Course Name	Knowledge and Information
Course No.	01MB101
Credits	2.0Credits
Timetable	FallAB Wed1,2
Grade	1, 2Year
Instructor	Nobuyuki Midorikawa, Mikiko Yokoyama
Course	We discuss the concept of "knowledge" and "information" from the point of view of
Overview	philosophy, library and information science, and other areas. At first we examine what is
	the knowledge. There are two types of definition of knowledge, one is based on internalism
	and the other one is based on externalism which is critical to internalism. The internalism
	of knowledge is the idea that in order to be knowledge, it is necessary to be justified and
	cognitive subject-itself must be accessible to the reason for justification. The externalism of
	knowledge is to deny it. After having seen the definition of knowledge, we discuss the sharing
	of knowledge from the viewpoint of relativism and its criticism. Next, we examine what is
	the information. It has been various definitions for the information. After having seen them,
	we examine the two points of view, one assumes that information is a "thing " and the other
	assumes that it is a "non-thing". In light of both points of view, method of quantitative
	understanding of information and relationships among "information", "communication"
	and "media" are discussed.
Remarks	Lecture
Objectives	
Schedule	1)Definition of knowledge Instructor:Mikiko Yokoyama
	2)Examination of the definition of knowledge: internalism and externalism Instructor:Mikiko
	Yokoyama
	3)Sharing of knowledge: relativism and its criticism 1 Instructor:Mikiko Yokoyama
	4)Sharing of knowledge: relativism and its criticism 2 Instructor:Mikiko Yokoyama
	5)Sharing of knowledge: relativism and its criticism 3 Instructor:Mikiko Yokoyama
	6) Various definitions of information Instructor: Nobuyuki Midorikawa
	7)Quantities of information Instructor:Nobuyuki Midorikawa
	8) I wo points of view for the concept of information instructor: Nobuyuki Midorikawa
	9) Information and media instructor: Nobuyuki Midorikawa
Crading	
Toxt	
ICAU	
References	
References	Nobuvuki Midorikawa midorika at slis tsukuba ac ip
References Office Hours	Nobuyuki Midorikawa midorika at slis.tsukuba.ac.jp Mikiko Yokoyama mikiko at slis.tsukuba.ac.jp

Course Name	System Thinking
Course No.	01MB102
Credits	2.0Credits
Timetable	SprAB Mon5,6
Grade	1, 2Year
Instructor	Tetsuya Maeshiro, Mikiko Yokoyama
Course	Treats the viewpoint and methodology to treat the target phenomena or entity as the
Overview	combination of multiple elements, and its integral property is the result of the interactions
	among its elements. First part mainly treats the "system", both in Nature and Social
	fields. And the second part treats the "thinking", where viewpoint that multiple elements
	constitute the target entity, and the whole property is the result of interactions among
	elements.
Remarks	Lecture
Objectives	Concept of systems
	Describe the target phenomena from the systems viewpoint
	Explain the difference between "bottom up" and "top down" thinking
Schedule	1)Introduction, Modelling-1
	2)Modelling-2
	3)Modelling practice
	4)Relationships, interactions 1
	5)Relationships, interactions 2
	6)Atomic entity as the primary thinking unit
	7)Thinking structure viewpoint
	8)Sentence as the primary thinking unit
	9)Whole entity as the primary thinking unit 1
	10)Whole entity as the primary thinking unit 2
Grading	Reports and class practices
Text	
References	
Office Hours	Tetsuya Maeshiro maeshiro at slis.tsukuba.ac.jp
	Mikiko Yokoyama mikiko at slis.tsukuba.ac.jp
Remarks	

Course Name	Legal Study on Internet Issues
Course No.	01MB103
Credits	2.0Credits
Timetable	FallAB Tue5,6
Grade	1, 2Year
Instructor	Kaori Ishii
Course	Students will look into various laws regarding the internet and legal issues emerging from
Overview	the current network society. The course will provide an overview of some internet laws and
	related topics in Japan. They include the Copyright Act, the Unfair Competition Prevention
	Act, rights to information privacy, the Personal Information Protection Act, confidentiality
	of communication, and cyber crime. Students will be expected to study the legal aspects of
	these issues and give a presentation.
${f Remarks}$	Open in Every Odd Years in English
	Lecture
Objectives	The main aim of this class is for the students to learn various problems in our network
	society from legal viewpoints while acquiring basic knowledge for safe and secure use of
	internet. Their presentations will help them think about their own responses to specific
	problems through legal approaches as well as technical and self-regulatory means.
Schedule	I 'm going to pick up some topics and give lectures on them. Students who enroll in this
	class are expected to choose one which draws your interest, explore it on your own and give
	a presentation at least once in the term.
	The class will begin with introduction and proceed with the legal subjects such as:
	• Privacy and Personal Data Protection, including so-called National ID Act
	• Freedom of Information Act, Public Document Management Act
	• Copyright Act, the Protection of Trade Secrets
	• Infringements of Rights on the Internet including "The Right to be Forgotten"
	• Cyber Crimes
	• Consumer Protection on the Internet
	• Recent Case Studies regarding Legal Problems on the Internet
	• Information Security
	• Overall Discussions
Grading	• Grade will be evaluated by the person's presentation, report, participation in class
- 8	The particular text is not designated
Text	

