UNIVERSITÉ ANTONINE

UNIVERSITY INSTITUTE OF TECHNOLOGY

DENTAL LABORATORY SCIENCES UIT-DLS

Welcome Booklet
Academic year 2012-2013
WELCOME

Welcome to the University Institute of Technology-Dental Laboratory Sciences “IUT-DLS”, a higher education institute attached to the Université Antonine.

The “IUT-DLS” is a professional Institute in Lebanon. Its mission is to offer educational program of the highest standard, excellence, integrity, and professionalism in dental laboratory.

The “IUT-DLS” prepares its students in a challenging and intellectually stimulating environment that undergoes continuous improvement for life-long learning in the health profession and empowers them for richer personal and professional services.

The “IUT-DLS” will enhance its status as a world-class professional Institute that attracts eminently qualified outstanding students from the region.

The vision of the “IUT-DLS” is to provide teaching excellence that will enable students to develop into qualified professionals as well as civic-minded and concerned citizens.

So, we wish you a good start for the new academic year 2012-2013

Mr. Nabil ASMAR
Director
Role of the Dental Prothesiste

The dental laboratory specialist takes on significant responsibility as a member of the dental health care team.

A career as a dental prothesiste offers a wide range of challenges. Since each dental patient’s specific needs are different, the duties of a dental prothesiste are comprehensive and varied.

Although the diagnosis and treatment of the patients is the duty of the dentist, the making of the functional dental parts in line with the principles of health and artistry falls to the specialist in dental laboratory.

Although dental laboratory specialist may not work directly with patients, they work directly with the dentist by following detailed written instructions and using impressions of the patient’s teeth or oral soft tissues. From these impressions they create complete dentures, partial dentures, crowns and bridges, ceramics, implant or orthodontic restorations.

After completing three years of study, the student will obtain a university degree in technology equivalent to the bachelor degree in dental laboratory sciences and will earn directly the title of a dental laboratory specialist. He will be able to exercise his profession as a salaried capable of conceiving
most of the dental laboratory restorations and become eligible to be member of the Lebanese Dental Laboratories Association. After three years of experience as a paid employee, he will be able to open and run his own dental laboratory.

☐ **Admission Requirements:**

In the field of dental prosthetics, great artistic skills, solid foundation in Sciences, Art, Health Studies, Computer science, hard work and perseverance are essential in order to reach perfection.

The graduate has to use the highest manual dexterity in order to satisfy the needs of the dentist who in turn must satisfy the needs of his patients.

If you are like doing precision work with your hands, enjoys working independently, and interested in health care, a career as a dental laboratory specialist may be for you.

To register for the IUT-Dental Laboratory Sciences, the candidate must: have the Lebanese “baccalaureate” or any other equivalent official diploma, and pass the entrance test, which includes: Dental drawings; English evaluation test, and an individual interview

**Ms Maya NOHRA**  
Director, Office of Orientation & Admissions,  
And Academic Adviser of the IUT-DLS
University Institute of Technology-Dental Laboratory Sciences

Members of the board of the IUT-DLS:

- Mr. Nabil ASMAR, Director
- Ms. Maya NOHRA, Academic Adviser and Lecturer
- Mr. Georges SAYEGH, Lecturer
- Mr Elie SABBAGH, Lecturer
- Mr François LATTOUF, Lecturer

1. Academic Calendar Year 2012-2013

The academic year is divided into two semesters:
- Fall term (1st semester), and
- Spring term (2nd semester).

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday the 11th to Thursday the 13th of September, 2012</td>
<td>On-line course registration <a href="http://www.upa.edu.lb/inscription">www.upa.edu.lb/inscription</a></td>
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<tr>
<td>Monday the 17th of September, 2012</td>
<td>1st semester classes begin (3rd, &amp; 2nd years)</td>
</tr>
<tr>
<td>Monday the 1st of October, 2012</td>
<td>1st semester classes begin (1st year)</td>
</tr>
<tr>
<td>Friday the 26th of October, 2012</td>
<td>Al Adha*, holiday</td>
</tr>
<tr>
<td>Thursday 1st of November, 2012</td>
<td>Toussaint</td>
</tr>
<tr>
<td>Monday the 12th, Tuesday 13th, &amp; Wednesday the 14th of November, 2012</td>
<td>Midterm exam (3rd, &amp; 2nd years)</td>
</tr>
<tr>
<td>Thursday the 15th of November, 2012</td>
<td>Hijra New Year*, holiday</td>
</tr>
<tr>
<td>Monday the 19th, Tuesday 20th, &amp; Wednesday the 21st of November, 2012</td>
<td>Midterm exam (First year)</td>
</tr>
<tr>
<td>Thursday the 22nd of November, 2012</td>
<td>Independence Day, holiday</td>
</tr>
<tr>
<td>Date/Event</td>
<td>Description</td>
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<tr>
<td>------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>Saturday The 24th of November, 2012</td>
<td>Ashoura*, holiday</td>
</tr>
<tr>
<td>Monday the 24th of December to Tuesday the 1st of January, 2013 (included)</td>
<td>Christmas and New Year Vacation</td>
</tr>
<tr>
<td>Thursday the 10th of January, 2013</td>
<td>Classes end 1st semester</td>
</tr>
<tr>
<td>Tuesday the 15th and Wednesday 16th of January, 2013</td>
<td>Final term exam (3rd, &amp; 2nd years)</td>
</tr>
<tr>
<td>Thursday the 17th of January, 2013</td>
<td>St. Antoine’s Day, holiday</td>
</tr>
<tr>
<td>Friday the 18th of January, 2012</td>
<td>Final term exam (3rd, &amp; 2nd years)</td>
</tr>
<tr>
<td>Wednesday the 23rd of January, 2012</td>
<td>Classes end First year</td>
</tr>
<tr>
<td>Thursday the 24th of January, 2013</td>
<td>Prophet’s Birthday, holiday</td>
</tr>
<tr>
<td>Wednesday the 30th of January, 2012</td>
<td>Results (3rd, &amp; 2nd years)</td>
</tr>
<tr>
<td>Monday the 21th to Friday the 1th of February, 2013 (included)</td>
<td>Winter vacation (3rd, &amp; 2nd years)</td>
</tr>
<tr>
<td>Wednesday the 30th, Thursday the 31th, &amp; Friday 1st of February, 2012</td>
<td>Final term exam (1st year)</td>
</tr>
<tr>
<td>Monday the 4th to Friday 15th of February, 2012 (included)</td>
<td>Winter vacation (1st year)</td>
</tr>
<tr>
<td>Tuesday the 12th of February, 2012</td>
<td>Results First year</td>
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**Spring term 2012-2013**

