2020 FIAF FILM RESTORATION SUMMER SCHOOL PROGRAM

Welcome meeting: June 20th  
Film restoration online theory course: distance learning, April 29th to June 10th (on Wednesdays)  
Theory lectures and Il Cinema Ritrovato film festival: Bologna, Cineteca facilities, June 20th to 27th  
Restoration practice classes: Bologna, L’Immagine Ritrovata, June 29th to July 10th

INDEX

1. Introduction .................................................................................................................................................. 2
2. Program ...................................................................................................................................................... 4
3. Participants .................................................................................................................................................. 9
4. Practical information .................................................................................................................................. 9
5. Deadlines ................................................................................................................................................... 10
6. Contacts and partners .............................................................................................................................. 11
1. INTRODUCTION

PAST AND FUTURE SUMMER SCHOOLS

In 2020 the FIAF Film Restoration Summer School is being held in Bologna for the ninth time. Once again the Fédération Internationale des Archives du Film (FIAF) and the Association des Cinémathèques Européennes (ACE) have combined their efforts with Cineteca di Bologna and L’Immagine Ritrovata film restoration and conservation laboratory to organize the FIAF Film Restoration Summer School, held each year between 2007 and 2010, and every second year since 2012.

In 2013 for the first time the project moved from Bologna to Asia at the National Museum of Singapore to offer film restoration training in another area of the world. Following the success in Singapore, in 2015 the Summer School was held again in Mumbai in collaboration with the Film Heritage Foundation, in 2017 in Buenos Aires in collaboration with the CINAIN – Cinemateca y Archivio de la Imagen Nacional and in 2019 in Mexico City in collaboration with the UNAM (Universidad Nacional Autónoma de México). These four abroad editions (Singapore, Mumbai, Buenos Aires and Mexico City) were supported also by The Film Foundation. The Film Heritage Foundation rerun the project twice in Pune (2016) and Chennai (2017).

In Bologna a total of 298 participants have taken part in previous years, representing 68 countries (Algeria, Argentina, Australia, Austria, Bangladesh, Belgium, Brazil, Canada, China, Chile, Colombia, Croatia, Cuba, Czech Republic, Egypt, Estonia, Finland, France, Georgia, Germany, Greece, Holland, Hong Kong, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Japan, Jordan, Kenya, Korea, Lebanon, Lithuania, Luxembourg, Macedonia, Malawi, Malaysia, Mexico, Montenegro, Morocco, Myanmar, New Zealand, Nigeria, Norway, Philippines, Poland, Portugal, Romania, Serbia, Singapore, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Tunisia, Turkey, United Kingdom, Uruguay, USA).

After the success of previous Summer Schools, FIAF, ACE, Cineteca di Bologna and L’Immagine Ritrovata are looking forward to running a new training course in the field of film restoration and preservation in Bologna aimed at specialists and film archive staff. During the selection process, priority will be given to candidates who work for FIAF and ACE institutions.
IL CINEMA RITROVATO FILM FESTIVAL

Film restoration gives us the fantastic opportunity to bring great films back to the big screen and to the audience. Presenting and exhibiting restored films is a key part of the restoration process. For this reason the FIAF Film Restoration Summer School project takes place mainly in Bologna, arm in arm with Il Cinema Ritrovato film festival, a true meeting place for film researchers and experts (http://festival.ilcinemaritrovato.it/en/).

In 2019 Il Cinema Ritrovato film festival involved over 110 film archives, institutions, major film studios and productions companies from all over the world, reaching 130,000 spectators.

The connection between learning about digital and photochemical restoration and an event such as Il Cinema Ritrovato film festival is very strong: while it is crucial to put restoration into practice and to learn how to restore a film, it is equally as important to understand how films, restored by different archives institutions, major film studios and productions companies, can be shown to today’s public.

TARGETS AND FINAL AIM

The project’s main objective is to teach and update participants on how to restore and preserve a film through the use of photochemical and new digital technologies. Participants will have the chance to experience everyday work in a highly specialized laboratory; they will follow every step of the process through all departments, from beginning to end.

During the 2020 FIAF Film Restoration Summer School participants will be expected to develop and practice a specific set of skills: operating all digital and photochemical equipment in an archive and/or laboratory; following a complete restoration workflow; performing all the primary necessary operations needed to restore a film; evaluating the state of conservation of a film and choosing the best practice to restore, reconstruct and preserve it.
After completing the FIAF Film Restoration Summer School participants will:

- know how a film can be restored using new digital and analogue technologies in a modern, flexible work environment;
- be able to manage a complete restoration workflow;
- know how to choose the best format to restore a film and have it digitized from film support to 35mm, DCP broadcasting until DVD support;
- be able to discuss each step of a restoration project in detail with a restoration laboratory;
- know the various approaches to restoration of different FIAF archives;
- know how to manage a film restoration project budget.

