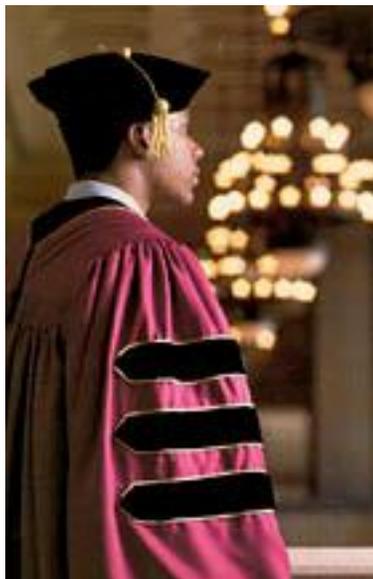


University of Minnesota School of Dentistry

Master of Science [M.S.] Degree Program in Dentistry



Graduate Student Reference Guide 2018-2019

Updated August, 2018

MS Dentistry Program

Contact Information

Graduate Studies Office: MS Program in Dentistry

15-136 Moos Tower
 515 Delaware Street. SE
 Minneapolis, MN 55455
 Telephone: 612-626-0158
 Fax: 612-624-0027

University of Minnesota Graduate School:

321 Johnston Hall
 Web site: <https://www.grad.umn.edu>

Helpful Contact Information			
Name	Telephone	Fax	e-mail
Jane Schwensohn Program Coordinator School of Dentistry 7-194 Moos Tower	612-626-5453	612-624-7960	schwe008@umn.edu
Dr. Stephen Shuman Director of Graduate Studies, School of Dentistry 15-137 Moos Tower	612-626-0158	612-624-0027	shuma001@umn.edu
International Student & Scholar Services 190 Hubert H. Humphrey Center	612-626-7100	612-626-7361	-----

Helpful Website:

Tuition and Fees
 (Full-time and per credit rates)
http://onestop.umn.edu/finances/costs_and_tuition/index.html

Graduate Student Services University of Minnesota Graduate School

Master's Degree Summary of Procedures from Initial Registration to Graduation

This summary has been prepared to assist students in completing the steps necessary for graduation. It should be used in conjunction with the current Graduate School Bulletin and University Class Schedule, which detail in full the requirements and regulations for which all students are responsible.

You must register in the Graduate School the semester you are admitted or readmitted. To maintain active student status, you must register in the Graduate School every Fall and Spring semester. If you do not currently have active student status, you must file a Change of Status/Readmission form to request readmission to the Graduate School.

Forms for Masters Students

- All forms and requests are available online on the Graduate School web site at: <http://www.grad.umn.edu/current-students-forms/forms-masters>
- Online forms and processes at this web site include:
 - [Graduate Planning and Audit System](#) (via One Stop)
 - [Assign/Update Examination Committee](#)
 - [Quick Start Guide](#)
 - [Petition Form](#) (request changes on approved programs or extension of time to complete degree)
 - [Application for Advanced Master's Status](#)
 - [Letter of Certification Request](#)
 - [Thesis or Dissertation Hold Request](#)
 - [Leave of Absence \(policy and forms\)](#)
- **Graduation Packet** is available at: <https://apps.grad.umn.edu/secure/gradpacket/>

Helpful Website:

Information for Masters Students:

<http://www.grad.umn.edu/students/masters/index.html>

MASTER'S DEGREE

Plan A (with Thesis)

1. **After completion of at least 15 credits towards the degree**, complete and submit the Graduate Planning and Audit System (GPAS) Planner. *(NOTE: It is in students' best interests to do this by the end of their first year in the MS-Dentistry Program. Delays in filing the GPAS Planner could result in failure to identify problems in meeting Graduate School degree requirements that could delay graduation!)*
2. **At least one semester before anticipated thesis exam**, select the Thesis Examination Committee by initiating the online committee request at the following Graduate School web site:

<http://www.grad.umn.edu/students/assignmasterscommittee/index.html>

3. Once the GPAS Planner and Examination Committee have been approved and the thesis is ready to go to the reviewers (Plan A), you can obtain a graduation packet online from the Graduate School. The Thesis Reviewers Report form will be issued at that time. Remember to allow your committee at least two weeks to read the thesis.
4. Submit the Application for Degree to 200 Fraser or 130 Coffey by the first working day of the intended month of graduation.
5. Submit a signed Thesis Review's Report form to receive the Final Examination Report form prior to the final exam.
6. Return the Final Examination Report form by the last working day of the intended month of graduation.
7. Submit two unbound copies of your thesis, both signed by your adviser(s), by the last working day of the intended month of graduation.