<table>
<thead>
<tr>
<th>Date/Event</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Monday the 4th of February, 2013</td>
<td>2nd semester classes begin (3rd, &amp; 2nd years)</td>
</tr>
<tr>
<td>Monday the 18th of February, 2013</td>
<td>2nd semester classes begin (1st year)</td>
</tr>
<tr>
<td>Saturday the 9th of February, 2013</td>
<td>St. Maroun’s Day, holiday</td>
</tr>
<tr>
<td>Monday the 25th of March, 2013</td>
<td>Annunciation Day, holiday</td>
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<tr>
<td>Tuesday the 26th, &amp; Wednesday the 27th of March, 2013</td>
<td>Midterm exam (3rd, &amp; 2nd years)</td>
</tr>
<tr>
<td>Thursday the 28th of March to Friday 5th of April 2013 (included)</td>
<td>Easter vacation</td>
</tr>
<tr>
<td>Monday the 22th, Tuesday the 23rd, &amp; Wednesday the 24th of April, 2012</td>
<td>Midterm exam (1st year)</td>
</tr>
<tr>
<td>Wednesday the 1st of May, 2013</td>
<td>Labor day, holiday</td>
</tr>
<tr>
<td>Thursday the 2th of May to Monday</td>
<td>Easter vacation</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>6th of May 2013 (included)</td>
<td>Lady of Spring, holiday</td>
</tr>
<tr>
<td>Wednesday the 15th of May, 2013</td>
<td>2nd semester classes end (3rd, &amp; 2nd years)</td>
</tr>
<tr>
<td>Thursday the 24th of May, 2013</td>
<td>2nd semester classes end (1st year)</td>
</tr>
<tr>
<td>Friday the 14th of June, 2012</td>
<td>Final term exam (laboratory work) Third year</td>
</tr>
<tr>
<td>Monday the 27th to Friday the 31st of May, 2013</td>
<td>Scientific Congress DLS</td>
</tr>
<tr>
<td>Friday the 7th, and Saturday the 8th of June, 2013</td>
<td>2nd semester classes end (1st year)</td>
</tr>
<tr>
<td>Monday the 10th, Wednesday the 12th, &amp; Friday the 14th of June, 2013</td>
<td>Final term exam (Theory) Third year</td>
</tr>
<tr>
<td>Thursday the 13th to Tuesday the 18th of June, 2013</td>
<td>Final term exam (laboratory work) Second year</td>
</tr>
<tr>
<td>Thursday the 6th, Monday the 10th, and Wednesday the 12th of June, 2013</td>
<td>Final term exam (Theory) Second year</td>
</tr>
<tr>
<td>Thursday the 20th, Friday the 21st, &amp; Monday 24th of June, 2012</td>
<td>Final term exam (Theory) First year</td>
</tr>
<tr>
<td>Tuesday the 25th to Friday the 28th of June, 2012</td>
<td>Final term exam (laboratory work) First year</td>
</tr>
<tr>
<td>Friday the June 21th of June, 2012</td>
<td>Results Third year</td>
</tr>
<tr>
<td>Friday the 28th of June, 2012</td>
<td>Results Second year</td>
</tr>
<tr>
<td>Friday the 12th of July, 2012</td>
<td>Results First year</td>
</tr>
</tbody>
</table>

2. Schedules and teaching premises

To get acknowledged with the premises, schedules, class rooms, practical work rooms and laboratories, go to:

- The electronic LCD is located on the administrative floor of your Institute (B.3)

- Université Antonine site: [http//www.upa.edu.lb](http://www.upa.edu.lb)
  IUT-DLS: (Administrative Circular)

If there is a course cancellation or a change in the rooms or in the schedule, you will be informed by the teacher during your courses, and the information will be confirmed according to a circular on an electronic LCD. Usually the electronic LCD is
found next to the administration office of each faculty/Institute (B.3).

☐ Identification of the room’s number

All the offices, the amphitheatres, class rooms, practical work rooms and laboratories, are identified by specific numbers that contain 3 distinct numbers.

Example:
- B.2.3 means Building B, 2nd floor, room 3
- C.1.4 means Building C, 1st floor, room 4

3. Your Educational Project

The team is at your disposal all year long, in order to inform, orientate and accompany the students. Do not hesitate to ask for an appointment to see the person with regard to this matter in order to obtain answers to all your questions.

In order to succeed in your education, the team is destined to stand by you to pave the pass and guide you by giving appropriate counseling whatever the difficulties might be.

