| 1    | Subject   | ORAL SURGERY 1  |   |  |  |
|------|---|---|---|--|--|
| 2    | Code  | DOR402  |   |  |  |
| 3    | Study Program   | Study Program of Integrated studies in dental medicine  |   |  |  |
| 4    | Organizing Institution (Unit,<br>Institute, Chair, Department)  | Department of oral surgery  |   |  |  |
| 5    | Educational degree (first or second cycle)  | Integrated study  |   |  |  |
| 6    | Study year/semester   | 4/ 7 and 8 7 Number of 8 credits  |   |  |  |
| 8    | Teacher   | Prof d-r.B.Velickovski, Prof.d-r M.Peeva Petreska, Prof.d-r O.Dimitrovski,<br>Prof.d-r M.Kacarska, Prof.d-r E.Janev, Prof.d-r D.Veleska Stevkovska  |   |  |  |
| 9    | Preconditions   | Passed all compulsory courses of 3 and 4 semester. Signatures of 5 and 6 semester courses   |   |  |  |
|      | Basic knowledge of oral surgery and tooth extraction instruments<br>Capable of setting a diagnosis and differential diagnosis<br>Capable of determining a therapy plan<br>Capable of performing certain therapeutic procedures (local infiltrative anesthesia, typical and atypical teeth<br>extractions, typical and atypical teeth extractions in medical compromised patients, treatment of complications<br>associated with local infiltrative anesthesia and complications related to tooth extraction)<br>Wider knowledge of oral surgical casuistry<br>Odontogenic and no odogenic cysts of the jaws and surgical treatment<br>Prevention and care of oral surgical complications<br>Oral surgery-orthodontic interventions<br>Oral surgery interventions in childhood<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and alloplastic materials in the orofacial region<br>Presence of a student in the operating room. |   |   |  |  |
| - 11 | Oral surgery-orthodontic intervention<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operation   | ons<br>ood<br>plastic materials in the orofacial region   |   |  |  |
| 11   | Oral surgery-orthodontic intervention<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operation<br>Brief content  | ons<br>ood<br>plastic materials in the orofacial region   | 0   |  |  |
| 11   | Oral surgery-orthodontic interventio<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b>  | ons<br>ood<br>blastic materials in the orofacial region<br>ting room.   | Class   |  |  |
| 11   | Oral surgery-orthodontic interventio<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b>  | ons<br>ood<br>plastic materials in the orofacial region   |   |  |  |
| 11   | Oral surgery-orthodontic interventio<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br>Brief content<br>Theoretical course<br>Anatomical topography of the ord  | ons<br>ood<br>plastic materials in the orofacial region<br>ting room.<br>facial region: osteology, muscles, vascularization and innervation   |   |  |  |
| 11   | Oral surgery-orthodontic interventio<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b><br>Anatomical topography of the orof<br>zones<br>Principles of asepsis and antisepsis  | ons<br>ood<br>blastic materials in the orofacial region<br>ting room.<br>facial region: osteology, muscles, vascularization and innervation<br>s<br>oral surgery intervention<br>pain from oral surgical aspect   | 2   |  |  |
| 11   | Oral surgery-orthodontic interventio<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b><br>Anatomical topography of the orof<br>zones<br>Principles of asepsis and antisepsis<br>Preoperative patient evaluation for<br>Pathophysiological mechanisms of   | ons<br>ood<br>plastic materials in the orofacial region<br>ting room.<br>facial region: osteology, muscles, vascularization and innervation<br>s<br>oral surgery intervention<br>pain from oral surgical aspect<br>ferent types of local anesthetics  | 2   |  |  |
| 11   | Oral surgery-orthodontic interventio<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b><br>Anatomical topography of the orof<br>zones<br>Principles of asepsis and antisepsis<br>Preoperative patient evaluation for<br>Pathophysiological mechanisms of<br>Local infiltrative anesthesia and diff   | ons<br>ood<br>plastic materials in the orofacial region<br>ting room.<br>facial region: osteology, muscles, vascularization and innervation<br>s<br>oral surgery intervention<br>pain from oral surgical aspect<br>ferent types of local anesthetics<br>he upper and lower jaw  | 2<br>2<br>2<br>2  |  |  |