Finally, past editions of the FIAF Film Restoration Summer School have proved to be an excellent meeting ground for people working in the same field. It represents a great opportunity for participants to initiate collaborations on possible future restoration projects.

2. PROGRAM

PHOTOCHEMICAL AND DIGITAL RESTORATION

The FIAF Film Restoration Summer School is dedicated to teaching digital and photochemical techniques for the restoration of film heritage. While digital technologies have a well-established role in the contemporary film industry, their importance in the restoration of films has been somewhat neglected as a teaching/learning experience.

At L'Immagine Ritrovata laboratory participants will follow the entire restoration process: photochemical, digital (4K, 2K and HD) and sound restoration, from repairing to printing preservation material, from film scanning to film recording, from sound digitization to final sound restoration.
A Three Step Course

The 2020 FIAF Film Restoration Summer School is structured along three main course steps:

1. **Film restoration online theory course**: distance learning, April 29th to June 10th (on Wednesdays)

2. **Theory lectures during Il Cinema Ritrovato film festival**: Bologna, Cineteca facilites, June 20th to June 27th

3. **Restoration practice classes**: Bologna, L’Immagine Ritrovata, June 29th to July 10th

1. **Film restoration online theory course**: distance learning

This Online Distance Learning Course has been conceived with the idea of offering the FIAF Restoration Summer School students an historical, technical and ethical overview of the Film Restoration discipline (definition, film materials, techniques, reconstruction, digital technologies and methodology) before attending the Festival, meeting professionals and training at L’Immagine Ritrovata laboratory. It has been discussed with and enriched by the FIAF Technical Commission members and correspondents.

It will start one month before the beginning of the classes in Bologna, and the participants will be provided with theory lessons, downloadable from the internet on a weekly basis (each Wednesday). These online lessons will run from 29th April until 10th June.

2. **Theory lectures and Il Cinema Ritrovato film festival**: meetings with experts

The first week will be entirely devoted to the XXXIII edition of Il Cinema Ritrovato film festival, Cineteca di Bologna’s main international event. Since 1986, the festival has been investigating the most remote territories of cinema history, screening the best in “Recovered and Restored Films” from archives around the world. Some screenings will be part of the FIAF Film Restoration Summer School’s program. Daily meetings of one hour or more with international specialists will be included in the schedule. During the festival week meetings will tackle more general issues, such as film house and archive management, the conservation and preservation of film heritage, cataloguing and other non-film issues. Meetings will also focus on film restoration theory. In particular they will deal with working in a film restoration laboratory and analysing specific pieces of restored works. These meetings will sometimes introduce the two-week long topics at the lab.
3. Restoration practice

During the third part of the course participants will be supervised by international experts and laboratory staff as they put into practice what they have learned during their distance online course and first week of theory at the festival.

For two weeks participants will be offered hands-on experience working in each laboratory's departments and their greatest amount of time will be devoted to experience each restoration practice. 8 hours a day, for 10 days.

Each department will accommodate a maximum of 5 participants. This is considered the right ratio of students per piece of equipment in order to allow each student the possibility of interacting directly.

**THE LABORATORY**

Participants will be divided into groups and will work in each of the laboratory's departments:

- Film identification
- Film repair
- Chemical treatment
- Film comparison
- Film scanning and telecine
- Digital restoration
- Colour correction
- Sound scanning and sound restoration
- Mastering and Digital Cinema
- Data and Network management and back-up strategies
- Film recording
- Photochemical preservation and restoration
- Analogue grading
- Print and processing
<table>
<thead>
<tr>
<th>Training Subjects</th>
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<tr>
<td><strong>Film Identification</strong></td>
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<td>This very first step involves the identification, study and analysis of film materials, different elements (negative, positive, intermediate), trademarks, edge codes and marks, shape and size perforation, etc.</td>
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<tr>
<td><strong>Film Repair</strong></td>
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<td>Film handling and inspection: how to fix tears and breaks using adhesive film tape; analysis of old splices; restoring splices by hand with cement; repairing film to prepare it for cleaning and scanning or printing; cleaning of film nitrate, triacetate and polyester both manually and with an ultrasonic cleaning machine.</td>
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<tr>
<td><strong>Chemical treatment</strong></td>
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<tr>
<td>Overview on different film base, their related types of decay and the chemical treatments used for fixing different issues in order to temporarily restore the mechanical functionality which allows the material to be duplicated without suffering any further damage. Understanding and practising how to develop a specific workflow for chemical deteriorated film and choosing the best treatment.</td>
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<tr>
<td><strong>Film Comparison</strong></td>
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<td>Comparing the different sources available frame by frame, along with the analysis of various non filmic documents to understand and choose the right version for the restoration, using the best and the most complete elements.</td>
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<td><strong>Film Scanning and telecine</strong></td>
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<td>Scanning and telecine of a motion picture image from 35mm and 16mm negative, positive and intermediate materials to a digital file.</td>
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<td><strong>Digital Restoration</strong></td>
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<td>Digital treatment of images using dedicated software to eliminate physical damage to the film resulting from usage and the manual handling of film, as well as the restoration of visual clarity of images by tackling issues such as grain, instability and flicker without affecting the original material. Digital restoration has a wide range of tools and possibilities, therefore it is vital for archivists to know what can be done in order to set their specific restoration workflow.</td>
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<tr>
<td><strong>Colour Correction</strong></td>
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<tr>
<td>Film colour correction and colour fade restoration. From Tint and Tone to Technicolor. 4K, 2K, HD, SD conforming, Mastering, Colour references.</td>
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| Sound Scanning and Restoration | Sound technology history: 150 years of sound on film.  
|                               | Sound transfers: optical, magnetic and soundtrack scanning.  
|                               | The sound restoration workflow: from analogue to digital (to analogue). |
| Mastering and Digital Cinema   | Quality Control, finalization and export of output formats: Digital Cinema Packages, HDCAM tapes, video files, etc. |
| Data and Network Management and Back-up Strategies | The technology behind a restoration lab, how to configure a system to manage high-resolution frames. The long-term archiving on LTO exposed and which kind of solution and alternatives are used. How to monitor your system to avoid bottlenecks and slow operations. |
| Film Recording                | How to set a film recorder to generate master negatives. |
| Analogue Grading              | Use of the Colour master to set printing values to print from negative to interpositive for preservation, or a positive for screening. Study of the Desmet Method and practical application to recreate tinting and toning. |
| Print and Processing          | Principles of optical and contact printing and their differences; study of different printers, printer loading and usage. Basics of film processing and the analysis of the relationship between printing and film processing and their shared parameters. Application of Lad, Strip, and other quality-control tools to check the correct operation of printing and development. Quality control. operation of printing and development. Quality control. |
3. PARTICIPANTS