Plan B (with 3 Papers)

2. **After completion of at least 15 credits towards the degree**, complete and submit the Graduate Planning and Audit System (GPAS) Planner. *(NOTE: It is in students' best interests to do this by the end of their first year in the MS-Dentistry Program. Delays in filing the GPAS Planner could result in failure to identify problems in meeting Graduate School degree requirements that could delay graduation!)*
1. **At least one semester before anticipated oral exam**, select the Plan B Examination Committee by initiating online committee request at the following Graduate School web site:

<http://www.grad.umn.edu/students/assignmasterscommittee/index.html>

2. Once the GPAS Planner and Examination Committee have been approved, pick up the Final Examination Report form and the Graduation Packet before your final oral examination.

3. Submit an Application for Degree to 200 Fraser or 130 Coffey by the first working day of the intended month of graduation.
4. Return the Final Examination Report form by the last working day of the intended month of graduation.

If you have specific questions, please contact the MS-Dentistry Program Coordinator.

GRADUATION

Graduate School degrees are awarded monthly; the Application for Degree must be turned in to Student Relations, 200 Fraser Hall (East Bank) on or before the first working day of the intended month of graduation. All other Graduate School requirements must be completed by the last working day of the intended month of graduation. Graduating in any month before the end of the quarter may affect your eligibility for student loans, housing, etc.; check with the appropriate office if you have questions. The award of the degree should appear on transcripts within one month following graduation. The diploma is mailed from the Registrar three to four months after graduation.

All Graduate School requirements for graduation are listed below. Unless stated otherwise, you should submit all forms to 316 Johnston Hall. Forms are available online at the Graduate School website. Note: all students must submit an Application for Degree to 200 Fraser Hall or 130 Coffey Hall on or before the first working day of the intended month of graduation.

Preparation of Master's Thesis/Project Guidelines

Available from the Graduate School web site at:

<http://www.grad.umn.edu/students/ThesisSubmission/index.html>

Note: The Graduate School will accept only theses that meet these guidelines. If you have any questions, you may contact the Graduate School staff in 316 Johnston Hall (612-625-4019).

Helpful Website:

Masters Degree Completion Procedures:

<http://www.grad.umn.edu/students/masters/index.html>

***University of Minnesota
School of Dentistry
and
Graduate School***

***Master of Science:
Dentistry***



OVERVIEW **M.S. in Dentistry**

(Plan A and Plan B)

Curriculum – The M.S program in Dentistry offers training designed to prepare dentists with clinical expertise for positions of leadership in education, research, and programs administration in the oral health field. The program is housed in the School of Dentistry and is taught by a multidisciplinary faculty of educators, researchers and clinicians. All students complete core coursework in teaching and evaluation in dentistry, research methods and biostatistics, and health care administration. Additional advanced coursework is offered in these same focus areas, as well as in selected clinical and oral science topics with interdisciplinary impact, including conscious sedation, craniofacial pain, geriatrics, oral biology, oral medicine and radiology, oral pathology, practice administration, and psychology. Flexibility is available in planning individualized programs to accommodate students' specific areas of interest, and courses from other disciplines may be included for credit in the major area.

Prerequisites for Admission – The graduate program in Dentistry is designed for individuals who have a desire to prepare for careers in dental education, research, or program administration. Applicants must have received a D.D.S. or D.M.D. degree from an accredited U.S. institution. Students with comparable foreign degrees from recognized colleges or universities may also apply for admission. Applications from individuals who have completed or are enrolled in an advanced clinical dental training program (general dentistry or specialty residency program) are encouraged. Per Graduate School requirements, an undergraduate grade point average (GPA) of 3.0 is the preferred performance level for admission. Applicants for whom English is a second language must also take the Test of English as a Foreign Language (TOEFL). The preferred performance levels on the TOEFL are as follows:

Paper-Based Total Score:	600
Computer Based Total Score:	250
Internet Based Total Score:	100

Special Admission Requirements – Applicants should submit three letters of recommendation from individuals familiar with their academic capabilities. Also required is a brief essay (under 500 words) which relates the applicant's career goals to the goals of the program. Applications are received and reviewed throughout the year. Students may enter the program in any semester at the discretion of program faculty.

