

Universidade Federal do Rio Grande do Sul Instituto de Química Graduate Program in Chemistry (Grade 7/CAPES) Av. Bento Gonçalves, 9500 – Bairro Agronomia Porto Alegre, RS – Brazil - ZIP 91501970 T+55 (51) 3308 6258 – Fax +55 (51) 3308 7198 http://www.iq.ufrgs/ppgq - e-mail: ppgq_iq@ufrgs.br

COURSE SYLLABUS

1. Identification

Code and title: QUIP 180 – Scientific Filming Professor: Dr. Thomas Berg Level: Master and Doctorate Credit hours: 3 Revised: June_2020

2. Summary

Filming in science. Scientific dissemination and digital media. Video production and editing.

3. Objective

One of the best ways to explain science is through the use of video images. Today more than ever, we have easy access to filming resources, dissemination channels and the general public, allowing us to produce, publicize and promote our projects and research. In addition, filming is an essential tool for many scientific areas and knowing how to use this methodology is fundamental. However, producing quality videos is a science in itself and requires knowledge of some concepts and methodologies. In this course, we will address these concepts and methodologies in a theoretical and practical way, with the aim of enabling the student to produce their own scientific videos.

4. Contents

- 4.1 Introduction: Watch it here!
- 4.2 Brief History of the Image
- 4.3 Types of Scientific Filming
- 4.4 Basic Film Materials
- 4.5 Mastering your Camera
- 4.6 Capturing Image
- 4.7 Capturing Sound
- 4.8 Use of Light
- 4.9 Filming Tips
- 4.10 Building a Itinerary
- 4.11 Filming an Interview
- 4.12 How to Get Free Stuff
- 4.13 Image Storage
- 4.14 Video Editing
- 4.15 Shooting Practice
- 4.16 Video Editing Practice
- 4.17 Course Evaluation

5. Assessment

Production of a video on scientific topics.



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The student who achieves at least the average grade C will be considered approved considering the contents covered in the three assessments. The student, who obtains a final grade of A, B or C, awarded as per the list below, will be considered approved:

A: grade equal to or above 9.0

B: grade equal to or above 7.5 and below 9.0

C: grade equal to or above 5.0 and below 7.5

D: grade below 5

FF: lack of frequency

6. Methodology

Students will have 7 days to watch the videos of the theoretical part of the course, starting from the day it starts. In the following 7 days after the end of the period to watch the theoretical videos, students will then do the 2 practical parts of the course (filming and video editing), and will send the short video produced to the teacher, if desired. After the 7 days of the practical part period, students will have 30 days to produce the course evaluation video, which will be delivered on a date to be agreed (please note here that anyone who wants feedback with comments and criticism of the first version of the video (recommended!) must send the first version of the video 1 week before the delivery date of the video to the teacher. After the evaluation, we will arrange a day so that we can all together watch the videos produced, either by computer or in person.

7. Bibliography

Miscellaneous videos

- Scientific Film Guide (Thomas Berg)
- What to Think When Shooting Guide (Thomas Berg)