

Biomaterials is the science and technology of materials used in dentistry. Chemical, physical and manipulative characteristics of various restorative and procedural materials will be explored in the prevention and treatment of oral disease. Laboratory experiences develop skills in working with these materials. Laboratory experiences develop skills in working with these materials and illustrate the characteristics and uses of dental materials.

PREREQUISITES:

EXPECTED COMPETENCIES:

- Identify the basic physical and mechanical properties of dental biomaterials.
- Manipulate all given dental materials within the dental hygienist's scope of practice.
- Provide fundamental and additional (where appropriate) clinical dental hygiene services involving the selection, manipulation and care of specific dental materials.
- Evaluate the effects of specific materials on the oral environment and the effectiveness of such materials on the prevention and treatment of oral disease.
- Demonstrate current acceptable aseptic techniques in the laboratory setting.
- Identify the principles and formation knowledge in material science so the student can understand the rationale for their use.
- Apply course knowledge and prepare for board examinations.
- Identify the resources needed in order to obtain updates on dental materials.
- Identify critical thinking skills necessary to manipulate and select appropriate dental materials.

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:

93%- 100% = A
86% - 92% = B
85% - 75% = C
69% - 74% = D
0% - 68% = E