Commitment to Diversity: The M.S. Dentistry Program and the Graduate School embrace the University of Minnesota's position that promoting and supporting diversity among the student body is central to the academic mission of the University. A diverse student body enriches graduate education by providing a multiplicity of views and perspectives that enhance research, teaching, and the development of new knowledge. A diverse mix of students promotes respect for, and opportunities to learn from other with the broad range of backgrounds and experiences that constituent modern society. Higher education trains the next generation of leaders of academia and society in general, and such opportunities for leadership should be accessible to all members of society. The M.S. Dentistry Program and the Graduate School are therefore committed to providing equal access to educational opportunities through recruitment, admission, and support programs that promote diversity, foster successful academic experiences, and cultivate the leaders of the next generation.

Concurrent Residency and M.S. Studies – Students who are enrolled in an advanced clinical dental training program (general dentistry or specialty residency) may be admitted to the Dentistry graduate program for concurrent study. However, students must carefully plan their studies with their faculty adviser and the Director of Graduate Studies so that their residency and M.S. programs are appropriately integrated and satisfy Graduate School registration and degree requirements.

Master's Degree Requirements – The M.S. degree program usually requires at least 18 months and may be completed as either Plan A (with thesis) or Plan B (without thesis). Students in both plans must complete a minimum of 14 credits in the major field, including four core courses in: 1) teaching and evaluation in dentistry; 2) basic research methodology; 3) introductory biostatistics, and; 4) fundamentals of health care administration. All students must also complete a minor or related field option of at least 6 credits. Courses for credit in the major may also be taken from other disciplines with the approval of the student's adviser and the Director of Graduate Studies. Students are also required to complete training in Research Ethics in accordance with Graduate School requirements.

For Plan A students, a minimum of 10 thesis credits are required for the M.S. degree. Plan B students do not complete a thesis, but take an additional 10 credits of coursework and submit three Plan B papers, one of which must involve the analysis and reporting of research information. Students must maintain a cumulative grade point average (GPA) of at least 3.0 and no more than 6 incomplete credits during their program. A final oral examination is required for both Plan A and Plan B programs. A minimum cumulative grade point average (GPA) of at least 3.0 in MS Dentistry Degree Program coursework is required for graduation.

Use of 4xxx Courses – Inclusion of a limited number of 4xxx courses on degree program forms is subject to Adviser and Director of Graduate Studies approval. Under NO circumstances are courses below 4000 level allowed for graduate degree credit by the Graduate School.

Language Requirements - None

DETAILED DESCRIPTION

M.S. in Dentistry

1. PROGRAM DESCRIPTION

The M.S. degree program in Dentistry is designed to prepare dentists for leadership positions in dental education, research, and program administration that will complement their areas of clinical expertise. The specific objectives of the program are to develop skills in:

- Designing and conducting research
- Teaching
- Administration of clinical and educational programs
- Advanced multidisciplinary clinical care

The program is housed in the School of Dentistry and taught by Dentistry's multidisciplinary graduate faculty of dental educators, researchers, and clinicians. Core elements of the program include required courses in teaching and evaluation, research methods, biostatistics, and program administration. Additional advanced coursework may be taken in these focus areas, as well as selected areas of clinical and oral science that are of multidisciplinary concern, including anatomy, conscious sedation, craniofacial pain, geriatrics, oral biology, oral medicine and radiology, oral pathology, physical diagnosis, practice administration, and psychology. Flexibility is encouraged in planning individualized programs that will accommodate students' specific areas of interest, and courses from other disciplines may be included for credit in the major area.

Students are responsible for developing their program of education and professional growth in conjunction with the Dentistry graduate faculty. Selection of an adviser is of critical importance, since the student and adviser will jointly plan the student's curriculum and thesis or other projects. New students will be under the general supervision of the Director of Graduate Studies or assigned an initial adviser by the Director of Graduate Studies. Students will be expected to choose an adviser by the end of their first year in the graduate program and will be encouraged to familiarize themselves with the graduate faculty as soon as possible via seminars, tutorials, and informal contacts. Students may change advisers subsequently with the advice and consent of the Director of Graduate Studies.