References	
Office Hours	kaoriish at slis.tsukuba.ac.jp
Remarks	

Course Name	Management and Utilization of the Intellectual Property
Course No.	01MB104
Credits	2.0Credits
Timetable	SprAB Fri3,4
Grade	1, 2Year
Instructor	Maiko Murai
Course	The course introduces basic knowledge about the intellectual property law and recent cases
Overview	to understand the appropriate management and exploitation. Students should make pre-
	sentation.
Remarks	Lecture
Objectives	The course introduces basic knowledge about the intellectual property law and recent cases
	to understand the appropriate management and exploitation. Students should make pre-
	sentation.
Schedule	The course introduces basic knowledge about the intellectual property law and recent cases
	to students taking this course.
	Grading will be decided based on class attendance, attitude in class and presentation/debate.
	1)
	2)
	3)
Grading	
Text	1. 田村善之『知的財産法』(第5版·有斐閣)
References	1. 小泉直樹他編『著作権判例百選』(第5版・有斐閣)
	2. 田村善之『著作権法概説』(第 2 版・有斐閣)
Office Hours	myco at slis.tsukuba.ac.jp
Remarks	

Course Name	History of Libraries and Communication Media
Course No.	01MB105
Credits	2.0Credits
Timetable	SprAB Thu1,2
Grade	1, 2Year
Instructor	Saori Donkai, Yoshihiro Goto
Course	This course will provide an overview of a history of libraries as a knowledge resource and a
Overview	history of books as an information media from earliest times through the 20th century. We
	will particularly focus on Japan, Britain and North America about the development of the
	libraries.
Remarks	Open in Every Even Years in English
	Lecture
Objectives	The course learning objectives are:
	1) to introduce students to the history of the books in its a lot of forms and libraries
	2) to place the books and libraries within the broad context of human communication,
	culture and education
	3) to enhance the ability of thinking of the libraries and information media in the future
	through learning their histories.
Schedule	Lesson 1: Introduction
	Lesson 2: Significance of history of libraries and information media
	Lesson 3 [~] 4: Transformation of information media
	Lesson 5 [~] 6: Birth and development of modern libraries in North America and United King-
	dom
	Lesson 7 ⁻⁸ : Birth and development of modern libraries in Japan
	Lesson 9-10: Presentation by students[Individual or Group work]
	2.
	3.
	4.
	5. C
	6. 7
	Q.
	0
	10
Grading	Research Paper and Presentation: 70%
	participation to the class: 30%
Text	
References	
Office Hours	Saori Donkai donkai at slis.tsukuba.ac.jp
	Yoshihiro Goto ygoto at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~ygoto/index.html
Remarks	

Course Name	Information Seeking and Retrieval
Course No.	01MB106
Credits	2.0Credits
Timetable	SprAB Thu1,2
Grade	1, 2Year
Instructor	Hideo Joho, Haitao Yu
Course	In this course, students will gain the basic understanding of information seeking and retrieval
Overview	with the focus on interaction between users and information retrieval (IR) systems. Students
	will be given opportunities to critically think about the relationship between system aspects
	such as search engine architecture and search interfaces, and user aspects such as query
	formulation and relevance judgements. This course also discusses both system-oriented and
	user-oriented approaches to evaluation of information retrieval. Finally, advanced topics
	and latest research trends will be introduced.
Remarks	Open in Every Odd Years in English
	Lecture
Objectives	Students can explain search engine architecture and evaluation methods.
	Students can explain searching behaviour using major models.
	Students can discuss the relationship between searching behaviour and IR systems.
	Students can device a new IR system design and make its evaluation design.
Schedule	1)
	2)Course guidance
	4)
	5)Search engine architecture
	6)
	7)Test collections
	9)Searching behaviour
	11)Relevance
	13)Query formulation methods
	14) 15)Secret regults presentation matheds
	15)Search results presentation methods
	10) 17)Search process management
	18)
	10)User studies
	20) Advanced tonics and latest research trends
Grading	Lecture reports (x9): 70%
	Term-end report (x1): 30%
Text	No textbook.
	Learning materials will be provided in lectures.
	Students must read relevant materials in the reading list before classes.
	Learning materials will be provided in lectures. Students must read relevant materials in the reading list before classes.

References	1. Case, D. O. (2012) Looking for Information: A Survey of Research on Information
	Seeking, Needs, and Behavior (3rd Ed.). Emerald Group Publishing.
	2. Hearst, M. A. (2009) Search User Interfaces. MIT Press.
	3. Kelly, D. (2009) Methods for evaluating interactive information retrieval with users. Now
	Publishers.
	4. Ruthven, I. and Kelly, D. (Eds.)(2011) Interactive Information Seeking, Behaviour and
	Retrieval. Facet Publishing.
Office Hours	Hideo Joho Thu 4 and 5th Period
	7D408 hideo at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~hideo/
	Haitao Yu yuhaitao at slis.tsukuba.ac.jp
Remarks	

Course Name	Requirements Analysis and Project Management
Course No.	01MB109
Credits	2.0Credits
Timetable	FallAB Fri1,2
Grade	1, 2Year
Instructor	Taro Teduka
Course	In a project involving many participants, project management is necessary in order to make
Overview	effective collaboration among members. Also, it is crucial to correctly grasp the require-
	ments of the client. In this lecture, various techniques developed to meet such needs, namely
	requirement analysis and project management, will be covered. For requirement analy-
	sis, object oriented analysis and formal methods will be discussed. Students will practice
	drawing UML diagrams using a modeling tool. For project management, the course will
	cover methods in PMBOK, including man-hour estimation using WBS and scheduling using
	PERT.
Remarks	Open in Every Odd Years in English
	Lecture
Objectives	A project is a process of creating something that has not existed before, within a given
	amount of time.
	When an enterprise or a public institution does a project, it must obtain requirements
	correctly from the client, and also complete it before the deadline. This is accomplished by
	managing project members and their schedule properly. Various techniques developed to
	achieve this goal will be covered in this course.
Schedule	1)Requirement analysis
	2)Requirement and specification
	3)Object oriented analysis and UML
	4)Test and proof
	5)Formal methods and VDM
	6)Project management
	7) Version control for software development
	8)Man-hour estimation and WBS
	9)Scheduling and PERT
	10)Conclusion
Grading	By reports
neierences	1. Michael Jackson, Software Requirements and Specifications - a lexicon of practice, prin-
Office Hours	topies and prejudices, Addison-wesley, 1995.
Pomorlea	tezuka at Sustisukuba.ac.jp
nemarks	