Institute Administrative Support:

- Director: Mr. Nabil ASMAR
- Academic Consultant and Lecturer: Ms. Maya NOHRA
- Lecturer: Mr. Georges SAYEGH
- Administrative Assistant: Mrs. Mira N. CHEHWAN

4. IUT - Dental Laboratory Sciences
Admission requirements:
- Lebanese baccalaureate SV, SG, LH, & SE, and
- Entrance test including:
  - Dental drawing,
  - English placement test and
  - an Individual interview

Curriculum:
The program is completed in three calendar years. The curriculum of the DUT degree in dental laboratory Sciences is divided into six semester’s equivalent to seventy-eight weeks, totaling 101 credits:
  - 22 credits general requirements
  - 79 credits major requirements

One theory credit is equal to 15 hours of teaching & evaluation; One laboratory credit is equal to 45 hours of teaching & evaluation.

The candidate must accomplish 2635 hours of three study years. The necessary training is carried out in related laboratories, workshops and summer practices throughout the three academic years.

Degree:
After completing 101 credits, the student will obtain a University Diploma of Technology in Dental Laboratory Sciences “DUT” equivalent to the Bachelor degree in Dental Laboratory Sciences by the Ministry of Education and Higher Education.

Detailed program:
First Year (S1 & S2)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Value</th>
<th>Average Required</th>
<th>Assessment Result /100</th>
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</thead>
<tbody>
<tr>
<td>CLR 1001</td>
<td>MS-A1/A2 or Remedial English-B1 or Academic Reading &amp; Writing-B2</td>
<td>2</td>
<td>50</td>
<td>S1 + S2</td>
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<tr>
<td>CLR 1002</td>
<td>DHA 1111 Dental Human Anatomy</td>
<td>3</td>
<td>50</td>
<td>S1 + S2</td>
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<tr>
<td>CLR 3001</td>
<td>DMT 1011 Dental Morphology TH</td>
<td>3</td>
<td>50</td>
<td>S1 + S2</td>
</tr>
<tr>
<td></td>
<td>DML 1021 Dental Morphology LW</td>
<td>3</td>
<td>60</td>
<td>S1 + S2</td>
</tr>
<tr>
<td></td>
<td>FDT 1031 Fixed Dental Prosthesis TH I</td>
<td>3</td>
<td>50</td>
<td>S1 + S2</td>
</tr>
<tr>
<td></td>
<td>FDL 1041 Fixed Dental Prosthesis LW I</td>
<td>3</td>
<td>60</td>
<td>S1 + S2</td>
</tr>
<tr>
<td></td>
<td>CSI 1121 Introduction to Computer Facilities</td>
<td>3</td>
<td>50</td>
<td>S1</td>
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<tr>
<td></td>
<td>RCT 1051 Removable Complete Denture TH I</td>
<td>3</td>
<td>50</td>
<td>S1 + S2</td>
</tr>
<tr>
<td></td>
<td>RCL 1061 Removable Complete Denture LW I</td>
<td>3</td>
<td>60</td>
<td>S1 + S2</td>
</tr>
<tr>
<td></td>
<td>RPT 1071 Removable Partial Denture TH I</td>
<td>3</td>
<td>50</td>
<td>S1 + S2</td>
</tr>
<tr>
<td></td>
<td>RPL 1081 Removable Partial Denture LW I</td>
<td>3</td>
<td>60</td>
<td>S1 + S2</td>
</tr>
<tr>
<td></td>
<td>SDM 1131 Science of Dental Materials</td>
<td>3</td>
<td>50</td>
<td>S1 + S2</td>
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Second Year (S3 & S4)

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<th>Course Code</th>
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<th>Credit Value</th>
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<th>Assessment Result /100</th>
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<tr>
<td>CLR 2002</td>
<td>Remedial English-B1 or Academic Reading &amp; Writing-B2/TOEFL or English for Professionnal-C1</td>
<td>2</td>
<td>50</td>
<td>S3 + S4</td>
</tr>
<tr>
<td>CLR 2003</td>
<td>BMG 2112 Introduction to Business</td>
<td>3</td>
<td>50</td>
<td>S3 + S4</td>
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<tr>
<td>CLR 3002</td>
<td>DOC 2122 Dental Occlusion</td>
<td>3</td>
<td>50</td>
<td>S3 + S4</td>
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<tr>
<td></td>
<td>EMC 2122 Emergency Care</td>
<td>3</td>
<td>50</td>
<td>S3 + S4</td>
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<td>FDT 2032 Fixed Dental Prosthesis TH II</td>
<td>3</td>
<td>50</td>
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<td></td>
<td>FDL 2042 Fixed Dental Prosthesis LW II</td>
<td>3</td>
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<td>OTT 2092 Orthodontic Technology TH I</td>
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<td>RPL 2082 Removable Partial Denture LW II</td>
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Third Year (S4 & S5)
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<tr>
<td>BLE 3113</td>
<td>Business Law &amp; Ethics</td>
<td>3</td>
<td>50</td>
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<tr>
<td>DPT 3013</td>
<td>Dental Porcelain TH</td>
<td>3</td>
<td>50</td>
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<tr>
<td>DPL 3023</td>
<td>Dental Porcelain LW</td>
<td>3</td>
<td>60</td>
<td>S5 + S6</td>
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<tr>
<td>CLR 3003</td>
<td>English for Specific Purposes for Dental Prosthetics</td>
<td>3</td>
<td>50</td>
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<td>FIE 3033</td>
<td>Fixed Restoratives, Implants &amp; Esthetic in Dentistry TH</td>
<td>3</td>
<td>50</td>
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<tr>
<td>FRE 3043</td>
<td>Fixed Restoratives, Implants &amp; Esthetic in Dentistry LW</td>
<td>3</td>
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<td>OTL 3103</td>
<td>Orthodontic Technology II</td>
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<td>RCO 3053</td>
<td>Removable Complete Dentures &amp; Overdentures TH</td>
<td>3</td>
<td>50</td>
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<tr>
<td>RCO 3063</td>
<td>Removable Complete Dentures &amp; Overdentures LW</td>
<td>3</td>
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<tr>
<td>RPT 3073</td>
<td>Removable Partial Denture TH III</td>
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<td>RPL 3083</td>
<td>Removable Partial Denture LW III</td>
<td>3</td>
<td>60</td>
<td>S5 + S6</td>
</tr>
</tbody>
</table>

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Students must successfully undergo a course schedule that contains theoretical and hands-on classes. The courses in The IUT-DLS are listed into two categories: the main courses directly related to the major, and the complementary courses.

