# Scientific Writing

(Fall Semester, 2018)

Common lectures for the School of Multidisciplinary Sciences
SOKENDAI (The Graduate University for Advanced Studies)

## 2018 Fall Semester

**Time**:
Thursday 5th slot, 16:30-18:00 (at NII or ISM, see schedule for details)
Wednesday 2nd slot, 10:45-12:15 (at NII on certain weeks for lectures given by Ms. Jones, see schedule for details)

**Place**:
NII (National Institute of Informatics): 12F Lecture Room 1 (1212) (Hitotsubashi)
(http://www.nii.ac.jp/en/about/access/)
ISM (Institute of Statistical Mathematics): Room D222 (Tachikawa)
(http://www.ism.ac.jp/access/index_e.html)

In principle, all the lectures can be attended at the student's own campus.
Lectures by Dept. of Informatics teachers will be provided via teleconferencing system to Tachikawa. Lectures on technical writing by Ms. Jones will be done at both campuses, on Wednesdays and Thursdays.

**Lecturers:**
Prof. Michael Houle (Department of Informatics),
Ms. Caryn Jones (ThinkSCIENCE Inc., Department of Polar Science),
Prof. Ken Hayami (Department of Informatics)

**Schedule:**

| No. | Date | Content | Lecturer | Place |
|---|---|---|---|---|
| 1. | Oct 18 (Th) | Orientation / Reading 1 | Hayami | NII (Tachikawa: TV) |
| 2. | 25 (Th) | Reading 2 | Hayami | NII (Tachikawa:TV) |
| 3. | Nov 1 (Th) | Reading 3 | Hayami | NII (Tachikawa: TV) |
| 4N. | 7 (W) | Technical Writing N1 | Jones | NII |
| 4T. | 8 (Th) | Technical Writing T1 | Jones | Tachikawa |
| 5N. | 14 (W) | Technical Writing N2 | Jones | NII |
| 5T. | 15 (Th) | Technical Writing T2 | Jones | Tachikawa |
| 6N. | 21 (W) | Technical Writing N3 | Jones | NII |
| 6T. | 22 (Th) | Technical Writing T3 | Jones | Tachikawa |
| 7N. | 28 (W) | Technical Writing N4 | Jones | NII |
| 7T. | 29 (Th) | Technical Writing T4 | Jones | Tachikawa |
| 8. | Dec 6 (Th) | Robust Writing 1 | Houle | NII (Tachikawa: TV) |
| 9. | 13 (Th) | Robust Writing 2 | Houle | NII (Tachikawa: TV) |
| 10. | 20 (Th) | Robust Writing 3 | Houle | NII (Tachikawa: TV) |
| 11. | 27 (Th) | No lectures | | |
| 12N. | Jan 9 (W) | Technical Writing N5 | Jones | NII |
| 12T. | 10 (Th) | Technical Writing T5 | Jones | Tachikawa |
| 13N. | 16 (W) | Technical Writing N6 | Jones | NII |
| 13T. | 17 (Th) | Technical Writing T6 | Jones | Tachikawa |
| 14N. | 23 (W) | Technical Writing N7 | Jones | NII |
| 14T. | 24 (Th) | Technical Writing T7 | Jones | Tachikawa |
| 15N. | 30 (W) | Technical Writing N8 | Jones | NII |
| 15T. | 31 (Th) | Technical Writing T8 | Jones | Tachikawa |

<Additional> Supplementary lecture for Oct.25(Th)
Feb.07(Th) 16:30-18:00 by professor Hayami at #1212 at NII (Tachikawa: TV)

**Lecture Details:**

**(I) Technical Writing** (8 lectures by Ms. Jones):

We focus on how to write effective research papers. We examine in detail: the roles and responsibilities of authors and other actors in the scholarly publishing industry; communicating effectively with the different actors; recent changes in scholarly publishing and the implications for authors; good practices that underpin effective

science writing (from conception of the research through writing, submission, and peer review to publication and beyond); avoiding and resolving common issues (plagiarism and self-plagiarism, authorship, copyright, predatory journals and conferences, etc.); establishing structure and logical flow; strategies and practical tips for writing clearly, accurately, concisely, and authoritatively; and self-editing and proofing.
All classes are interactive, involving practical exercises and encouraging problem-solving. Students complete a short writing assignment as part of this course.

**(II) Robust Writing Strategies** (3 lectures by Prof. Houle):
Strategies for scientific writing will be examined with regard to reducing the impact of writing errors on reader comprehension. The students will be asked to read the titles, abstracts and introductions of several real research papers of varying quality, and to critique them in light of organizational principles. Students will be encouraged to supply samples of their own technical writing for analysis by the class.

**(III) Reading** (3 lectures by Prof. Hayami):
We will read English articles, for example, from Nature or Science.
Each student will be asked to read aloud a paragraph or two in turn, to summarize, and to answer questions related to it. This will be followed by discussions related to the article.