### ORAL AND CRANIOFACIAL **SCIENCES (OR CRA FAC)**

#### OR CRA FAC 204 Biology of Craniofacial Development and Tooth Movement (2 Units) Spring

Instructor(s): Andrew Jheon Prerequisite(s): None

Restrictions: None

Activities: Lecture

This lecture series occurs once per week (1-hr) for first year dental residents and MS students. Orthodontic tooth movement is a complex process defined by the supporting craniofacial structures including the periodontium (i.e., enamel, dentin, cementum, bone, and periodontal ligament). This course will focus on the basic biological concepts and mechanisms related to craniofacial development and orthodontic tooth movement (OTM). This course will also provide evidence for and against the

School: Graduate Division

**Department:** Oral And Craniofacial Sciences MS Program May the student choose the instructor for this course? No Does enrollment in this course require instructor approval? No

Course Grading Convention: Letter Grade

Graduate Division course: Yes Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes Repeat course for credit? No

#### **OR CRA FAC 205 Advanced Topics in Pharmacology for** the Dental Specialist (1 Units) Spring

Instructor(s): Mark Ryder, Brian Bast, Caroline Shiboski, Gary Armitage, **Sharon Youmans** 

Prerequisite(s): None

Restrictions: Enrollment in the first or second year of the postgraduate/ residency programs in the School of Dentistry including Pediatric Dentistry, General Practice Residency, Dental Public Health, Endodontics, Orthodontics, Periodontics, Prosthetic Dentistry, Oral Surgery. Additional enrollment per the request of the student and course director approval.

Activities: Lecture

The basic concepts in clinical applications of the major classes of pharmacological agents used in both general and specialty dental practices will be presented. Faculty from the school of pharmacy and dentistry will first present basic principles in the application of antimicrobials, anti inflammatories, analgesics, bisphosphonates, drugs for major systemic conditions, and major drug interactions, followed by direct clinical correlations and applications.

School: Graduate Division

**Department:** Oral And Craniofacial Sciences MS Program May the student choose the instructor for this course? No Does enrollment in this course require instructor approval? No Course Grading Convention: P/NP (Pass/Not Pass) or S/U (Satisfactory/ Unsatisfactory)

Graduate Division course: Yes Is this a web-based online course? No Is this an Interprofessional Education (IPE) course? No May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? No

#### OR CRA FAC 215 Laboratory Rotation (6 Units) Fall, Winter, Spring, Summer

Instructor(s): Staff

Prerequisite(s): Consent of instructor

Restrictions: For graduate students in the Oral & Craniofacial Sciences Program only

A laboratory rotation course to familiarize first-year graduate students with various approaches to research in Oral & Craniofacial Sciences (OCS). Rotations are six weeks each, with three rotations in total. Students can select the laboratory of any faculty member within the OCS Program.

School: Graduate Division

**Department:** Oral and Craniofacial Sciences PhD Program May the student choose the instructor for this course? Yes Does enrollment in this course require instructor approval? No

Course Grading Convention: P/NP (Pass/Not Pass) or S/U (Satisfactory/

Unsatisfactory)

Graduate Division course: Yes Is this a web-based online course? No Is this an Interprofessional Education (IPE) course? No May students in the Graduate Division (i.e. pursuing Master or PhD) enroll in this course? Yes

Repeat course for credit? Yes

#### OR CRA FAC 220 Seminar Series (1 Units) Fall

Instructor(s): Nathan Young
Prerequisite(s): unk

Restrictions: unk
Activities: Seminar

A seminar series to introduce information, resources, and skills for students to successfully engage in independent MS-level research in the OCS program. Sessions consist of faculty and guest speaker-led interactive lectures covering a range of topics related to current best practice in oral biology research, including basic, clinical, and translational research.

School: Graduate Division

Department: Oral And Craniofacial Sciences MS Program
May the student choose the instructor for this course? No
Does enrollment in this course require instructor approval? No

Course Grading Convention: P/NP (Pass/Not Pass) or S/U (Satisfactory/

Unsatisfactory)

**Graduate Division course:** Yes **Is this a web-based online course?** No

Is this an Interprofessional Education (IPE) course? No

 $\label{eq:may-students} \mbox{May students in the Graduate Division (i.e.\ pursuing\ Master\ or\ PhD)}$ 

enroll in this course? Yes Repeat course for credit? No

### OR CRA FAC 221 Current Concepts in Oral Biology (2.5 Units) Winter

Instructor(s): Ralph Marcucio

Prerequisite(s): Consent of graduate advisor and instructor

Restrictions: None

Activities: Lecture, Discussion

Students will develop a working knowledge of oral and craniofacial organogenesis, growth, and metabolism and understand the pathogenesis and treatment of heritable and acquired disorders of oral and craniofacial tissues and organs. \r\nstudents will identify areas of interest within the field of oral and craniofacial science that may serve as a focus for future research activity leading to the Ph.D. and develop strategies for addressing outstanding critical questions in the field.

School: Graduate Division

**Department:** Oral and Craniofacial Sciences PhD Program May the student choose the instructor for this course? No Does enrollment in this course require instructor approval? No

Course Grading Convention: P/NP (Pass/Not Pass) or S/U (Satisfactory/

Unsatisfactory)

Graduate Division course: Yes
Is this a web-based online course? No
Is this an Interprofessional Education (IPE) course? No
May students in the Graduate Division (i.e. pursuing Master or PhD)
enroll in this course? No
Repeat course for credit? No

# OR CRA FAC 222 OCS PhD Seminar Series (1 Units) Fall, Winter, Spring

Instructor(s): Ralph Marcucio
Prerequisite(s): None

Restrictions: Students must be enrolled in the OCS Graduate Program.

