

Appendix Assessment Criteria of Practice of Basic Informatics

These assessment criteria are used to assess achievement of learners in topics treated in the course Practice of Basic Informatics. Level C is the level required to pass the course, level A is a goal of this course. Level S shows the goal that learners should acquire in the whole undergraduate program. Topics with a white background color are not covered in this course.

| Topic Category | Subcategory | Topic | Level C | Level A | Level S | Notes |
|---|-------------|--|--|--|---|---|
| | | | Necessary skills have been acquired but are insufficient (at the level needed to pass the course) | Level that meets necessary basic skills (goals of this course) | Level to be achieved in the undergraduate program | Considered in teaching and assessment methods |
| Using in-campus information services and network | | | | | | |
| | | in-campus information services | The learner understands in-campus services but can use only some of them. | The learner understands and uses in-campus information services. | The learners use the in-campus information services effectively for his/her learning. | Assessed by usage of KULASIS, PandA(LMS), and KUINS (campus network). |
| | | Connecting PC to the campus network | The learner can connect his/her PC or smartphone to the campus network and VPN services with help of supporting staff. | The learners understands the necessity of encryption, and can connect his/her PC and smartphone to the campus network and VPN services. | The learner can connect his/her devices choosing methods adequately if multiple methods are available. | Assess through practice. |
| Formal communication with e-mail | | | | | | |
| | | Composing appropriate messages | The learner can compose messages explicitly describing subject, sender and recipient(s). | The learner can compose messages explicitly describing subject, sender and recipient(s), and write appropriate content formally. | The learner can use fields for recipients such as Cc, Bcc, Reply-to adequately and can use e-mail for communication among groups | Assess through practice. |
| | | Proper handling of received messages | The learner understand proper handling of receives messages, and practices it. | Same as on the left | Same as on the left | Assess with tests |
| | | Consideration of attachments | The learners can attach files of adequate sizes, but can't compress them or encrypt them. | The learners can attach files of adequate sizes, and can encrypt important files | The learner understands how to send files other than attachments, their safe usage, and can use them appropriately in e-mails. | Assess through practice. |
| | | Operation of LMS used in classes. | The learner can see files and submit assignments with LMS, but does not fully meet the requirements. | The learner can see files and submit assignments with LMS adequately. | The learner can effectively organize usages of KULASIS, LMS and the Student Mail System. | Assess through usage of LMS(PandA) |
| | | Rules about using information networks. | The learner is aware of the notices about using the information network to some extent but is insufficiently practiced. | The learners knows the rules about using information network, and adheres to them. | The learners continuously acquires the rules by him/herself and improves his/her practice. | Completion of information security e-Learning |
| Intellectual production (知的生産, words invented by Tadao Umesao) in university and utilization of ICT | | | The learner partly understands and practices the usages of ICT for intellectual production in courses and extracurricular activities | The learner understands and practices the usages of ICT for intellectual production in courses and extracurricular activities | The learner actively understands and practices the usages of ICT for intellectual production in courses and extracurricular activities | Assess in the following topics |
| Basics of the personal computer and OS | | | | | | |
| Basic knowledge of computer and OS and their secure operation (such as information security and proper use of software licenses) as an independent PC owner | | | | | | |
| | | Understanding the basic mechanism of the computer and the role of the OS | The learner has basic knowledge of the mechanism of computer and roles of OS to some extent, but needs other's assistance for safe operation. | The learner has basic knowledge of the mechanism of the computer and the role of the OS, and can operate them safely. | The learner has basic knowledge of the mechanism of the computer and the role of OS, and can troubleshoot and improve their performance. | Assess with tests |
| | | Proper use of software licenses | The learner understands software licensing, and uses it properly | The learner understands software licensing, and use it appropriately | The learner understands software licensing, and use software which is licensed to university, and open source software appropriately | Assess with tests |
| | | Connecting external devices to a PC. | The learners can operate networks, printers and external storage, while he/she needs assistance in connecting them to the PC | The learners can connect networks, printers and external storage to the PC by him/herself. | The learners can set up a wired or wireless network, and can connect a PC a printer etc. by him/herself. | Assess with tests |
| | | Operation of OS as the basis for using applications (files, devices such as printers, networks, processes, memory, users, start up, shutdown, and GUI) . Type of OS such as Windows or Linux is an option. | The learner can set up required OS functionality, with assistance. | The learner can set up required OS functionality by him/herself. | The learner can set up required OS functionality, for effective and efficient use of the PC. | Assess with tests |
| | | Touch typing, shortcut keys, and typing in English | The learner 1) understands touch typing, and practices to some extent, 2) uses shortcut keys, 3) knows the rules for English typing and practices these and 4) can use character codes adequately. | The learner 1) understands touch typing and practices it. 2) ~ 4) same as on the left | The learner 1) practices touch typing well, 2) can operate the PC to some extent without a mouse, 3) same as on the left 4) can select appropriate character codes, and can convert them if necessary | Assess with typing speed, and composing documents in English |
| Academic information seeking and use of University library | | | The learner understands information resources provided by the University library, and can seek necessary information to some extent. | The learner understands information resources provided by the University library, and can seek necessary information comprehensively and systematically. | The learner understands information resources provided by the University library, can seek necessary information effectively and efficiently, and use these critically. | Assess with tests and information search practices. |
| Information processing with a spreadsheet | | | | | | |
| | | Data presentation adequate for processing, skills for validation of data | The learner can compose a spreadsheet taking data processing into account. | The learner can compose a spreadsheet taking data processing into account, and can set up input validation to avoid orthographic variants. | In addition to level A, the learner can check input data effectively | Assess through making of spreadsheets |