The average required for:

- The complementary courses: 50/100
- The main theoretical courses: 50/100
- The main hands-on courses: 60/100

A grade below the required average is considered eliminatory. In this case the student has to register, and to attend again the course in question.
5. What is a DUT Degree?

The DUT is a professional qualification representing 3 years of study after the baccalaureate. This program focuses on the practical aspects of the science more than the theoretical part.

DUT graduates are able to:
- Begin a career immediately after graduation.
- Adapt and respond quickly to technological developments.

6. Lebanese Dental Laboratories Association

After completing three years of study (101 credits), the student will obtain a bachelor degree in dental Laboratory Sciences, and will earn directly the title of a dental laboratory specialist. He will be able to exercise his profession as a salaried capable of conceiving most of the dental laboratory restorations and become eligible to be member of the Lebanese Dental Laboratories Association. After three years of experience as a paid employee, he will be able to open and run his own dental laboratory.

7. Course Descriptions

DHA 1111 Dental Human Anatomy (3 credits)
Knowledge of dental anatomy is fundamental in the study and practice of all the disciplines of dentistry. It is essential in diagnosis, treatment planning and treatment. In this course Head and neck anatomy will be presented basically to understand the function and constitution of the oral cavity. Tooth structure, bony jaws, the face cavities, the skull in general, the masticator and the facial expression muscles, the tongue, nerves, blood supply and all structures related to oral cavity will be discussed.
DMT 1011 Dental Morphology TH (3 credits)
This course consists of teaching the morphology and root canal anatomy of each permanent tooth. It is essential for every dental prothesiste who wants to succeed in his works to have a good knowledge of tooth morphology. The objective of this course is to make the student very familiar with the teeth, to memorize their shapes.

DML 1021 Dental Morphology LW (3 credits)
The objective of this course is to make the student very familiar with the teeth, to memorize the shape of each tooth. Laboratory classes consist of carving the upper and lower teeth from the central incisors to the third molars using wax blocks (four times bigger than natural size and then twice bigger than natural teeth). Carving teeth help the student to have better knowledge, and better manual dexterity in making crowns, inlays, ceramics and other restorative treatment.

FDT 1031 Fixed Dental Prosthesis TH I (3 credits)
This course will develop all types of fixed restorations, the different materials used, and the laboratory procedures required to fabricate fixed restorations (master model with removable dies, crowns, inlays, bridges, and porcelain fused to metal). An understanding of these techniques and competence in them will enable the dental prothesiste to progress to more refined techniques. At the end of this course the student will be able to define, describe and explain the use of the various types of fixed restorations, and to differentiate between them.

FDL 1041 Fixed Dental Prosthesis LW I (3 credits)
This course is designed to give the student maximum hands-on training and experience in a real working dental laboratory very well equipped. The student will be taught the dental laboratory procedures and skills needed to fabricate master models with removable dies, to identify different margins, and to construct wax pattern using the very best technology available. This course involves a careful examination of drafting, as a tool of
communication and visualization to introduce student to various forms of teeth as well as various types of fixed restorations.

**CSI 1121 Introduction to Computer Facilities (3 credits)**
This course is designed to help students become proficient in Microsoft Office. Using Office will better prepare them for their studies in their Bachelor degree. By the end of this course students should be able to use Microsoft Office proficiently (Excel, Word and PowerPoint).

**RCT 1051 Removable Complete Denture TH I (3 credits)**
Laboratory classes in removable complete denture LW I&II consist of pouring models, fabricating individual custom trays using different techniques, fabricating occlusion rims for the upper and lower cast using different techniques. Student will be able to identify these anatomic landmarks on the edentulous study cast of the maxilla and the mandible.

**RCL 1061 Removable Complete Denture LW I (3 credits)**
This course teaches the new student how to treat persons who lost all their teeth by fabricating a device called a “removable complete denture”. Additional dental culture and management are also diffused during the theory and or the lab sessions helping the student to master and control his skills to match with excellence the requirements of a quality dental market.

**RPT 1071 Removable Partial Denture TH I (3 credits)**
This is the first course in removable partial denture. Its purposes are to introduce the student to the basic principles of removable partial prosthodontics. The course will address the treatment of impressions, and the making of a cast. Students will acquire the knowledge and skills to diagnose and treat the case. They will learn the fundamentals of nomenclature, classification, survey and design of a removable partial denture.

**RPL 1081 Removable Partial Denture LW I (3 credits)**
It is important that students gain a fundamental background in the following: Treatment planning survey and design; Pouring impressions, preliminary and secondary; Making preliminary
casts and master cast; Working with different materials for example: stone, resin and wax.

**SDM 1131 Science of Dental Materials (3 credits)**
This course is designed to study the history, the ADA specifications, the composition, the general properties, the classifications and the uses of dental materials. It provides policies related to hygiene and security control. This course improves knowledge related to the physical, mechanical, and chemical properties of Dental Materials. It provides the necessary tools and principles of Dental Materials that are currently used in dental laboratory and covers the underlying principles of their functional properties, and biocompatibility. The laboratory exercises are designed to illustrate the properties and uses of the materials studied and the result of proper and improper manipulation.

