

# DENTAL SCIENCE (MSDS)

## Courses

### **MSDS 5020. Dental Biomed Core 1. 4 Credit Hours.**

The Biomedical Core Course will provide a multidisciplinary approach to basic science instruction as it relates to the clinical practice of dentistry. Both basic science and clinical science faculty will participate to provide a sound base of material required by each program. Individual programs will supplement the Biomedical Core Course in the basic science areas particular to that discipline. This combination of core instruction with individual supplementation should provide the advanced education student the appropriate background in biomedical science.

### **MSDS 5021. Dental Biomed Core 2. 1 Credit Hour.**

This course is a continuation of MSDS 5020 Dental Biomedical Core Course 1.

### **MSDS 5057. Research I Protocol Development and Design. 3 Credit Hours.**

The introductory course in research design and protocol development is limited to postdoctoral students enrolled in advanced education programs. It is the 1st of four required core research course for the Masters of Science in Dental Science curriculum. Registration for this course requires permission by the respective program director for a particular Masters of Science education track. The course occurs during the PGI year offered in summer, fall and spring semesters. Credit hours vary between educational tracks for a particular semester from 1-3 hours, with a total of 3 credit hours required for course completion.

### **MSDS 5090. Grad Research Methodology. 2 Credit Hours.**

This course is an introduction to methods and techniques used in dental research. Topics will include basic assumptions and concepts of scientific research, selecting research topics, specifying objectives and hypotheses, literature reviews, and experimental design.

### **MSDS 5121. Biostatistics. 1 Credit Hour.**

This course is designed to prepare the advanced education dentist with the knowledge of common statistical methods in order to critically evaluate the literature and to perform necessary analyses in support of their own research projects, particularly those directed at the completion of the Certificate from the Dental School and/or the Master of Science degree from the Graduate School of Biomedical Sciences.

### **MSDS 5157. Research 1- Project Proposal. 1 Credit Hour.**

The introductory course in research design and protocol development is limited to postdoctoral students enrolled in advanced education programs. It is the 1st of four required core research courses for the Master of Science in Dental Science curriculum. Registration for this course requires permission by the respective program director for a particular Master of Science educational track. The course occurs during the PGI year offered in the spring semester. In fulfillment of the Master of Science degree, registration for this course requires completion of MSDS 5257 in the preceding semester.

### **MSDS 5257. Research 1- Project Proposal. 2 Credit Hours.**

The introductory course in research design and protocol development is limited to postdoctoral students enrolled in advanced education programs. It is the 1st of four required core research courses for the Master of Science in Dental Science curriculum. Registration for this course requires permission by the respective program director for a particular Master of Science educational track. The course occurs during the PGI year offered in the spring semester.

### **MSDS 5357. Research 1- Project Proposal. 3 Credit Hours.**

The introductory course in research design and protocol development is limited to postdoctoral students enrolled in advanced education programs. It is the 1st of four required core research courses for the Master of Science in Dental Science curriculum. Registration for this course requires permission by the respective program director for a particular Master of Science educational track. The course occurs during the PGI year offered in the spring semester.

### **MSDS 6057. Research 2 - Data Collection. 6 Credit Hours.**

The course focuses on refining research design, implementation, and data collection. Enrollment limited to postdoctoral students in advanced education programs who have completed successfully both MSDS 5257 and MSDS 5157, or MSDS 5357 in PG1. This is the 2nd of four required core research courses for the Masters of Science in Dental Science curriculum. Registration for this course requires permission by the respective program director for a particular Masters of Science education track. The course occurs during the PGI 2 year offered in summer, fall and spring semesters. Credit hours vary between educational tracks for a particular semester from 1-6 hours, with a total of 6 credit hours required for course completion.

### **MSDS 6058. Research 3- Data Analysis. 2 Credit Hours.**

The course focuses analysis of research data and experimental design. Enrollment limited to postdoctoral students in advanced education programs who have completed successfully MSDS 6057. This is the 3rd of four required core research courses for the Masters of Science in Dental Science curriculum. Registration for this course requires permission by the respective program director for a particular Masters of Science education track. The course occurs during the PG II year offered and is offered in both fall and spring semesters. Credit hours vary between educational tracks for a semester from 1-2 hours, with a total of 2 credit hours required for course completion.

### **MSDS 6098. Thesis. 1-4 Credit Hours.**

The research thesis course is limited to postdoctoral students in advanced education programs who have completed successfully MSDS 6058. This is the 4th of four required core research courses for the Masters of Science in Dental Science curriculum. Registration for this course requires permission by the respective program director from a particular Masters of Science education track. The course is offered in fall, and spring semesters. Credit hours vary between educational tracks for a semester from 1-4. The course occurs during the PG II and PG II year offered in summer, fall, and spring semesters. Credit hours vary between educational tracks for a semester from 1-4 hours, with a total of 4 credit hours required for course completion.

### **MSDS 6357. Research 2- Data Collection. 3 Credit Hours.**

This course focuses on refining research design, implementation, and data collection. Enrollment limited to postdoctoral students in advanced education programs who have completed successfully MSDS 5257 and MSDS 5157 or MSDS 5357 in PG1. This is the 2nd of four required core research courses for the Master of Science in Dental Science curriculum. Registration for this course requires permission by the respective program director for a particular Master of Science education track. The course occurs during the PG2 year offered in fall and spring semesters. In fulfillment of the Master of Science degree, registration for this course requires registration for MSDS 6357 for two semesters.

**MSDS 6657. Research 2- Data Collection. 6 Credit Hours.**

The course focuses on refining research design, implementation, and data collection. Enrollment limited to postdoctoral students in advanced education programs who have completed successfully MSDS 5257 and MSDS 5157 or MSDS 5357 in PG1. This is the 2nd of four required core research courses for the Master of Science in Dental Science curriculum. Registration for this course requires permission by the respective program director for a particular Master of Science education track. The course occurs during the PG2 year offered in the spring semester.