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|---|--|--|---|--|---|
| | Basic operation of data, sorting, aggregation and cross tabulation | The learners can sort data for analysis, and can operate simple aggregation | In addition to level C, the learner can operate cross-tabulation | In addition to level C, the learner can operate aggregation with multiple conditions according to his/her need for analysis. | Assess through making of spreadsheets |
| | Numerical simulation using a spreadsheet | The learner can carry out simulation of given difference equations. | The learner can operate simulations, changing model parameters. | The learner can construct simulations according to his/her need. | Assess through making of spreadsheets |
| | Plotting data as charts for visualization, requirements for charts for academic documents | The learner can plot data as a chart, but fails in selecting an adequate format. | The learner can plot data as a chart, and formats such as axes are adequately set and necessary information is provided. | The learner can select chart types according to his/her need, and can make charts with appropriate formatting. | Assess through making of spreadsheets |
| Using word processor for academic writing | | | | | |
| | Skills of using word processor for academic writing. Converting logical structure to physical presentation, using templates and styles, cross references | | | | |
| | Creation of structured documents | The learner can compose paragraphs and headings with physical expression by inserting spaces and newlines. | The learner can use templates for paragraphs and headings, and edit them with the outline view. | In addition to level A, the learner can adjust templates according to his/her need. | Composition of documents |
| | Inserting figures and tables | The learner can make document with figures and tables. The learner inserts captions and numbers of figures and tables manually. | The learner can insert captions and numbers of figures and tables using styles and resolving cross-references automatically. | In addition to level A, the learner can adjust the format of figures and tables according to his/her need. | Composition of documents |
| | Appropriate writing of references, citations, and proper quoting of copyrighted materials | The learners can make references with adequate bibliographical information. The learner understands difference of plagiarism and quote, and can make adequate quote. | In side a document, the learner can solve cross-references among citations and references automatically. The learners can manage references adequately. | In addition to level A, the learner can manage references efficiently and utilize them using tools for reference management. The learner understands the format required in his/her academic field, and can make documents accordingly | Assess with tests and composition of documents |
| | Communication skills such as review of created documents | According to review on the printed document, the learner can revise his/her document. | The learner can use review functions of the word processor, such as recording changes, attachment of comments and reflecting on the changes. | The learner can review documents written by others. | Assess by practice of review |
| Collaboration over network | | | | | |
| | Skills for collaboration over a network such as file and document sharing | The learner can access files using services available to him/her. | The learner can share files with adequate control of access and respecting copyright with available services. | The learner can organize group work using services on the information network. | Assess through usage of LMS(PandA) |
| | Alerts about use of social media | The learner understand risks of using social media and take ethical behaviors. | The learner understand risks of using social media and can offer information appropriately | The learner can use social media adequately and actively. | Completion of information security e-Learning |
| Skills for presentation | | | | | |
| | Creation of slides | | | | |
| | Structuring slides | The learner can create almost logically structured slides, while some inadequacies remain. | The learner can create logically structured slides. | The learner can create slides structured effectively, considering their audience. | Assess through presentation or composition of slides. |
| | Use of charts and tables in slides | The learner can insert charts and tables into slides, but their use in presentations is insufficient. | The learner can insert charts and tables into slides and use them in his/her presentation. | The learner can present his/her slides effectively using charts and tables. | Assess through presentation or composition of slides. |
| | Use of visual effects | The learner uses visual effects, but usage is not fully adequate. | The learner can use visual effects adequately in his/her presentation. | The learner can use visual effects in his/her presentation effectively. | Assess through presentation or composition of slides. |
| | Presentation | | | | |
| | Making a presentation within an allocated time | The learner can use presentation time almost adequately. | The learner can use presentation time effectively. | The learner use his/her time with an effective schedule for his/her presentation. | Assess through presentation |
| | Responses to questions | The learner take time to refer to slides. He/She doesn't take note of questions. | The learner can answer questions adequately on referring to slides, and records this. | The learner can prepare slides for possible questions and discuss things constructively. | Assess through presentation |
| | Presentation by a team | The learner can collaborate with team members to make a presentation effective, to some extent. | The learner can collaborate with team members to make an effective presentation. | The learner can make a presentation even if some of the members absent. | Assess through presentation and peer evaluation |
| | Use of graphical expression such as diagrams and charts | The learner can use graphical expression such as diagrams in his/her presentation, but this is not sufficient. | The learner can use graphical expression such as diagrams in his/her presentation. | The learner can make a presentation using graphical expression effectively and creatively. | Assess through presentation or composition of slides. |
| | Basics of programming (optional) | The learner has experience of programming, but can't write a program by him/herself. | The learner understand basic elements in a programming language and can write small programs. | The learner can make small programs as his/her problem solving tools. | Assess thorough programming assignments |