**BMG 2112 Introduction to Business (3 credits)**
The general objective of this course is to prepare the students to understand the foundations of business knowledge and familiarize them with how businesses operate and how they are initially organized.

The “Introduction to Business” course will also enable students to overview the different topics in Business such as management, marketing, finance, accounting, human resources and will help them to pull them all together.

**DOC 2122 Dental Occlusion (3 credits)**
It is a basic subject in the dental practice; it signifies the relation between the teeth in their different positions. This course will include the physiology of occlusion, the determinants of occlusion, and popular occlusion theory and techniques.

**EMC 2122 Emergency Care (3 credits)**
This course will provide the student with the knowledge and skills necessary to manage ill or injured victims at the scene of an
emergency until the arrival of course personnel. A certificate will be delivered to the student, upon Successful completion of this course, as a medical first responder.

**FDT 2032 Fixed Dental Prosthesis TH II (3 credits)**
The student will show the capacity of understanding the different procedures followed to make a successful cast preparation and to have a clear view of tooth morphology in space which are fundamental knowledge to make an esthetical and functional porcelain restoration.

**FDL 2042 Fixed Dental Prosthesis LW II (3 credits)**
This course gives the student the ability to make crowns, bridges and inlay cores until the final casting. The student will also be able to learn about tooth anatomy, esthetics, contour, and outlines.

**OTT 2092 Orthodontic Technology TH I (3 credits)**
The main objective of these chapters is to inform students about the materials used to fabricate orthodontic wires and how to manipulate them in order to create clasps without deforming the structure of the wire, then to know the orthodontic measurements and finally to execute all kinds of orthodontic removable appliances.

**OTL 2102 Orthodontic Technology LW I (2 credits)**
During the lab work the student practice the bending of orthodontic wires following a relief, he will be able to execute Adams clasps according to a specified order in addition to labial arch and finally the application of auto polymerizing resin in order to form a removable appliance.

**RCT 2052 Removable Complete Denture TH II (3 credits)**
At the end of this course, students will be familiar with the correct procedures for making removable complete dentures. What is a normal occlusion, what is the nature of abnormalities which can occurs, and how problems can be solved in order to give the patient the most functional and esthetic result.
RCL 2062 Removable Complete Denture LW II (3 credits)
The student should demonstrate the abilities and the skills to do laboratory procedures from mounting on articulators, arranging and setting artificial teeth in esthetic and functional harmony until wax contouring and smoothing. During laboratory classes the student will understand the biological and mechanical aspect of complete denture, discuss the elements and component of complete denture, and outline the functions of the appliance.

RPT 2072 Removable Partial Denture TH II (3 credits)
Students will acquire the knowledge and skills to construct a removable partial denture metal framework along with the basic sequence as it relates to constructions. They will gain a knowledge and appreciation for the supporting dental laboratory procedure.

RPL 2082 Removable Partial Denture LW II (3 credits)
Students will acquire the knowledge and skills to fabricate an appliance metal framework preparation to completion of the prosthesis.

BLE 3113 Business Law & Ethics (3 credits)
The course introduces the students to the laws of employment and the CNSS, which is a good knowledge to them since they are going to start working soon and will surely be helpful to them in their future life. Business ethics involves applying ethical principles to the activities of business and to the relationships between businesses and various stakeholders. It applies to a wide range of business activity such as relationships with suppliers, employees, and consumers as well as the overall system by which a company is directed and controlled (i.e. governance).

DPT 3013 Dental Porcelain TH (3 credits)
The course starts with the porcelain history then theoretical knowledge of the fundamental physical and mechanical properties of the ceramic to meet the challenges of modern dentistry. Students will be able to understand the techniques
required to control these properties in order to obtain optimal clinical results and better communication with the dentist.

**DPL 3023 Dental Porcelain LW (3 credits)**
The student must be able to wax and cast precisely simple, combined and complicated cases, and built up the porcelain with proper shape until glaze.

**FIE 3033 Fixed Restoratives, Implants & Esthetic in Dentistry TH (3 credits)**
This course goes into details: indication for a Maryland bridge, rules for making a telescopic crown and combined case with the partial denture, principles and use of implants in dentistry: includes history, biological basis, types, diagnosis and treatment planning, surgical and restorative procedures, and limitations. Laboratory and clinic experience in fabrication and placement of implant retained prostheses, definition and relationship of elements of esthetics; development of clinical and dental laboratory skills in care of patients with esthetic needs. The student will be able to plan for all different cases he may faced in his future laboratory and facilitate the communication with the dentist.

**FRE 3043 Fixed Restoratives, Implants & Esthetic in Dentistry LW (3 credits)**
The student will be able to improve the external appearance of the tooth. He will be able to wax and cast precisely a simple case, a combined work, complicated cases, as well as Implants restorations. He will also be able to build up porcelain with proper shape until glaze.

**OTL 3103 Orthodontic Technology II (2 credits)**
The student will be able to compare between normal and abnormal statement of human teeth, and will have knowledge of different dental classifications, and where to use fixed appliances in addition to the functional therapy that leads to execute functional appliances. The student will be able to construct removable appliances with different springs and screws, to make
fixed arches and finally make an activator or mono bloc which is a functional appliance.

**RCO 3053 Removable Complete Dentures & Overdentures TH (3 credits)**

Numerous anatomical, histological, physiological, and mechanical data intervene in a permanent way in complete denture teaching (all, in replacement of the lost natural dentition of the maxillas and the mandibles). This course offers the student as well, the comprehension of the communication problems between the dentist and the technician in order to better insure the patient’s needs, and the principles and use of implants in dentistry: includes history, biological basis, types, diagnosis and treatment planning, surgical and restorative procedures, and limitations. Laboratory and clinic experience in fabrication and placement of implant retained prostheses.