Course Name	Technical Communication
Course No.	01MB110
Credits	2.0Credits
Timetable	FallAB Tue5,6
Grade	1, 2Year
Instructor	Chihomi Sannami
Course	In modern society, the experts and the professionals must fulfill their accountability that
Overview	explain their specialized fields. Especially, the explanation how their specialized fields and
	researches are involved in the society is important. In this course, we aim to acquire informa-
	tion sharing skills to achieve technical communication through setting and implementation
	of "place" to convey audience the interest in each specialized field of each student and
	importance in society.
Remarks	Lecture
Objectives	
Schedule	1)Orientation
	Presentation practice
	2)Planning, presentation, competition
	3)Planning, practice and group review on the place for technical communication for public
	relation
	4)Group reviews on the place for technical communication, discussion on practices, produc-
	tion of the manual
	5)Simulation of the place, public relation, review of the manual
	6)Presentation practice
	7)Presentation practice
	8)Presentation practice
	Preparation for implementation of the place for technical communication
	9)Implementation of the place for technical communication
	10)Consideration and evaluation of the place for technical communication, production of
	the report
Grading	
Text	
References	1. サイエンスコミュニケーション「科学を伝える 5 つの技法」(日本評論社)
Office Hours	
Remarks	

Course Name	Communication and Culture
Course No.	01MB111
Credits	2.0Credits
Timetable	SprAB Tue5,6
Grade	1, 2Year
Instructor	Junko Teruyama, Shaoyu Ye
Course	This course covers the basic theories of communication and culture and examines the rela-
Overview	tionship between the two.
Remarks	Open in Every Odd Years in English
	Lecture
Objectives	We expect students (a) to develop an understanding of communication and culture from an
	interdisciplinary perspective, and (b) to acquire the basic skills needed to comprehend and
	analyze existing literature utilizing both qualitative and quantitative methods.
Schedule	1)Introduction/Literacy 1 (Notion of literacy)
	2)Literacy 2 (Comparative studies of Internet literacy)
	3)Media 1 (Transition of media studies)
	4)Media 2 (Media and interpersonal communication)
	5)Media 3 (Media, social network and community)
	6)Language 1 (Group and community organization)
	7)Language 2 (Language use and identity)
	8)Language 3 (Impression formation between cross-cultural communication)
	9)Specialized topic 1 (Accessibility)
	10)Specialized topic 2 (Communication in the "mobile and social" era)
Grading	Evaluation will be based on attendance, class participation, comment sheets (assigned ir-
	regularly), final exam or paper.
Text	TBA
References	
Office Hours	
Remarks	Weekly reading assignments will be provided. Students are expected to upload several
	discussion points on each assignment to Manaba by the day before class.

Course Name	Information Media Seminar B-1
Course No.	01MB151
Credits	2.0Credits
Timetable	SprC Mon/Thu5,6
Grade	1Year
Instructor	Masahiko Mikawa and others
Course	There are some important methodologies in academic researches. In order to research ef-
Overview	ficiently, it is necessary to learn these basic methodologies. The goal of this course is to
	acquire several practical skills in exercise classes, such as how to know a research field, how
	to write academic theses, and the rules of academia.
Remarks	Seminar
Objectives	The goal of this course is to acquire several practical skills through exercise classes.
Schedule	1)Introduction
	2)Research ethics
	3)KJ Method #1
	4)KJ Method $#2$
	5) Previous studies and literature reviews $\#1$
	6) Previous studies and literature reviews $\#2$
	7)Logical training $\#1$
	8)Logical training $#2$
	9)How to write abstracts $\#1$
	10)How to write abstracts $\#2$
	11)
Grading	
Text	
References	
Office Hours	
Remarks	

Course Name	Information Media Seminar B-2
Course No.	01MB152
Credits	2.0Credits
Timetable	SprC Mon/Thu5,6
Grade	1Year
Instructor	Masahiko Mikawa and others
Course	There are some important methodologies in academic researches. In order to research ef-
Overview	ficiently, it is necessary to learn these basic methodologies. The goal of this course is to
	acquire several practical skills in exercise classes, such as how to know a research field, how
	to write academic theses, and the rules of academia.
Remarks	Seminar
Objectives	The goal of this course is to acquire several practical skills through exercise classes.
Schedule	1) Introduction
	2) Research ethics
	3) KJ Method $\#1$
	4) KJ Method $#2$
	5) Previous studies and literature reviews $\#1$
	6) Previous studies and literature reviews $\#2$
	7) Logical training $\#1$
	8) Logical training $\#2$
	9) How to write abstracts $\#1$
	10) How to write abstracts $\#2$
	1)
	2)
	3)
	4)
	5)
	$\left(\begin{array}{c} 9 \end{array} \right)$
Caradia	
Grading	
Lext Deferences	
neierences	
Omce Hours	
Kemarks	

Course Name	Information Media Seminar C-1
Course No.	01MB153
Credits	2.0Credits
Timetable	FallAB Thu5,6
Grade	1Year
Instructor	Hisashi Nakai
Course	All students will make a presentation twice and also discuss about all other students' pre-
Overview	sentations.
Remarks	Seminar
Objectives	Students will study how to make a winning presentation. With the feedbacks from audience,
	students will learn tricks and traps how to advance their own research, how to express their
	opinions, and how to discuss about their researches.
Schedule	1)All students will make a presentation twice and also discuss about all other students'
	presentations. The presentation order will be suggested before we start this class.
Grading	We grade scores by evaluating students' presentation style and practice, and quality of
	comments they suggested in the discussion.
Text	
References	
Office Hours	nakai at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~nakai
Remarks	