2. CURRICULUM

The program will require a minimum of 18 months of study and may be completed as either Plan A (with thesis or) or Plan B (without thesis). Students in both plans must complete a minimum of 14 credits in the major, which includes credit for four core courses in dental education (Teaching and Evaluation in Dentistry); basic research methodology (Methods in Research and Writing); introductory biostatistics (Biostatistics I or equiv.); and fundamentals of health care administration (Principles of Management in Health Services Organizations). At the discretion of the student's adviser and the Director of Graduate Studies, core course requirements may be waived upon demonstration of previous completion of equivalent course(s) at the University of Minnesota or elsewhere. All students must complete a related field or a minor option of at least 6 credits, as well as training in research ethics per Graduate School requirements. Potential related field offerings of likely interest to Dentistry Program students are listed in Appendix A, while potential minors of possible interest are listed in Appendix B. Courses for credit in the major may also be taken from other disciplines outside to the Dentistry Program with the approval of the student's adviser and the Director of Graduate Studies.

Plan A Program: In addition to the requirements outlined above, students in the Plan A program will complete a research project under the guidance and supervision of the faculty, and write and successfully defend a thesis. The Graduate School requires that Plan A students register for at least 10 Master's thesis credits (DENT 8777) before receiving the degree. A final oral examination is required. Students will be encouraged to submit their thesis in the form of one or more manuscripts or published papers for the scientific literature in keeping with current Graduate School policies.

Plan B Program: Plan B students will not complete a thesis, but take an additional 10 credits of coursework and submit three Plan B papers. Titles of the three Plan B papers should be submitted with the student's program registration no later than the second semester of enrollment. Papers may consist of critical reviews of literature, comprehensive clinical case reports, or research papers. At least one of the

three Plan B papers involve the reporting of research information conducted under the guidance of a faculty member. Research papers may be based on experimental work and discussions conducted as part of a tutorial experience arranged with the faculty. There is no specified format or length for Plan B papers but they must be of professional quality as determined by supervising faculty. Their content and scope will be also be determined in consultation with the faculty supervising the Plan B papers. The student will defend the three Plan B papers via an oral examination.

3. ADMISSION REQUIREMENTS

Applicants must have received a D.D.S or D.M.D. degree from an accredited U.S. institution. Students with comparable foreign degrees from recognized colleges or universities may also apply for admission. Applications from individuals who have already completed, or are enrolled in, an advanced clinical training program (e.g., general dentistry or specialty residency program) are encouraged. As per Graduate School Requirements, an undergraduate grade point average (GPA) of 3.0 is the preferred performance level for admission. Applicants for whom English is a second language must also take the Test of English as a Foreign Language (TOEFL). The preferred performance levels on the TOEFL are as follows:

Paper-Based Total Score:	600
Computer Based Total Score:	250
Internet Based Total Score:	100

The graduate program in Dentistry is designed for individuals who have a strong desire and capacity to prepare for careers in advanced clinical care, dental education, research, or program administration as evidenced by three letters of recommendation from individuals familiar with their academic capabilities. Also required is a brief essay (under 500 words) which relates the applicant's career goals to the goals of the program. Applications will be received and reviewed throughout the year. Students may enter the program in any semester.

4. COMMITMENT TO DIVERSITY:

The M.S. Dentistry Program and the Graduate School embrace the University of Minnesota's position that promoting and supporting diversity among the student body is central to the academic mission of the University. A diverse student body enriches graduate education by providing a multiplicity of views and perspectives that enhance research, teaching, and the development of new knowledge. A diverse mix of students promotes respect for, and opportunities to learn from other with the broad range of backgrounds and experiences that constituent modern society. Higher education trains the next generation of leaders of academia and society in general, and such opportunities for leadership should be accessible to all members of society. The M.S. Dentistry Program and the Graduate School are therefore committed to providing equal access to educational opportunities through recruitment, admission, and support programs that promote diversity, foster successful academic experiences, and cultivate the leaders of the next generation.