**RCO 3063 Removable Complete Denture Devices & Overdentures LW (3 credits)**

This course enables the student to acquire abilities and skills to do all laboratory procedures related to the construction of a complete denture. He will be able: to understand the various components of a complete denture, and to apply and use various materials, instruments and devices, involved in the construction of a complete denture. This course also covers implant overdentures (removable implant prostheses).

**RPT 3073 Removable Partial Denture TH III (3 credits)**

This course of RPD consists of didactic and practical components. The primary goal of this course is to familiarize the student with the biological and technical aspect of RPD and their integration with the clinical procedures to be taught in the successive clinical prosthodontic courses.
RPL 3083 Removable Partial Denture LW III (3 credits)
The student should demonstrate the abilities and skills to do all the laboratory procedures related to the construction of an RPD metal and resin.

CLR 1001 Multi-skills for Beginner & Low Intermediate students-A1/A2 (2 credits)
Designed for Dental Prosthetics students who score between 6-8½ /20 on the English Placement Test (EPT) but need additional exposure to the English for low-intermediate learners, this course balances academic listening, reading, writing and speaking, using motivating and relevant topics. Grammatical and textual elements will increase in difficulty as the semester progresses.

CLR 1002 Remedial English-B1 (RE-B1) (2 credits)
This course is designed for Dental Prosthetics students who score between 9-12 /20 on the English Placement Test and are quite advanced in their understanding of the language but need additional exposure to more advanced reading, writing, grammar and vocabulary. The class is challenging and academic.

CLR 3001 Academic Reading and Writing-B2 (ARW-B2) (2 credits)
Designed for Dental Prosthetics students who score above 12½ /20 and are the most advanced students who enter the program, this course is designed to begin students’ immersion into the reading and writing demands of their university classes. Advanced grammar and academic lexicon will be presented and practiced.

CLR 2003 Academic Reading and Writing-B2/TOEFL (ARW-B2/TOEFL) (2 credits)
Designed for Dental Prosthetics students who have completed Remedial English/B1 in Year 1, this course concentrates upon the language, expository (non-fiction) texts, and assessment approaches from the TOEFL Examination. Although this examination is the focus of the class, students will participate in a
variety of advanced activities that are interesting—and separate from examination practice.

**CLR 3002 English for Professional-C1 (EFP-C1) (2 credits)**
Designed for Dental Prosthetics students who have completed Academic Reading and Writing-B2 in Year 1, this advanced course prepares students for a variety of professional opportunities. Students practice writing resumes, participate in interview role-playing, and learn more about appropriate emails and other technology for their professional lives.

**CLR 3033 ESP for Dental Prosthetics (3 credits)**
This is an English course for students of dental prosthetics who will require a working knowledge of the English of their chosen profession. It is good preparation for future professionals planning working in this field where English is the spoken, and often the written, language. The course offers to the students a variety of topics related to their career.

**8. Training Center**

Université Antonine & Amann Girrbach CAD-CAM Training Center has been established to satisfy the growing needs of professional skills in Lebanon, Middle East and Pacific Asia. Working dental prothesiste, students and alumni can benefit from a series of seminars and hands-on training courses held by international and national lecturers and trainers.

**9. Rules and Regulations**

You will find below an extract of the General Discipline of the Dental Laboratory Institute:

**A. General Discipline**

- Every act capable of breaching the good functioning of teaching is forbidden.
It is also forbidden to:

- Talk or have fun during courses;
- Take care of something else during teaching hours apart from paying attention to the course or accomplishing university tasks that are required;
- Eat, drink or chew during lessons and Laboratory work;
- Smoke in classrooms, laboratories, corridors or stairs;
- Use the mobile phone or have it in working premises;
- Take out material or documents from the department without written authorization;
- Move about in working premises during teaching hours;
- Distribute printed books or paper, or leaflets without authorization unless they are in relation with identified legal or conventional prerogatives;
- Lacerate posters or ruin posters or notes placed on boards reserved to the direction or the students’ representatives;
- Write down or post up things outside cases foreseen by provisions related to students’ representatives.

Students must respect the environment in which they move around in addition to nature, premises, furniture, material, etc… and before anything else, with who they share the educational surrounding. Every act of vandalism is followed by indemnification and amends in terms of the caused damage.

No association or group of persons or individuals is permitted to take measures on the suspension, the cessation or postponement of meetings (courses, TD and TP). Only the competent authority of the UPA is responsible for passing the administrative and academic communications in the form of circulars. In the absence of compliance with the foregoing, the individual (s) person (s) in question (s) may (will) administer penalties.
The compositions in relation with the mid terms exams are given back to students. The compositions in relation to the final exams are kept in the general secretariat as the university’s property in accordance with the Lebanese law taken into effect. The student who wishes to look at his/her composition of the final exam (fall and spring) within **one week** following the online grades publication, may risk a sanction of -5/20, if the grade turns out to be correct or if there is no error while counting the grades. Otherwise, the student benefits from the formal rectification of his/her grade. There is no possibility, no matter the case, after looking at the composition, to ask the teacher for a second correction of the exam.

**B. Organization of the Curriculum**

1. The studies are the “raison d'être” of the faculty, staff, its premises and its equipment. The life of the Faculty is organized for this primary purpose and will safeguard the success and the smooth functioning of their studies.

2. Each person should scrupulously avoid anything that might prejudice the effectiveness of education or constitute an obstacle to their normal course of study.

3. The implementation of the curriculum, the organization of the schedule, the codification of the course, the notification of the time and the consistency of the subjects taught, are the exclusive ownership of the academic authorities.

