SAN JUAN COLLEGE
Success Matters

DHYG 221-DENTAL BIOMATERIALS 3 CREDITS

SYLLABUS

CATALOG DESCRIPTION

A study of the composition, chemical and physical properties, manipulation and uses of dental materials. Laboratory experiences include manipulation and application of materials used in dentistry.

Prerequisites: DHYG 223, 224, 227, 231

Semester Offered: Summer

Common Student Learning Outcomes

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in…

BROAD AND SPECIALIZED LEARNING
Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING
Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT
Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION
Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY
Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES
Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

Course Learning Outcomes

Upon successful completion of the course, the student will be able to…

1. Be able to define the science of dental materials and describe the role that a dental auxiliary plays in the preparation and placement of dental materials.

2. Understand the behavior of dental materials, and handle these materials properly and safely.
3. Be able to educate their patients regarding the risks, benefits applications, dental procedures and the proper maintenance of dental materials used in restorations and dental prosthetics.
4. Provide a variety of high quality therapeutic and preventive services within the dental hygiene scope of clinical practice that involve selection and manipulation of appropriate dental materials.
5. Make the appropriate clinical judgments in the selection and use of dental materials and their subsequent reaction in the oral environment.
6. Understand the physical, chemical, and biological properties of specific dental materials.
7. Demonstrate current, acceptable aseptic and safety procedures in both laboratory and clinical settings when using a given material or providing therapeutic preventive services.
8. Be able to evaluate effects of specific materials on the oral environment, the effectiveness of such materials in prevention and treatment of oral disease, and the factors which influence the quality of dental materials.
9. Be able to identify and differentiate between various dental materials (in vivo, in vitro and radiographically) and their respective properties.
10. Be able to facilitate the selection, preparation, manipulation, placement, and care of the materials used in dentistry.