Course Name	Information Media Seminar C-3
Course No.	01MB155
Credits	2.0Credits
Timetable	FallAB Thu5,6
Grade	1Year
Instructor	Yohei Seki
Course	All students will make a presentation twice and also discuss about all other students' pre-
Overview	sentations.
Remarks	Seminar
Objectives	Students will study how to make a winning presentation. With the feedbacks from audience,
	students will learn tricks and traps how to advance their own research, how to express their
	opinions, and how to discuss about their researches.
Schedule	All students will make a presentation twice and also discuss about all other students' pre-
	sentations. The presentation order will be suggested before we start this class.
Grading	We grade scores by evaluating students' presentation style and practice, and quality of
	comments they suggested in the discussion.
Text	
References	
Office Hours	
Remarks	

Course Name	Problem Description and Formalization
Course No.	01MB201
Credits	2.0Credits
Timetable	FallAB Mon1,2
Grade	1, 2Year
Instructor	Nobutaka Suzuki, Hisashi Nakai
Course	In order to solve problems in the real world, we need to comprehend the problems appropri-
Overview	ately and formalize them. This course discusses the formal description and manipulation of
	XML documents, formal language theory such as regular expression, and artificial languages
	as applications of formal language theory.
Remarks	Lecture
Objectives	
Schedule	1)Tree Grammar and XML Schema Languages (1)
	2)Tree Grammar and XML Schema Languages (2)
	3)Tree automaton and Validation
	4)Tree Transducer and XSLT
	5)Exercise
	6)Overview of Programming Language Processors
	7)Regular Expression and Lexical Analysis
	8)Context Free Grammar and Overview of Parsing
	9)Recursive Descent Parsing
	10)Exercise Instructor:Hisashi Nakai
Grading	
Text	
References	
Office Hours	Nobutaka Suzuki nsuzuki at slis.tsukuba.ac.jp $\rm http://nslab.slis.tsukuba.ac.jp/~nsuzuki/$
	Hisashi Nakai nakai at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~nakai
Remarks	

Course Name	Natural Language Processing
Course No.	01MB202
Credits	2.0Credits
Timetable	SprAB Fri5,6
Grade	1, 2Year
Instructor	Yohei Seki, Kei Wakabayashi
Course	This course is intended for people who want to learn Natural Language Processing technolo-
Overview	gies (e.g., Part of Speech tagging, syntactic analysis, machine learning, or term clustering)
	using Python programming and basic theories to analyze written language in newspapers or
	web corpora to implement information access technologies such as information extraction,
	text classification, automatic summarization, and sentiment analysis.
Remarks	Open in Every Even Years in English
	Lecture
Objectives	Student should learn about NLP technologies to implement your NLP applications.
Schedule	Please bring your laptop PC and install NLTK and Python environments, and implement
	your NLP application through lecture and practice.
	1)Language Processing and Python
	2)Accessing Text Corpora
	3)Processing Raw Text
	4)Project Presentation (1): NLP application design
	5)Text Classification
	6)Information Extraction
	7)Syntactic Parsing
	8)Project Presentation (2): NLP application implementation
	9)Final Report
Grading	Your grade should reflect your two times presentations and one final report. Copying or
	paraphrasing someone's work (code included), or permitting your own work to be copied or
	paraphrased, even if only in part, is not allowed, and will result in an automatic grade of 0
	for the entire assignment.
	However, you could consult your colleagues or advisors about your assignments.
Text	1. Steven Bird, Ewan Klein, Edward Loper: Natural Language Processing with Python
	O'Reilly & Associates Inc (2009/6/30)
References	
Office Hours	
Remarks	Class website: http://cu.slis.tsukuba.ac.jp/class/nlp2017

Course Name	Advanced Topics in Data Engineering
Course No.	01MB203
Credits	2.0Credits
Timetable	SprAB Fri1,2
Grade	1, 2Year
Instructor	Atsuyuki Morishima, Tetsuji Satoh
Course	データ工学・データベース分野における高度なトピックスおよび最先端技術などについて説明す
Overview	る. 授業は講義および議論などで構成される.
Remarks	Lecture
Objectives	We explain advanced topics and technologies in the database systems and data engineering
	fields. The class consists of lectures and discussions involving students. Those who take the
	class will be able to solve their problems with techniques and approaches in the fields.
Schedule	1)Introduction
	2)Theory of Database Design
	3)Theory of Transactions
	4)Logic Databases 1
	5)Logic Databases 2
	6)Query Processing and Optimization
	7)Data Storages and Indices
	8)Recovery
	9)Summary
	10)Examination
Grading	
Text	1. Hector Garcia-Molina, Jeff Ullman, and Jennifer Widom "Database Systems: The
	Complete Book "
	2. Ramakrishnan, R. et al "Database Management Systems"
References	
Office Hours	Atsuyuki Morishima amorishima at acm.org http://www.kc.tsukuba.ac.jp/~mori/
	Tetsuji Satoh http://www.slis.tsukuba.ac.jp/~satoh/index-j.html
Remarks	We assume that all students who take the class:
	1. have skills to use SQL databases and can write SQL queries and use indices, and
	2. have skills to write programs in procedural languages.

