

Syllabus: ADVANCED HYDROLOGY (2017)

Updated on 2017/3/26

Lecturers: Kei Yoshimura, Yukiko Hirabayashi, Kazuo Oki, Hyungjun Kim, Dai Yamazaki, Taikan Oki

Hours: Tuesday & Friday, 1:00pm-2:45pm (S1 Term)

Venue: Lecture room 13 in Eng. Building 1, Hongo Campus

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Recommended Text:

Brutsaert, 2005, "Hydrology: An Introduction", Cambridge Univ. Press
(both Japanese and English version are available)

Evaluation:

30% Lecture Attendance

20% Report (occasionally given)

50% Final Exam

Lecture Dates and Topics:

1. 4/7 Guidance / Radiation and Water-Energy Balance (Yoshimura)
2. 4/11 Atmospheric Dynamics (Yoshimura)
3. 4/14 Global Hydrology (Oki T.)
4. 4/18 Advances in modeling and remote sensing of hydrology (Kim)
5. 4/21 Precipitation (Yoshimura)
6. 4/25 Evapotranspiration (Yoshimura)
7. 4/28 Runoff and River Flow / Flood statistics / Rainfall-Runoff Models (Yoshimura)
8. 5/2 Ground water hydrology (Yoshimura)
9. 5/9 Cutting-edge of hydrological modeling (Yamazaki)
10. 5/12 Isotope hydrology (Yoshimura)
11. 5/16 Remote Sensing of Water Quality (Oki K.)
12. 5/23 Cryospheric hydrology (Hirabayashi)
13. 5/26 Hydrology in anthroposphere (Hirabayashi)
14. 5/30 Final Exam