**C. Attendance and Delay**

In the IUT-DLS, as it is in all other units dependent on the Université Antonine, assiduity is a must. All students are asked to participate in a personal and active way in all academic activities foreseen by the statute.
1. Students are expected to attend all classes (lectures, practice sessions, trainings, etc.). Absence by students from any class or laboratory session, does not excuse them from their responsibility for the work done or for any announcements made during their absence.

2. Students should be present on the premises 10 minutes before the beginning of the class.

3. Any delay, (more than 15 minutes since the beginning of the lecture) will be considered as an absence, unless mentioned otherwise by the teacher in charge. After 15 minutes of the beginning of the lecture, the student may be admitted to class only if the teacher allows it, but no attendance will be counted. Latecomers must tell the Institute administration the reasons of their delay.

4. Students are not allowed to leave class before the end of the course, unless they have the authorization from the institute direction or the teacher.

5. It is forbidden that the student skip the same study period if he doesn’t have permission from the administration board.

6. If the teacher has expelled the student 3 times from the same course, he/she will be considered as resigning.

7. Students who are absent from more than 25% of the total course during a semester lose all credit for the course. The student will be denied the right to pass the final exam, and he/she will have to repeat the course again.

8. A student cannot withdraw from a course or courses after the announced deadline unless approved by the General Secretary and the appropriate institute committee.
9. In case of a prolonged absence without justification and authorization, the student will be considered as resigning from the course; and whatever the issue may be, the student will not be able to insist upon one’s right concerning its process formation.

10. Excuses and medical reports must be presented the **day after the absence day** and they should be given to the Secretariat of the department (1\textsuperscript{st} floor). The refusal or approval of the medical excuse / report will be communicated to the student in question in writing. Every document presented after the abovementioned delay is seen as invalid.

11. Derogation claims must be deposited at the General Secretariat of UPA at the latest on the 12\textsuperscript{th} of November 2012 for the 1\textsuperscript{st} semester and on the 11\textsuperscript{th} of March 2013 for the second semester. Each case will be examined alone and the concerned students will receive a written letter relating to the final decision of the General Secretary. Attendance being the rule, derogations will be given with limits.

12. During the end of each semester deliberations, all these irregularities will be taken into consideration.

13. Attendance and assiduity are graded, and the grade constitutes 10\% of the total grade of any given course. The grades are distributed as follows:

<table>
<thead>
<tr>
<th>Absence</th>
<th>Grade (10\textsuperscript{th})</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 5%</td>
<td>+ 10/100</td>
</tr>
<tr>
<td>&gt; 5% &amp; ≤ 10%</td>
<td>+ 8/100</td>
</tr>
<tr>
<td>&gt; 10% &amp; ≤ 15%</td>
<td>+ 5/100</td>
</tr>
<tr>
<td>&gt; 15% &amp; ≤ 20%</td>
<td>+ 3/100</td>
</tr>
<tr>
<td>≥ 20%</td>
<td>+ 0/100</td>
</tr>
<tr>
<td>≥ 25%</td>
<td>Penalty</td>
</tr>
</tbody>
</table>

Academic authority has the power to determine and define the topics mentioned in the previous paragraph.
14. The courses timetable and all the academic activities are fixed by the administrative staff of the Institute.

15. Only the academic authority of the Institute reserves the right to modify the schedule, should the occasion arise, during the academic year. Consequently, students should be available with a view to possible modifications between Monday and Saturday.

16. Teachers cannot be bothered nor can they be objects to shameful actions. Dialogue between the teacher and the student remains a main value within the ethical system of the UPA.

D. Students

1. Students are given the right to expect, and to require a solid and an adequate education.

2. The statutes and the principals policies applied across the university must be respected by all students with honesty and integrity. Students must contribute to the intellectual and cultural vitality of the university community. They must seek to uphold the highest ethical and professional standards.

3. Student’s registration constitutes a formal engagement of the candidate or his/her legitimate tutor to abide by the principals policies and rules applied by the university.

4. Applications for registration must be submitted by the candidate on time and according to the principals and procedures applied by the administration. The administration will ensure the legal control of the registration’s principals and procedures.

5. Students are responsible for their own actions; they are only judged according to their behaviors and their satisfactory
legal situations. The UPA does not discriminate by religion, race, sex or social status.

6. The Admissions Office of the UPA provides notification of the required entrance test evaluation or examination. The object of this test is to determine if the students meet the UPA academic requirement for admission.

7. Only the registration in the Faculty/Institute for the academic year grants the admitted candidate the quality of student in the Université Antonine.

8. Registration gives the student the right to have the student’s card of the year according to the format established by the direction.

9. Student card may be required at any time at the university. The student card is particularly important during exam admission, in the Library of the university or one of its units regarding books taken or received. The card may be required at any time for participation in any student activity.

E. Examinations and Quizzes

- Continuous assessment of knowledge and exams

1. The Evaluation process consists of quizzes, continuous assessment, and an exam at the end of each semester.

2. During each test, students will be informed if they are authorized or not to use documents. By default, documents are prohibited.

3. Tests may include all chapters students have studied since the beginning of the current academic year.
4. Dates of the midterm and final term exams are published by the administration of the Institute at the beginning of each academic year. The administration is entitled to modify the dates of the exams that appear on a calendar.

5. Students are not allowed to be absent from announced quiz. Students who miss a quiz must present an excuse considered valid by the instructor of the course. The instructor should then require the student to take a make-up quiz.

6. Students are not allowed to be absent from announced final and midterm examinations. Students who miss a midterm or a final term examination must present an excuse considered valid by the Direction of the institute and the General Secretary. The direction of the institute should then require the student to take a second chance examination and paid 25$. Only one make-up examination is scheduled at the end of the academic year (end of June or July).