Course Name	Semantic Web
Course No.	01MB205
Credits	2.0Credits
Timetable	FallAB Tue1,2
Grade	1, 2Year
Instructor	Mitsuharu Nagamori
Course	he Semantic Web is an initiative that aims at improving the World Wide Web. The key
Overview	idea is the use of machine processable web information , namely Metadata. Objectives of
	this class are to understand an overview of the Semantic Web, metadata and Linked Open
	Data.
Remarks	Lecture
Objectives	The Semantic Web is an initiative that aims at improving the World Wide Web. The key
	idea is the use of machine processable web information , namely Metadata.
	Objectives of this class are to understand an overview of the Semantic Web, metadata and
	Linked Open Data.
Schedule	1)Introduction to the Semantic Web
	2)A Semantic Web Primer
	3)XML and XML Path Language
	4)RDF (Resource Description Framework)
	5)RDF Schema
	6)OWL (Web Ontology Language)
	7)Logic and Inference
	8)Ontology Development
	9)Linked Open Data (1)
	10)Linked Open Data (2) and Conclusion
Grading	Participation in the discussion and presentaion.
Text	Distribute if necessary
References	
Office Hours	
Remarks	

Course Name	Informetrics
Course No.	01MB206
Credits	2.0Credits
Timetable	SprAB Tue3,4
Grade	1, 2Year
Instructor	Fuyuki Yoshikane
Course	Informetric data, such as author productivity, has the nature that almost all statistical
Overview	measure systematically change according to changes in the sample size. The sample size
	dependency of measures makes a meaningful comparison of different samples of different
	sizes difficult. In this course, we learn how to consider the effect of sample size dependency
	and how to adopt a statistical framework in which the dynamics of informetric data can be
	considered.
Remarks	Lecture
Objectives	
Schedule	1)basic problem in informetrics: urn model and Lotka type data
	2)sample size dependency of statistical measures
	3) growth rate and random subsampling
	4) binomial interpolation and extrapolation
	5)LNRE model
	6)feature values of networks
	7)Barabasi-Albert model
	8) relationship between growth model and sample size dependency of statistical measures for
	networks
	9) experiments using practical data
	10) discussion concerning influence of sample size dependency of statistical measures upon
	analyses of productivity, co-authorship networks, etc.
Grading	
Text	
References	1. 影浦峡.計量情報学:図書館/言語研究への応用.丸善,2000
	2. 増田直紀・今野紀雄. 複雑ネットワーク:基礎から応用まで. 近代科学社, 2010
Office Hours	
Remarks	

Course Name	Content Design and Production
Course No.	01MB207
Credits	2.0Credits
Timetable	FallAB Thu3,4
Grade	1, 2Year
Instructor	Teiichi Nishioka, Yoichi Ochiai
Course	This course deals with the concept and meaning of the content. And also deals with pro-
Overview	duction techniques of digital content
Remarks	Lecture
Objectives	The aim of the course is to help students acquire the Basic knowledge required for content
	creation and methodology related to content production research.
Schedule	1) orientation
	2)Past of content, present and future
	3)Workflow of content production
	4)Media literacy
	5)Non-entertainment content (EdTech , Digital Museum)
	6)Basic knowledge for media research
	7)Methodology for media research
	8)Reviews of Media Studies
	9)Research planning of media research
	10)Reflection & Summary
Grading	
Text	
References	
Office Hours	
Remarks	

Course Name	Speech and Audio Processing
Course No.	01MB208
Credits	2.0Credits
Timetable	FallAB Thu1,2
Grade	1, 2Year
Instructor	Hiroko Terasawa
Course	Students will explore the various research fields in music and audio technology and
Overview	deepen the knowledge in a selected field, through lectures, guided reading, and discus-
	sions. Research areas are, including but not limited to, audio engineering, sound synthe-
	sis/design/sonification, psychoacoustics/music psychology, musical acoustics, and computer
	music.
Remarks	Open in Every Even Years in English
	Lecture
Objectives	The goal of this class is (1) to explore the broad research fields in music and audio technology,
	and (2) to deepen the knowledge of a selected research field of student 's own interest.
Schedule	In the first half of the term, we will survey the various research fields, including but not
	limited to, audio engineering, sound synthesis/design/sonification, psychoacoustics/music
	psychology, musical acoustics, computer music, through structured lectures and guided,
	interactive discussions.
	In the later weeks, the class will be designed by students ' own interests and needs. We will
	focus the literature survey and independent research projects.
	Academic year 2014: taught in English. AY 2015: taught in Japanese.
	The instructor is fluent both in English and Japanese, and ready to provide language support
	in class.
	2014 年度は英語,2015 年度は日本語での授業となります。当該言語が苦手な場合,必要に応じて
	補足説明等を行います。
Grading	Evaluations are made by attendance, participation to the discussion, class contribution, final
	project (research paper and presentation).
Text	
References	Reading materials, selected by instructor and the students, will be provided in the class.
Office Hours	
Remarks	

Course Name	Digital Image and Video Information Processing
Course No.	01MB209
Credits	2.0Credits
Timetable	SprAB Thu3,4
Grade	1, 2Year
Instructor	Makoto Fujisawa, Makoto Matsumoto
Course	Visual media is widely used in many fields, such as personal digital camera or camcorder,
Overview	automated measuring system for industrial and medical purpose. We can get a vast amount
	of visual media, such as image and video, from the Internet. In such an environment, visual
	media processing is becoming an important technology in order to automatically extract
	meaningful information from images and videos. In this lecture, we will talk about funda-
	mentals of digital image and video processing, image analysis and machine learning. The
	applications of digital image processing and its peripheral technologies including computer
	graphics technology will be also covered in this lecture.
Remarks	Lecture
Objectives	- Understand the fundamentals of image processing
	- Understand how to analyze the image
	- Understand the fundamentals of computer graphics
	- Gain knowledge of how to apply image processing and computer graphics technologies to
	real problems
Schedule	1)Introductions and Fundamentals of Image Processing
	2)Image Cording
	3)Image Restoration and Reconstruction
	4)Binary Image Processing
	5)Pattern Recognition
	6)Fundamentals of Computer Graphics (CG)
	7)CG (Modeling)
	8)CG (Rendering)
	9)CG (Animation and Simulation)
	10)State-of-the-art Technology of Image Processing and CG
Grading	
Text	
References	1. 田村秀行「コンピュータ画像処理」オーム社
	2. 藤代一成ら監修「コンピュータグラフィックス」CG-ARTS 協会
Office Hours	Makoto Fujisawa fujis at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~fujis/
	Makoto Matsumoto amy at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~amy/
Remarks	