5. EVALUATION OF STUDENT PROGRESS

- A. Minimum Grade Point Average (GPA) Requirements: Students in the Dentistry Graduate Program must maintain a cumulative GPA of at least 3.0 and no more than 6 incomplete credits in order to remain in good standing within the program. This standard is higher than the minimum Graduate School requirements for M.S. candidates. A student who does not obtain a GPA of 3.0 in any one semester will be placed on academic probation for the following semester. Students who, for two consecutive semesters, have a cumulative GPA of less than 3.0 will be terminated from the program. A minimum cumulative GPA of at least 3.0 in MS Dentistry Degree Program coursework is required for graduation.
- B. Data Requirements: Students must also satisfy all Graduate School requirements for the M.S. degree as outlined in the Graduate School Bulletin.
- C. Concurrent Residency and M.S. Studies: Students who are enrolled in an advanced clinical dental training program (general dentistry or specialty residency) may be admitted to the Dentistry graduate program for concurrent study. However, students must carefully plan their studies with their faculty adviser and the Director or Graduate Studies so that their residency and the M.S. programs can be

integrated while accommodating University policies prohibiting simultaneous registration in two colleges. Up to 40 percent of the credits required for the M.S. degree program that are taken outside of the University of Minnesota from another recognized institution or source may be transferred for credit at the discretion of the student's adviser and the Director of Graduate Studies in accordance with University policies.

6. LEAVES OF ABSENCE

Graduate students are now permitted to take a leave of absence per Graduate School Policies. A leave of absence allows students to return to the University under the same rules and policies that were in place when they left, and without affecting their time to degree.

MS-Dentistry graduate students who are enrolled in clinical residency programs and/or receive fellowships, stipends, or other financial aid from the University **must** talk with their program director and/or department, Student Financial Aid, International Student and Scholar Services, or a One Stop counselor to learn about any effects a leave of absence will have on completion of their residency training and financial support or student loan repayments. Students who receive funding from a source outside of the University should talk with that agency to learn about any effects a leave of absence might have.

During the period of an approved leave of absence, students may not use student amenities and services, laboratories, equipment, and other research facilities, nor may they use the services of faculty or administrative staff, except as needed to return to active status. For more information and leave request forms, please refer to the complete policy:

<http://www.policy.umn.edu/Policies/Education/Education/GRADSTUDENTLEAVE.html>

7. DENTISTRY COURSES*

Listed below are the core required courses for the Dentistry M.S. Program, along with those interdisciplinary graduate level courses in the focus areas of teaching, administration, and clinical care that will be taught by program faculty. Additional related field courses are also included in Appendix A. Descriptions of these courses may be found in the Graduate School Bulletin or online at <http://www.catalogs.umn.edu/courses.html> under Twin Cities campus courses.

A. CORE COURSES (REQUIRED)

Grad 8200 – Teaching for Learning in Dentistry (1 cr.)

OBio 5001 – Methods in Research and Writing (2 cr.)

PubH 6751 – Principles of Management in Health Services Organizations (2 cr.);
or PubH 6724 – The Health Care System and Public Health (3 cr)

PubH 6414 – Biostatistical Methods I (3 cr.) or PubH 6450 Biostatistics I (4 cr.)¹

B. DENTISTRY PROGRAM CLINICAL ELECTIVES

Dent 7021 – Contemporary Diagnosis and Management of Orofacial Pain (1 credit)

Dent 7051 – Advanced Theory and Principles of Oral Medicine (2 credit)

Dent 7052 – Oral and Maxillofacial Radiologic Interpretation (2 credits)

Dent 7061, 7062 – Special Oral Pathology I and II (2 credits)

Dent 7082 – Craniofacial Growth and Development (2 credits)

Dent 7101 – Management Philosophy for Dental Practices (1 credit)

Dent 7102 – Conscious Sedation (2 credits)

Dent 7111 – Current Literature Review in Dentistry (2 credits)

Dent 7112 – Treatment Planning Seminar (2 credits)

Dent 7121 – Psychological Issues in Medical and Dental Patient Mgmt (1 cr.)

Dent 7122 – Advanced Topics in TMD: Issues in Pain, Focus on Head and Neck (3 credits)

¹ PubH 6450, Biostatistics I is a more intensive course.

