

# Syllabus 2020 International Chronobiology Summer School

Meeting time: Thursdays 9am EDT via Zoom

Official communication: via Slack workspace

Website: <https://sophia.smith.edu/chronoschool2020/>

Note that this site requires a password. You should each receive an email with a subject line "Smith WordPress account information". The email contains site url, login link, username and temporary password to access our course website.

Organizers: Mary Harrington and Karyn Esser

Questions? Ask via Slack or email [mharring@smith.edu](mailto:mharring@smith.edu)

## Course expectations:

We will expect a minimum of 3h/week from each student. One hour will be in synchronous meetings for Q&A and discussion, and 2h (approx) will be devoted to listening to pre-recorded material and completing readings and challenge questions.

There is no fee for this course. We request each student be a member of either SRBR or one of the international rhythms societies <https://srbr.org/about-us/other-societies/> .

We expect courteous and honest behavior from all students. We reserve the right to dismiss any student based on behavior we judge unacceptable. This might include harassment, dishonesty, disruption, or any behavior that might interfere with the harmonious progress of our class.

Privacy policy: Our instructors may provide pre-recorded lecture material. This material is to be kept private and is solely for the use of the students and teachers in this class. To encourage an active, engaged teaching and learning environment in the classroom and to safeguard the privacy of students and instructors, no form of audio or visual recording shall take place in the classroom without explicit permission from the instructor. Posted recordings can only be used solely for personal academic purposes. **In all cases, recordings shall not be shared, posted, published, or distributed in any form for any reason.** Violation of this policy may violate Massachusetts strict "two-party consent" Recording Law.

Welcome!!!

We are delighted to join with you in a new adventure. This is the first time our field has hosted a large online course to gather trainees in the extended exploration of the topic. Our goal is to keep our focus on the fundamentals that unite us. We will learn from each other and aim to stretch our backgrounds. We hope to end the course much more capable of appreciating the diversity of research that falls within chronobiology.

Each student brings a unique background. We expect that each week we will be challenged in new ways, and subsets of our community will be able to jump in as assistants to help us master the new topic. We welcome all offers to help!

Several students have joined the course as Teaching Assistants. These TAs may offer additional sessions to allow further discussions. We are deeply appreciative of all the volunteer labor that is underlying our summer course!!!

Teaching Assistants include: Julia Riberio da Silva Vallim, Maria Luísa Jabbur, Jefferson Souza Dantos, Arijit Ghosh, and Corey Rynders. Thank you!!!!

#### Schedule of topics:

Meeting day	Topic	Lecturers
April 25	Social start	
	Weeks 1 & 2 Coursera course	Martha Mellow and Till Roenneberg
May 14	Weeks 3 & 4 Coursera course	Martha Mellow and Till Roenneberg
May 21	Weeks 5 & 6 Coursera course	Martha Mellow and Till Roenneberg
May 28	Molecular clocks in plants, insects & mammals	Stacey Harmer, Joanna Chiu, and Andrew Liu
No class	SRBR	
June 11	Molecular clocks in plants, insects & mammals	Stacey Harmer, Joanna Chiu, and Andrew Liu
June 18	Circadian photoreception	Stuart Peirson and Russell Foster
June 25	The SCN	Erik Herzog
July 2	A clock for all seasons	Michael Tackenberg
July 9	Measuring circadian rhythms in humans	Steve Lockley and Horacio de la Iglesia
July 16	Oscillator Theory and Chronobiology	Hanspeter Herzel, Bharath Ananthasubramaniam, Christoph Schmal

July 23	Oscillator Theory and Chronobiology	Hanspeter Herzel, Bharath Ananthasubramaniam, Christoph Schmal
Jul 30	How can modeling help to understand the clock mechanism?	Jaekyoung Kim
Aug 6	Data analysis 1	Tanya Leise
Aug 13	Data analysis 2	Tanya Leise
Aug 20	Circadian regulation of sleep	India Nichols
Aug 27	Circadian disruption and mental health	Luoying Zhang

Students will be expected to have completed the preparation (lectures, readings) prior to the course meeting on each topic. We do not expect to have materials posted well in advance - sorry! We are creating this as we go!! But as we are able, we will post materials on the course website, with at least a week in advance of the course meeting time for discussion.

The initial assignment is to complete the Clocks course posted free on Coursera. <https://www.coursera.org/learn/circadian-clocks> Any student joining the course late must complete this initial course prior to engaging in the subsequent material.