| 11   | Oral surgery-orthodontic interventio<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b><br>Anatomical topography of the ord<br>zones<br>Principles of asepsis and antisepsis<br>Preoperative patient evaluation for<br>Pathophysiological mechanisms of<br>Local infiltrative anesthesia and diff  | ood<br>ood<br>olastic materials in the orofacial region<br>ting room.<br>facial region: osteology, muscles, vascularization and innervation<br>s<br>oral surgery intervention<br>pain from oral surgical aspect<br>ferent types of local anesthetics<br>he upper and lower jaw<br>- intraoral and extraoral methods   | 2<br>2<br>2<br>2<br>2<br>2  |  |  |
| 11   | Oral surgery-orthodontic interventio<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b><br>Anatomical topography of the orof<br>zones<br>Principles of asepsis and antisepsis<br>Preoperative patient evaluation for<br>Pathophysiological mechanisms of<br>Local infiltrative anesthesia and diff<br>Terminal infiltrative anesthesia in th<br>Nerve block anesthesia in maxilla  | ood<br>ood<br>olastic materials in the orofacial region<br>ting room.<br>facial region: osteology, muscles, vascularization and innervation<br>s<br>oral surgery intervention<br>pain from oral surgical aspect<br>ferent types of local anesthetics<br>he upper and lower jaw<br>- intraoral and extraoral methods<br>le - intraoral and extraoral methods   | 2<br>2<br>2<br>2<br>2<br>2<br>2<br>2  |  |  |
| 11   | Oral surgery-orthodontic interventio<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b><br>Anatomical topography of the ord<br>zones<br>Principles of asepsis and antisepsis<br>Preoperative patient evaluation for<br>Pathophysiological mechanisms of<br>Local infiltrative anesthesia and diff<br>Terminal infiltrative anesthesia in th<br>Nerve block anesthesia in maxilla<br>Nerve block anesthesia in mandibl<br>General and local complications du  | ood<br>ood<br>olastic materials in the orofacial region<br>ting room.<br>facial region: osteology, muscles, vascularization and innervation<br>s<br>oral surgery intervention<br>pain from oral surgical aspect<br>ferent types of local anesthetics<br>he upper and lower jaw<br>- intraoral and extraoral methods<br>le - intraoral and extraoral methods   | 2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2  |  |  |
| 11   | Oral surgery-orthodontic interventio<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b><br>Anatomical topography of the ord<br>zones<br>Principles of asepsis and antisepsis<br>Preoperative patient evaluation for<br>Pathophysiological mechanisms of<br>Local infiltrative anesthesia and diff<br>Terminal infiltrative anesthesia in th<br>Nerve block anesthesia in maxilla<br>Nerve block anesthesia in mandibl<br>General and local complications du  | ood<br>blastic materials in the orofacial region<br>ting room.<br>facial region: osteology, muscles, vascularization and innervation<br>s<br>oral surgery intervention<br>pain from oral surgical aspect<br>ferent types of local anesthetics<br>he upper and lower jaw<br>- intraoral and extraoral methods<br>le - intraoral and extraoral methods<br>upper and lower jaw and oral surgical instruments   | 2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2                                    |  |  |
| 11   | Oral surgery-orthodontic intervention<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b><br>Anatomical topography of the ord<br>zones<br>Principles of asepsis and antisepsis<br>Preoperative patient evaluation for<br>Pathophysiological mechanisms of<br>Local infiltrative anesthesia and diff<br>Terminal infiltrative anesthesia in the<br>Nerve block anesthesia in maxilla<br>Nerve block anesthesia in mandible<br>General and local complications du<br>Instruments for teeth extractions in<br>Principles of extraction   | ood<br>blastic materials in the orofacial region<br>ting room.<br>facial region: osteology, muscles, vascularization and innervation<br>s<br>oral surgery intervention<br>pain from oral surgical aspect<br>ferent types of local anesthetics<br>he upper and lower jaw<br>- intraoral and extraoral methods<br>le - intraoral and extraoral methods<br>le - intraoral and extraoral methods<br>upper and lower jaw and oral surgical instruments<br>and lower jaw<br>and lower jaw | 2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2                               |  |  |