7. At the end of each semester, the total grade of each course obtained from the quizzes, midterm, and final term examinations are over 100.

8. The grades for the practical and theoretical courses are distributed as follows:

   Theoretical courses:  
   10% attendance and assiduity  
   20% quizzes and projects  
   30% midterm exam  
   40% final exam  

   Hands on courses Fall:  
   10% attendance and assiduity  
   90% progressive Period  

   Hands on courses spring:  
   10% attendance and assiduity  
   60% progressive period exam
30% final exam

English Courses: 10% attendance and assiduity
30% quizzes and projects
30% progressive period
30% final exam

9. At the end of the year, all the grades of the theoretical and hands on courses are calculated according to the following formula:
   - 50% of the first semester added to
   - 50% of the second semester

10. The administration of the IUT-DLS, in accordance with the lectures, can modify these distributions and communicate the changes to the students at the beginning of each semester for each course.

11. The final grade of each repeated course in the make-up exam will be the total of:
   - The grade of the 2\textsuperscript{nd} chance exam representing 80%, and
   - The grade of the final exam representing 20%.

12. Each course with a grade below the required average will be considered not valid or not earned. The student should attend the course in question, even if this procedure deprives him of attending another course decided for this year (conflict problems).

13. Registration fees and, the payment must be respected. Otherwise, students risk being penalized academically as well as have disciplinary measures taken against them.

14. Failing more than 2 main courses (hands on) planned for the year will lead to the student repeating their year.
F. General rules for continuous, midterm and final term examinations

Before entering the classroom

1- Are strictly prohibited in exam rooms:
   - Hand or backpacks
   - Documents (unless mentioned otherwise)
   - Mobiles
   - Snacks
   - Drinks (except for water)

1- Students coming late cannot enter without the permission of the General Secretary

2- Students who failed to pass the mid-term or the final exams because of health problems must show a medical report issued only by the university, signed by UPA Doctor Gaby Moukarzel, other reports are not accepted

In the classroom

3- Students are advised to:
   - Take the place indicated by the invigilator,
   - Present their ID card of the current year.

4- It is strictly prohibited to:
   - Talk about any subject with teachers or invigilators
   - Argue with the invigilator regarding any decisions taken,
   - Borrow materials from colleagues
   - Any communication with a third party must go through the authorized invigilator.

5- It is strictly unacceptable to:
   - Smoke,
   - Leave the room temporarily,
   - Exchange work materials (calculators, rulers, erasers),
• Give back the paper within the first 30 minutes of the examination.

6- Any attempt to cheat is punished by taking the exam paper and may lead to the cancellation of all exam sessions for the student – this includes the possibility of standing before the disciplinary council.

7- Any recording or any writing on documents admitted for test such as books, codes, etc ... will be considered as attempted fraud, and therefore liable to the same penalties mentioned above.

8- When the student finishes his/her exam, they signal to the supervisor. The latter takes the paper and allows them to leave. While waiting for permission to leave, the student must sit silently in his/her place. This rule is equally applicable at the end of examination.

9- Unless otherwise mentioned, students shall only use blue or black ink while writing their mid or final exams. Any failure to do this will be considered as cheating.

10- Once the student is admitted to the examination classroom and has taken possession of the examination sheet, he/she can no longer invoke his/her right to take the makeup exam, no matter the reason.

When leaving the classroom

11- Students are urged to:
   o Leave silently,
   o Evacuate rapidly down the lobbies and stairs.

12- Students can check their final exam grades before the General Secretariat within one week from the online communication of the semester results.
G. The hygiene and the security in the Dental Laboratory

Hygienic conditions and safety practices are absolutely essential for the welfare of the laboratory prothesiste. He must respect the rules when working.

1. Students must put their clothes and personal materials in the lockers.
2. Students must wear convenient clothes and strictly follow the rules.
3. During training, students must follow the instructions of the teacher.
4. Clothing must be appropriate, white blouse is obligatory.
5. Students must accomplish their hands on work in time, in the dental laboratories of the University.
6. They must keep the internal and external premises clean.
7. The easiest way to maintain a neat work area is to clean after each procedure.
8. The work bench and the drawer of each student must be cleaned before leaving the laboratory.
9. The Bunsen burner of each student must be turned off before leaving the laboratory.
10. Students are responsible to put back in its place his/her personal instruments before leaving the laboratory.
11. Ventilation should always be used to remove dust.
12. Students should always wear protective goggles or spectacles during all finishing and polishing procedures. Musk is obligatory.
13. Continuous routine care of the laboratory is the dental prothesiste responsibility.
14. Students must maintain and keep all the materials in the dental laboratory in working order.
15. Hygienic conditions and safety practices are absolutely essential for the welfare of the laboratory prothesiste.
H. Practical Information

Constituted on a green and panoramic field, the campus overlooks the capital of Beirut. It is located at the brink between mountain and city. It offers several facilities to students such as:

- Chapel,
- Infirmary,
- Library,
- Cafeteria,
- Dorms.
- Associative space for physical and sport education

Physical and sports activities

UPA’s students have the possibility to practice at least one sport activity in complete harmony with the Institute of the Physical Education and Sports.

1. Athletics and Football are practiced in the big stadium TF1,
2. Basket-ball and Volley-ball are played in the covered field or at the Basket-ball field TB1,
3. Gymnastics are done at the gymnasium D11,
4. Judo takes place at Dojo: room E.O.1,
5. Swimming occurs in the swimming pool

I. UPA’s Conferences and manifestations Events

During the academic year, conferences, symposiums and events are organized in order to allow people to meet industry and market leaders. We are asked to participate actively to these events organized by the university. Detailed programs of these events will be communicated through the billboard and the conferences rubric of the university’s internet site. Visit the address: http://www.upa.edu.lb