Dent 7991 – Independent Study (1-4 credits) Staff
Dent 8081 – Clinical Topics in TMD (2 credits)
Dent 8090 – Evidence-based Clinical Pediatric Dentistry (2 credits)
Dent 8091 – Interdisciplinary Care of the Cleft Palate Patient (1 credit)
Dent 8100 – Topics in Advanced Periodontology: Literature Review (2 credits)
Dent 8101 – Dental Implantology: A Multidisciplinary Approach (2 credits)
Dent 8120 – Advanced Principles and Techniques of Orofacial Pain Disorders (3 credits)
Dent 8121 – Current Literature in TMJ and Craniofacial Pain (1 credit)
Dent 8123 – Advanced Topics in Orofacial Pain (3 credits)
Dent 8333 – FTE: Advanced Master's Status (1 credit)
Dent 8777 – M.S. Thesis Credits (variable 1 – 10 credits)

*** Note: Course availability is subject to change and should be verified by students at least one semester in advance of planned registration.**

APPENDIX A: COURSE LISTING*

REQUIRED COURSES FOR THE DENTISTRY MAJOR

- Grad 8200 – Teaching for Learning in Dentistry (1 cr.)
- OBio 5001 - Methods in Research and Writing (2 cr.)
- PubH 6414 - Biostatistical Methods I (3 cr.); PubH 6450 Biostatistics I (4 cr.)¹ or equivalent
- PubH 6751 - Principles of Management in Health Services Organizations (2 cr.)
 OR PubH 6724 - The Health Care System and Public Health (3 cr.)

EXAMPLES OF OTHER COURSES COUNTED FOR CREDIT IN THE MAJOR

<u>Focus Area</u>	<u>Course</u>
1. Education	Grad 8101 - Teaching in Higher Education (3 cr.) Grad 8150 - Practicum for Future Faculty (3 cr.) Grad 8200 - Professional Communication Skills (2 cr.) EPsy 5115 - Psychology of Adult Learning and Instruction (3 cr.) EPsy 5221 - Basic Principles of Educational Measurement (3 cr.)
2. Research	Dent 8777 - Thesis Credits: Masters required, Plan A only (10 cr.) PubH 6301 - Fundamentals of Clinical Research (3 cr.) PubH 6320 - Fundamentals of Epidemiology - online course PubH 6341 - Epidemiologic Methods I (3 cr.) PubH 6342 - Epidemiologic Methods II (3 cr.) PubH 6415 - Biostatistical Methods II (3 cr.) PubH 6451 - Biostatistics II (4 cr.) PubH 7420 - Clinical Trials (3 cr.)
3. Administration	Dent 7101 - Management Philosophy for Dental Practices (1 cr.) PubH 6557 - Healthcare Finance I (3 cr.) PubH 6547 - Healthcare Human Resource Management (2 cr.) PubH 6556 - Health and Health Systems (2 cr.) PubH 6541 - Statistics for Health Management Decision Making (3 cr.) PubH 6568 - Inter-professional Teamwork in Health Care (2 cr.) PubH 6558 - Healthcare Finance II (3 cr.)
4. Clinical Sciences²	Dent 7051 - Advanced Study in the Theory and Principles of Oral Medicine (2 cr.) Dent 7052 - Oral and Maxillofacial Radiologic Interpretation (2 cr.) Dent 7061 - Special Oral Pathology I (0 cr.) Dent 7062 - Special Oral Pathology II (2 cr.) ³ Dent 7082 – Craniofacial Growth and Development (2 cr.) Dent 7101 - Management Philosophy for Dental Practices (1 cr.) Dent 7102 - Topics in Conscious Sedation (2 cr.) Dent 7111 - Current Literature Review in Dentistry (2 cr.) Dent 7112 - Treatment Planning Seminar (2cr.) Dent 7991 - Independent Study (1-4 cr.) Dent 8081 - Clinical Topics in TMD (2 credits) Dent 8090 - Evidence-based Clinical Pediatric Dentistry (2 cr.) Dent 8091 - Interdisciplinary Care of Cleft Palate Patient (1 cr.) Dent 8100 - Topics in Advanced Periodontology (2 cr.)