Course Name	Selected Topics in Cognitive Science
Course No.	01MB210
Credits	2.0Credits
Timetable	FallAB Mon3,4
Grade	1, 2Year
Instructor	Yuzuru Hiraga, Hiromi Morita
Course	This course features selected topics in Cognitive Science, which studies the nature of human
Overview	cognition as well as its realization and modeling on computers. The course will be in lecture
	form, and partly in interactive forms such as document reading, student presentation and
	discussion.
Remarks	Open in Every Even Years in English
	Lecture
Objectives	1) To understand the basic computational approaches to human higher-level cognition by
	analyzing and modeling
	2) To grasp the current research situations and some examples of research in the process of
	music cognition and problem solving in games and puzzles
	3) To comprehend recent cognitive psychological researches on visual attention, object per-
	ception, procedural memory etc.
Schedule	1)Introduction: Significance and role of computational modeling of human cognitive process
	2)Introduction: Significance and role of computational modeling of human cognitive process
	3)Examples of models of human problem solving in the music cognition, games and puzzles
	4)Examples of models of human problem solving in the music cognition, games and puzzles
	5)Examples of models of human problem solving in the music cognition, games and puzzles
	6)Introduction: Psychological approaches to human cognitive processes and the result
	7)Introduction: Psychological approaches to human cognitive processes and the result
	8) Examples of recent psychological studies on human cognitive processes such as visual
	attention, object perception, and procedural memory
	9)Examples of recent psychological studies on human cognitive processes such as visual
	10) Examples of reception, and procedural memory
	10)Examples of recent psychological studies on human cognitive processes such as visual
	11) An examination or submission of a homework
Grading	
Text	
References	1
itelefences	
	│ 3. 村上郁也編,「イラストレクチャー認知神経科学」オーム社
Office Hours	
Remarks	

Course Name	Human-Computer Interaction
Course No.	01MB211
Credits	2.0Credits
Timetable	SprAB Mon1,2
Grade	1, 2Year
Instructor	Tomoo Inoue, Masahiko Mikawa
Course	Human communication have been expanding its environment, which includes the use of var-
Overview	ious electronic devices and computer networks. The environment affects communication and
	resulting collaborative activity themselves. This course provides viewpoint and discussion
	on this communication and collaboration environment through latest research papers of the
	HCI and CSCW fields.
Remarks	Lecture
Objectives	The goals of this course are
	1) to understand theories of element technologies and their applications,
	2) to know recent trends of HCI,
	3) to understand applications of HCI.
Schedule	1)Introduction
	2) Foundations of Human-Computer Interaction $\#1$
	3) Foundations of Human-Computer Interaction $\#2$
	4)Sensors: Element technologies and recent trends for configuring HCI systems #1
	5)Input / output devices: Element technologies and recent trends for configuring HCI sys-
	tems $#2$
	6)Software technologies: Element technologies and recent trends for configuring HCI systems
	#3
	7) Design and configurations for HCI systems $\#1$
	8) Design and configurations for HCI systems $\#2$
	9)Applications of HCI
	10)Conclusion
Grading	
Text	
References	
Office Hours	Tomoo Inoue http://inolab.slis.tsukuba.ac.jp/
	Masahiko Mikawa mikawa at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~mikawa/index
Remarks	

Course Name	Information Design
Course No.	01MB212
Credits	2.0Credits
Timetable	FallAB Fri3,4
Grade	1, 2Year
Instructor	Sangtae Kim
Course	Information design representation using a graphic design technique is one of the important
Overview	means to continue to disseminate a variety of information. In this lecture, the target in the
	understanding of graphic design techniques and 3DCG technology from the point of view
	of visual communication design. Particular attention to the "visualization of concept", to
	experience the info graphics representation using a 2D / 3D computer graphics.
Remarks	Lecture
Objectives	Information design representation using a graphic design technique is one of the important
	means to continue to disseminate a variety of information. In this lecture, the target in the
	understanding of graphic design techniques and 3DCG technology from the point of view
	of visual communication design. Particular attention to the "visualization of concept", to
	experience the info graphics representation using a 2D / 3D computer graphics.
Schedule	1)Guidance:Class Description
	2)Research Presentation (1):
	To clarify the difference between data and information. And to discuss the representation
	method and information reading how the for handling as information.
	3)Research Presentation (2):
	To clarify the difference between data and information. And to discuss the representation
	method and information reading how the for handling as information.
	4)From data to information:
	The concept of the design approach, affordances to be used as a design element as well as
	explain the application example, color, layout, to understand the golden divide.
	5)Artwork from the idea sketch:
	Knowing the type of 2D / 3D computer graphics applications. By understanding the concept and usage of each, to understand the flow of efficient work.
	6)Making of Information graphics(research subject):
	Planning, production, to experience the process of up to outgoing. Organize data, repre-
	sentation method, to understand the flow of the in-formation graphics design in general,
	including the application of each element.
	7) Expression using the 3DCG (1) :
	To consider the priority and the representation of the information to be represented. And
	production using 3DCG software.
	8) Expression using the 3DCG (2) :
	To consider the priority and the representation of the information to be represented. And
	production using 3DCG software.
	9)Making of Information graphics(general subject):
	Information and graphics production using graphic design techniques and 3DCG. And to
	discuss how to get the most out.