| 11   | Oral surgery-orthodontic intervention<br>Oral surgery interventions in childh<br>Dental grafts<br>Preprosthetic surgery<br>Application of bone grafts and allop<br>Presence of a student in the operat<br><b>Brief content</b><br><b>Theoretical course</b><br>Anatomical topography of the orof<br>zones<br>Principles of asepsis and antisepsis<br>Preoperative patient evaluation for<br>Pathophysiological mechanisms of<br>Local infiltrative anesthesia and diff<br>Terminal infiltrative anesthesia in th<br>Nerve block anesthesia in maxilla<br>Nerve block anesthesia in mandibl<br>General and local complications du<br>Instruments for teeth extractions in<br>Principles of extraction<br>Typical teeth extractions in upper a<br>Atypical teeth extractions in upper a   | ood<br>blastic materials in the orofacial region<br>ting room.<br>facial region: osteology, muscles, vascularization and innervation<br>s<br>oral surgery intervention<br>pain from oral surgical aspect<br>ferent types of local anesthetics<br>he upper and lower jaw<br>- intraoral and extraoral methods<br>le - intraoral and extraoral methods<br>upper and lower jaw and oral surgical instruments<br>and lower jaw<br>and lower jaw<br>ons                                  | 2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2<br>2 |  |  |

|   | Acute odontogenic infection   | 2     |  |  |  |
|---|---|-------|--|--|--|
|   | Test 1  | 2     |  |  |  |
|   | Complex odontogenic infection   |       |  |  |  |
|   | Basic surgical principles   |       |  |  |  |
|   | Chronic periapical diseases   |       |  |  |  |
|   | Therapeutic procedures in chronic periapical diseases   |       |  |  |  |
|   | Impacted teeth  |       |  |  |  |
|   | Dental radiography in oral surgery  |       |  |  |  |
|   | Prevention and treatment of medical emergencies in the dental office  |       |  |  |  |
|   | Test 2  |       |  |  |  |
|   | Total 4   |       |  |  |  |
|   | Practical lessons:  | Class |  |  |  |
|   | Introduction with oral surgery subject, the tasks, goals and methods<br>Introduction with the procedures and devices for sterilization, asepsis and antisepsis  | 2     |  |  |  |
|   | Medical history( anamnesis) from oral surgical aspect<br>Extraoral and intraoral clinical examination   | 2     |  |  |  |
|   | Anatomical topography of orofacial region - os maxillae, innervation zones and aplication of terminal anesthesia in the upper jaw   |       |  |  |  |
|   | Anatomical topography of orofacial region - os mandibullae, innervation zones and aplicaion of terminal anesthesia in the lower jaw<br>Nerve block anesthesia for the oral branches of n mandibullaris (n alveolaris inferior, n lingualis, n buccalis) | 2     |  |  |  |
|   | Local and general complications during and after application of local anesthesia  | 2     |  |  |  |
|   | Demonstration of instruments for teeth extractions in the upper jaw and oral surgical instruments   |       |  |  |  |
|   | Demonstration of instruments for teeth extractions in the lower jaw   |       |  |  |  |
|   | Principles of extraction  |       |  |  |  |
|   | Typical extractions of different morphological teeth groups   |       |  |  |  |
|   | Test 1  |       |  |  |  |
|   | Typical extractions of different morphological teeth groups   |       |  |  |  |
|   | Atypical teeth extractions in upper and lower jaw   |       |  |  |  |
|   | Complications during teeth extractions  |       |  |  |  |
|   | Complications after teeth extractions   |       |  |  |  |
|   | Typical and atypical teeth extractions in medical compromised patients  |       |  |  |  |
|   | Presence of a student in the operating room during oral surgery intervention  |       |  |  |  |
|   | Test 2  |       |  |  |  |
|   | Total   |       |  |  |  |
|   | Methods of studying: class room oriented lectures, interactive lectures, group work, practical training, seminar paper  |       |  |  |  |
| } | Total available time 240 classes  |       |  |  |  |

| 14 | Organization of the  | ecourse   | 45 classes - theore individual learning a          | tical course, 75 classes-<br>and other activities  | practical course, 120      | classes - home |  |
|----|--|---|--|--|----------------------------|----------------|--|
| 15 | Forms of   | 15.1.   | Theoretical course                                 |  | 45 classes                 |                |  |
|    | teaching<br>activities                                     | 15.2.   | Practical course, se                               | eminars  | Practical cour             | se- 75 classes |  |
| 16 | Other forms of   | 16.1.   | Project tasks                                      |  |                            |                |  |