¹ PubH 6450, Biostatistics I is a more intensive course.

² Other existing coursework in Oral Biology, Biomaterials, Immunology, and other areas pertinent to multiple dental disciplines can also be taken for credit in this category.

³ Dent 7061 & Dent 7062 is a sequential course. Students need to take both sessions to receive credit.

4. Clinical Sciences² (continued)

- Dent 8101 - Dental Implantology: A Multidisc. Approach (2 cr.)
- Dent 8120 - Adv. Prin. & Tech. of TMJ/Craniofacial Pain (3 cr.)
- Dent 8121 - Current Lit. in TMJ & Craniofacial Pain (1 cr.)
- Dent 8123 - Advanced Topics in Orofacial Pain (3 cr.)
- Anat 7999 - Head & Neck Anat. for Med/Dent Residents (3 cr.)
- OBio 8011 - Oral Biology (2 cr.)
- OSur 5277 - Physical Diagnosis (2 cr.)
- Gero 5110 - Biology of Aging (3 cr.)

*** Note: Course availability is subject to change and should be verified by students at least one semester in advance of planned registration**

TRAINING IN THE RESPONSIBLE CONDUCT OF RESEARCH

All students are required to complete formal training in the responsible conduct of research as part of their graduate education. To fulfill this requirement, MS-Dentistry Students must complete the online [Collaborative Institutional Training Initiative](https://www.citiprogram.org) (CITI) course in Responsible Conduct of Research as follows or equivalent training offered by the University, and submit proof of course completion to the Graduate Program Coordinator or Director of Graduate Studies. The link to this training program is as follows:

<https://www.citiprogram.org>

² Other existing coursework in Oral Biology, Biomaterials, Immunology, and other areas pertinent to multiple dental disciplines can also be taken for credit in this category.

APPENDIX B: POTENTIAL MINOR PROGRAMS

(Note: This list provides a few examples only. Students must consult with the Director of Graduate Studies for any Minor Field of interest to them to verify eligibility and specific requirements. If a Minor Field is selected, one examiner from that Minor must also serve on the student's final examination committee.)

1. Public Health Minor (M.S. level)

Credit Requirements:

8 semester credits

Courses:

- 1) PubH 6341 - Epidemiologic Methods I (3 cr.)
- 2) PubH 6414 - Biostatistics I (3 cr)
- 3) PubH 6102 - Issues in Environmental & Occupational Health (2 cr)
- 4) Electives

2. Educational Psychology Minor (M.S. level)

Credit Requirements:

6 semester credits

Courses:

Any graduate level courses in EPsy

3. Gerontology Minor (M.S. level)

Credit Requirements:

8 semester credits

Courses:

- 1) Gero 5105 - Multidisciplinary Perspectives on Aging (3 cr)
- 2) Electives in one of four tracks in aging-related courses (5 cr)

APPENDIX C

Masters Examination Committee Information

(See: <http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>)

The MS-Dentistry Program requires that examination committee members have Graduate Education Responsibilities in the field they represent (major field or minor/outside field). Advisers and committee members must also meet college-specific requirements to carry out graduate education responsibilities. **Please note that not all faculty members teaching in the School of Dentistry have Graduate Education Responsibilities in the MS-Dentistry Program.**

The most up-to-date listings of graduate faculty in the major field of Dentistry and/or minor/outside fields (e.g., Oral Biology, Public Health, etc.) can be found by searching via faculty name or graduate program at:

<https://apps.grad.umn.edu/programs/faculty.aspx>

Final examination committee:

Per Graduate School policy, the final examination committee must consist of at least three members, including the adviser/s. All members of the committee and the student must participate in the final examination.

- At least two committee members must represent the major field of Dentistry
- At least one committee member must represent a field outside of the major field of Dentistry
- If the student has a declared minor(s), the outside member(s) must be from the minor field(s).
- Members cannot satisfy the requirement with respect to more than one field.

Adviser:

- Must represent the major field of Dentistry on the examination committee
- May serve as chair for the final examination

Co-adviser (if any):

- May represent the major field or the outside/minor field
- May serve as chair for the final examination.

Thesis reviewers (Plan A only):

- Assigned committee members also serve as thesis reviewers for Plan A.