	10)Future Prospects and Summary
Grading	
Text	Small report [40%] of several times to impose in class, Final report [40%], Attendance -
	20%], Unit certification requirements shall not be less than 60 points.
References	The history of computer graphics, Takayuki Oguchi, Film Art, Inc., 2009
	Introduction CG design, CG-ARTS Association, 2010
	Video Production by digital video expression CG , CG-ARTS Association, 2010
Office Hours	
Remarks	

Course Name	Ubiquitous Computing
Course No.	01MB213
Credits	2.0Credits
Timetable	SprAB Tue1,2
Grade	1, 2Year
Instructor	Masatoshi Kawarasaki
Course	Rapid spread of the Internet brought the convergence of telecommunication and information
Overview	processing. Combined with wireless mobile communication and RFID tags (non-contact IC
	card), our daily life is surrounded by a variety of networked information equipment. This
	lecture discusses the basic technologies to realize such a ubiquitous society. Keywords are
	mobile, network and cloud.
Remarks	Not open in 2017.
	Lecture
Objectives	Objectives are to understand the basic principles, configurations and technologies of ubiq-
	uitous computing through case studies. Social impacts are also discussed.
Schedule	1)Advances in ubiquitous computing
	2)Mobile network, Mobile internet
	3)Wireless access technologies
	4)RFID and Sensor network
	5)Cloud computing, Cloud networking
	6)Convergence in communication and broadcasting
	7)Case studies: Presentation and Discussion
	8)
	9)
	10)
Grading	
Text	
References	1. On Matsushita, et al., Ubiquitous Computing (in Japanese)
	2. A. Tanenbaum, Distributed Systems: Principles and Paradigms
Office Hours	mkawa at slis.tsukuba.ac.jp http://mkawa.slis.tsukuba.ac.jp/
Remarks	

Course Name	Lectures on Algorithms
Course No.	01MB219
Credits	2.0Credits
Timetable	FallAB Tue3,4
Grade	1, 2Year
Instructor	Shuichi Moritsugu
Course	We discuss some basic algorithms in information mathematics and their improvement of
Overview	efficiency. Topics will be selected from: (1) Algebraic algorithms on integers and polyno-
	mials, (2) Application to computational geometry and Wasan (Japanese old mathematics),
	(3) Ranking algorithm for web pages. Several exercises using computer algebra system are
	included.
Remarks	Lecture
Objectives	
Schedule	1)Introduction and basics in algebraic algorithms on integers and polynomials
	2)Modeling of polynomial computations and their improvement of efficiency, e.g. exact
	solution for systems of algebraic equations
	3)Application to computational geometry: theorem proving, mathematical origami, studies
	on Wasan
	4)Algorithms for search and ranking of web pages
	5)
	6)
Grading	
Text	1. 「応用のための代数系入門」増田真郎,サイエンス社
	2. 「アルゴリズム・サイエンス:出口からの超入門」岩間一雄, 共立出版
	3. 「代数学入門第三課」一松信,近代科学社
References	
Office Hours	moritsug at slis.tsukuba.ac.jp
Remarks	

Course Name	Foundation of Data Science
Course No.	01MB220
Credits	2.0Credits
Timetable	FallAB Mon5,6
Grade	1, 2Year
Instructor	Hidehiko Hasegawa, Maki Tokii
Course	With cutting edge research results in the field of Data Science, we introduce the basic ideas,
Overview	as well as applications in large-scale data systematically. We require students to analyze by
	using specific methods and appropriate data to understand what is "Data Science".
Remarks	Lecture
	Lectures are conducted in Japanese only.
Objectives	1) Students will be able to understand the basics of Data Science.
	2) Students will be able to master applications of methods to Large data from real problems.
	3) Students will be able to analyze some data by using one of the studied methods.
Schedule	The following order may be changed.
	1)Introduction: "What is Data Science?" and Treatment of data
	2)Introduction to Statistical Analysis Software R
	3)Regression Analysis and Principal Component Analysis
	4)Clustering
	5)PageRank
	6)LSI: Latent Semantic Indexing
	7)Kernel Methods
	8)SVM: Support Vector Machine
	9)SVM
	10)Presentation of anlytic reports by Students
Grading	Grading will be given based on your report and the presentation by using methods that you
	learned through this course.
Text	None
References	Documents will be shown during the class.
Office Hours	
Remarks	

Course Name	Advanced Topics in Video Media
Course No.	01MB221
Credits	2.0Credits
Timetable	FallAB Fri5,6
Grade	1, 2Year
Instructor	Yasuaki Tsuji
Course	Along with the development of digital means of data capture, storage, and transmission,
Overview	video distribution services on the internet started to appear one after another in recent years
	as cutting edge businesses.But the lecture in a systematic manner about their actual status
	of development and operation has no previous example or precedent or parallel. This course
	lectures on video distribution services from their development to know-hows comprehensively
	with the aim to obtain systematic knowledge and understanding of them.
Remarks	Lecture
Objectives	
Schedule	Contents of Lecture
	-Actual status of video distribution services
	-Types of image distribution sites
	-Latest trends of on-demand image distribution services
	-Operation of distribution system
	-Aggregation and program organization of contents
	-Page Layout and web site constitution
	-Techniques of web advertisement and customer collection
	-Web access and traffic line analysis
	-Future vision of video distribution on the internet
	etc.
Grading	
Text	1. 辻 泰明, 映像メディア論, 和泉書院, 2016
References	1. Daniel Arijon,,Grammar of the film language, Silman-James Press, 1991.
Office Hours	tsujiy at slis.tsukuba.ac.jp
Remarks	