The training is conceived for an international target group, and will be taught by an international panel of the best experts from different countries. The 2020 FIAF Film Restoration Summer School is aimed at staff working at film archives, institution or organization, as well as right holders and students in the field of Cinema. The aim is to foster a shared knowledge in the field for current and future generations and world film archives.

All classes will be in English.

Participants will be selected according to their C.V., commitment and motivation.

The course will be divided into different levels and participants will be grouped according to their skills and expertise according personal C.V. and past experience in that field.

A special commission composed of representatives from FIAF, ACE, and Cineteca di Bologna will examine all applications. The commission will officially release the names of the 40 selected participants via e-mail and on the website of L’Immagine Ritrovata and those of its partners on March 3rd.

4. PRACTICAL INFORMATION

The participation fee amounts to 3.000€ and includes registration, festival accreditation, accommodation for 21 nights and lunch for 18 days.

Lunch will be provided every day from June 20th to June 27th while from June 29th to June 10th it will be provided Mondays to Fridays only.

Accommodation will be provided from June 20th (check-in) to July 11th (check-out).

If applications exceed the maximum number of participants allowed, a selection will be made. The list of selected participants will be announced on March 3rd Selected participants must confirm their attendance by paying their fee in advance and not later than April 3rd. Selected participants who do not pay their fee by the due date will be excluded and replaced by the next eligible candidate in the waiting list.
NOTES ABOUT SCHOLARSHIPS

We are currently processing scholarships and have not yet received all necessary confirmations.

All candidates will be notified in due time.

5. DEADLINES

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<tr>
<th>2020 DATES</th>
<th>WHERE</th>
<th>WHAT</th>
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<tr>
<td>February 16th</td>
<td></td>
<td>Deadline for application form submission</td>
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<tr>
<td>February 17th - 28th</td>
<td></td>
<td>A special commission composed of FIAF, ACE and Cineteca di Bologna members will examine all application forms, select 40 participants and release their names.</td>
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<tr>
<td>March 3rd</td>
<td></td>
<td>Announcement of participants’ names. All candidates will receive a communication via e-mail concerning the selection results. The list of selected participants will be published on the website of L’Immagine Ritrovata and those of its partners</td>
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<tr>
<td>April 3rd</td>
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<td>Deadline for payment of registration fee</td>
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<tr>
<td>April 29th - June 10th</td>
<td>Online</td>
<td>Distance Learning Course</td>
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<td>June 15th</td>
<td></td>
<td>Definitive program of the theory lessons, names of international tutors</td>
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<tr>
<td>June 20th</td>
<td>Bologna (Cineteca facilities)</td>
<td>Welcome Meeting 2020</td>
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<tr>
<td>June 20th - 27th</td>
<td>Bologna (Cineteca facilities)</td>
<td>Il Cinema Ritrovato film festival and Film Restoration theory classes</td>
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<tr>
<td>June 29th - July 10th</td>
<td>Bologna (L’Immagine Ritrovata)</td>
<td>Film restoration practice</td>
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<td>July 10th</td>
<td>Bologna</td>
<td>Closing day and delivery of the training certificates</td>
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For further information contact:

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