|    | activities   | 16.2.   | Individual tasks                                   |  |                            |                |  |
|    |  | 16.3.   | Individual (home) le                               | earning  | 120 classes                |                |  |
| 17 | Method of assessment                                       | 17.1.   | Test 1<br>Test 2                                   |  | 20 points<br>10 points     |                |  |
|    |  | 17.2.   | Presence on theore<br>Presence and activ           | 3 points<br>7 points (2+5)                         | 3 points<br>7 points (2+5) |                |  |
|    |  | 17.3.   | Final (oral) exam                                  |  | 60 points                  |                |  |
| 18 | Grading criteria   | Up to 59 p  | Jp to 59 points                                    |  | 5 (five) (F)               |                |  |
|    | (points / grade)   | from 60 to  | from 60 to 67 points                               |  |                            | 6 (six) (E)    |  |
|    |  | from 68 to  | from 68 to 75 points                               |  |                            | 7 (seven) (D)  |  |
|    |  | from 76 to  | from 76 to 84 points                               |  |                            | 8 (eight) (C)  |  |
|    |  | from 85 to 93 points  |  |  | 9 (nine) (B)               | 9 (nine) (B)   |  |
|    |  | from 94 to 100 points   |  |  | 10 (ten) (A)               | 10 (ten) (A)   |  |
|    | signature<br>and taking the<br>final exam                  | Conditional criteria for assessment of knowledge:<br>In order to get a signature, the student should obtain minimum points in both theoretical and<br>practical courses, and to present seminar paper;<br>In order to take the final exam, the student should obtain the minimum points from activity and<br>test;<br>If the student has not obtained the minimum points in the continual assessments, he/she in<br>next exam session will have paper part of the exam (40 points) and final exam (60 points) |  |  |                            |                |  |
| 20 | Language of the course                                     | English   |  |  |                            |                |  |
| 21 | Method for<br>evaluation of<br>the quality of<br>education | Anonymous student's evaluation of the subject, teachers and collaborators involved in the educational activities  |  |  |                            |                |  |
| 22 | Literature   |   |  |  |                            |                |  |
|    | 22.1.  | Mandatory textbooks   |  |  |                            |                |  |
|    |  | No.   | Author   | Title  | Publisher                  | Year           |  |
|    |  | 1   | Neil S. Norton                                     | Netter's Head and<br>Neck Anatomy for<br>Dentistry | Elsevier Saunders          | 2012           |  |
|    |  | 2   | Teachers from the<br>Department of oral<br>surgery | Authorized and systematized lectures               |                            |                |  |
|    |  | 3   | Baart J.A., Brand<br>H.S.                          | Local anesthesia in dentistry                      | Wiley-Blackwell            | 2009           |  |
|    |  | 4   | Fragiskos D.                                       | Oral surgery                                       | Springer                   | 2007           |  |
|    |  | 5   | James R. Hupp                                      | Contemporary oral and maxillofacial                | Mosby, Elsevier            | 2014           |  |

|  |       |                       |                   | surgery  |                      |      |  |
|--|-------|-----------------------|-------------------|--|----------------------|------|--|
|  |       | 6                     | Peterson Larry J. | Contemporary oral<br>and maxillofacial<br>surgery            | Mosby Year Book, Inc | 1993 |  |
|  | 22.2. | Additional literature |                   |  |                      |      |  |
|  |       | No.                   | Author            | Title  | Publisher            | Year |  |
|  |       | 1                     | James W. Little   | Dental Management<br>of the Medically<br>Compromised Patient | Elsevier, Mosby      | 2013 |  |
|  |       | 2                     | Stanley Malamed   | Local anesthesia   | Elsevier             | 2011 |  |
|  |       | 3                     | Stanley Malamed   | Medical emergencies in the dental office                     | Mosby, Elsevier      | 2007 |  |