Activities: Seminar

OCS DDS/PhD and PhD students registered for this course will be required to attend a total of 10 scientific seminars during the academic year and submit a signed log of all of those attended. \r\n\r\nAdditionally, each student is required to submit a review of 3 of the 10 seminars to the Course Instructor by the last day of the Spring Quarter.

School: Graduate Division

Department: Oral and Craniofacial Sciences PhD Program
May the student choose the instructor for this course? No
Does enrollment in this course require instructor approval? No

Course Grading Convention: P/NP (Pass/Not Pass) or S/U (Satisfactory/

Unsatisfactory), In Progress (IP, SP/UP) grading allowed

**Graduate Division course:** Yes **Is this a web-based online course?** No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes
Repeat course for credit? Yes

#### **OR CRA FAC 224 Host Response (2 Units) Spring**

Instructor(s): Mark Ryder

Prerequisite(s): Consent of graduate advisor and instructor

Restrictions: Open to graduate and postgraduate students in the Oral and Craniofacial Sciences program.

Activities: Lecture, Seminar

Components of the immune system, survey of the various immunologic mechanisms in host responses, and current working concepts of the immune system. Overview of consequences that failure, exaggeration, or inability to distinguish self from non-self, may have for the host.

School: Graduate Division

Department: Oral And Craniofacial Sciences MS Program
May the student choose the instructor for this course? No
Does enrollment in this course require instructor approval? No

**Course Grading Convention:** Letter Grade

**Graduate Division course:** Yes **Is this a web-based online course?** No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes Repeat course for credit? No

## OR CRA FAC 250 Research (1-8 Units) Fall, Winter, Spring, Summer

Instructor(s): Staff
Prerequisite(s): None

Restrictions: None

Activities: Project

M.S. thesis or Ph.D. dissertation research under the mentorship of Oral & Craniofacial Sciences (OCS) faculty

School: Graduate Division

Department: Oral And Craniofacial Sciences MS Program
May the student choose the instructor for this course? Yes
Does enrollment in this course require instructor approval? No

Course Grading Convention: P/NP (Pass/Not Pass) or S/U (Satisfactory/

Unsatisfactory)

Graduate Division course: Yes
Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes Repeat course for credit? Yes

#### OR CRA FAC 270 Journal Club (1 Units) Spring

Instructor(s): Ralph Marcucio
Prerequisite(s): None

Restrictions: None

Critical review of current journal articles pertinent to oral biology. Instruction and feedback in the choice of topic, style and effectiveness of presentations are provided, as well as critical discussion of articles and relevance to current research.

School: Graduate Division

Department: Oral and Craniofacial Sciences PhD Program
May the student choose the instructor for this course? No
Does enrollment in this course require instructor approval? No

Course Grading Convention: P/NP (Pass/Not Pass) or S/U (Satisfactory/

Unsatisfactory)

**Graduate Division course:** Yes **Is this a web-based online course?** No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? No Repeat course for credit? No

### OR CRA FAC 283 Introduction of Biostatistics for Dentistry (2.5 Units) Fall

Instructor(s): Alfa-Ibrahim Yansane

Prerequisite(s): None.

Restrictions: None.

Activities: Lecture

This is an introductory level course in biostatistical methods. There will be 9 modules discussing descriptive statistics, probability application and theory, epidemiological study design, hypothesis testing and regression based methods. Each lecture will have both written statistical and computing components. Stata 13 will be taught and used.

School: Graduate Division

Department: Oral And Craniofacial Sciences MS Program
May the student choose the instructor for this course? No
Does enrollment in this course require instructor approval? No

Course Grading Convention: Letter Grade

Graduate Division course: Yes
Is this a web-based online course? No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes Repeat course for credit? No

### OR CRA FAC 295 Masters Studies Journal Club (1 Units) Spring

Instructor(s): Nathan Young
Prerequisite(s): None

Restrictions: Must be a student in a School of Dentistry postgraduate

program.

Activities: Seminar

Critical review of current journal articles pertinent to craniofacial research and oral biology. Faculty in OCS program will assist in the selection of papers for review in the MS Journal Club.

School: Graduate Division

Department: Oral And Craniofacial Sciences MS Program
May the student choose the instructor for this course? No
Does enrollment in this course require instructor approval? No

Course Grading Convention: P/NP (Pass/Not Pass) or S/U (Satisfactory/

Unsatisfactory)

**Graduate Division course**: Yes **Is this a web-based online course?** No

Is this an Interprofessional Education (IPE) course? No

May students in the Graduate Division (i.e. pursuing Master or PhD)

enroll in this course? Yes Repeat course for credit? Yes

## OR CRA FAC 296 Master's Thesis Project Design (1 Units) Fall, Summer

*Instructor(s):* Nathan Young Prerequisite(s): None.

Restrictions: Limited to Students enrolled in the MS program in Oral and

Craniofacial Sciences.

Activities: Project

Masters students in oral and cranifacial sciences shall establish their thesis committee; prepare, present, and modify as necessary the thesis project proposal. Students can take OCS 296 for either 1 or 2 consecutive quarters. The grade will be assigned after completion of the course. If the students do not complete the course after two quarters and incomplete will be given for the course.

School: Graduate Division

Department: Oral And Craniofacial Sciences MS Program
May the student choose the instructor for this course? No
Does enrollment in this course require instructor approval? No

Course Grading Convention: P/NP (Pass/Not Pass) or S/U (Satisfactory/

Unsatisfactory)

Graduate Division course: Yes
Is this a web-based online course? No
Is this an Interprofessional Education (IPE) course? No
May students in the Graduate Division (i.e. pursuing Master or PhD)
enroll in this course? Yes
Repeat course for credit? No