Course Name	Information Media Seminar A (Informatics)
Course No.	01MB251
Credits	2.0Credits
Timetable	SprAB Thu5,6
Grade	1Year
Instructor	Tetsuji Satoh, Shuichi Moritsugu, etc
Course	「研究」には,新規性,有用性,信頼性など,様々な要素が必要とされる.本科目では,新規性の源
Overview	となる「気づき」や「着眼」の習得,ならびに,信頼性の高い論文を書くために必要となる「根拠
	に基づく論旨展開」の習得を目的とする.具体的な題材を用いながら実践的な取り組みを行う.
Remarks	Seminar
Objectives	\cdot Touch a lot of research cases to broaden the range of interest and understand the concept
	of bottoming out.
	\cdot Learn multifaceted analyzes and strategy planning methods such as strengths, weaknesses,
	opportunities, and threats by practicing using concrete subjects.
	\cdot Learn methodologies for making graphs and charts that are effective and easier to un-
	derstand for actual data such as observation data etc. Know the difference in results from
	viewpoints and points of view of data.
Schedule	1)guidance
	2) Introduction of Research Areas (1)
	3)Introduction of Research Areas (2)
	4)Survey of analysis target
	5)Evaluation of survey results(1)
	6)Evaluation of survey results (2)
	7)Designing the report
	8)Writing a report (1)
	9)Writing a report (2)
	10)Summary and Preparation for Exercise B
Grading	Judge by considering the results of the report and taking into consideration the participation
	situation etc. in the exercise
Text	
References	
Office Hours	Tetsuji Satoh http://www.slis.tsukuba.ac.jp/~satoh/index-j.html
Remarks	- Since there are circumstances for grouping etc, please be sure to attend the first time. In
	case you are forced to abstain, ** Please contact us by email ** in advance.
	• Submit the report assignment by the deadline, we will not accept reports late for the
	deadline.

Course Name	Text Analysis
Course No.	01MB301
Credits	2.0Credits
Timetable	SprAB Tue3,4
Grade	1, 2Year
Instructor	Shin-ichi Nakayama, Tetsuya Maeshiro
Course	Discusses about methods to extract knowledge from text data. Includes some practice tasks.
Overview	
Remarks	Lecture
Objectives	Be able to identify knowledge extractable from text data.
	Understand suitable methodologies to extract each aspect of knowledge.
	Be able to explain principles of knowledge extraction methodologies.
Schedule	1)Authenticity Appraisal (1): Feature analysis by word spectrum
	2)Authenticity Appraisal (2): Feature analysis by the frequency of words
	3)Author classification methods using multivariate analysis
	4)Extraction methods of Kansei and knowledge from texts
	5)Methods of the narrative analysis
	6)Feature extraction from text data
	7)Co-occurrences analysis
	8)Network Science
	9)Text analysis based on network structure
	10)Text analysis practices
Grading	Reports, in-class pratices and participation
Text	
References	
Office Hours	Shin-ichi Nakayama nakayama at slis.tsukuba.ac.jp
	Tetsuya Maeshiro maeshiro at slis.tsukuba.ac.jp
Remarks	

Course Name	Digital Libraries
Course No.	01MB303
Credits	2.0Credits
Timetable	FallAB Fri5,6
Grade	1, 2Year
Instructor	Norihiko Uda, Keita Tsuji
Course	Digital Libraries differ from search engines such as Google in that they maintain a
Overview	certain standard of information resources. Google's mission is to organize the
	world's information and make it universally accessible and useful. Digital Li-
	braries aim at connecting information resources with diversity of collections. In this course,
	we discuss history of digital libraries, element technologies, system design, and service strat-
	egy.
Remarks	Lecture
	01MB503 との重複履修不可
Objectives	Students can understand features of digital libraries in academic libraries.
	Students can understand features of digital libraries in public libraries.
	Students can features of digital libraries in web environment.
Schedule	1) history of digital libraries
	2)digital libraries in the world
	3) academic libraries and academic information infrastructure
	4)electronic journals and institutional repositories
	5) design and implementation of digital libraries
	6) from next generation OPAC to discovery service
	7)public libraries and digital libraries
	8)digital books in library service
	9)digital reference
	10)future of digital libraries
Grading	
Text	
References	
Office Hours	Norihiko Uda uda at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~uda/
	Keita Tsuji keita at slis.tsukuba.ac.jp http://slis.sakura.ne.jp/
Remarks	

Course Name	Digital Archiving
Course No.	01MB304
Credits	2.0Credits
Timetable	SprAB Fri5,6
Grade	1, 2Year
Instructor	Tetsuo Sakaguchi, Eiji Mizushima, Eduard Baryshev
Course	Today, in the beginning of 21st century, there is tremendous interest in how people, infor-
Overview	mation, and technology can work together to enhance the Museums, Libraries, Archives
	(MLA) experience for cultural institutions professionals, visitors, and all users of cultural
	information resources. That so many interested in this topic is due in no small part to con-
	tributions of several books covering different aspects of cultural institutions and information
	technology. This lectures focus on the methodology of digital archiving from MLA resources
	for public use.
Remarks	Open in Every Odd Years in English
	Lecture
Objectives	Understanding the history and current state of digital archiving of MLA from multidisci-
	plinary views.
Schedule	1)Introduction
	2)Archival practices and their theoretical foundations: historical development and cultural
	diversities
	3)New technologies and evolution of archival theory and practice: Towards metadata ap-
	proach
	4)Archives in Information Age and their future: Professional Debates
	5)Cultural Heritage and Digital Archiving : how to document
	6)Record Heritage and Collection Management
	7)e-Catalogue for museums and libraries
	8)Long time preservation of digital data: bit preservation and logical preservation
	9)Methods for preservation: migration, emulation, and so on
	10)Preservation metadata and discussions Each topic is not corresponding to week. Some
	topics will run for more than one week.
Grading	Reports
Text	
Office Hours	Totavo Salaguahi Tugadar, 12,45, 15,00
Once nours	7D212 sales at dis teuleuba as in http://www.salealab.org/
	Fiji Mizushima Monday, 15:15-18:00
	7D303 mizushima at slis tsukuba ac in
	Eduard Baryshey harvshey at slis tsukuba ac in
Remarks	Eduard Darysnev barysnev at sils.tsukuba.ac.jp
Itellial KS	

Course Name	Organization of Information and Resources
Course No.	01MB306
Credits	2.0Credits
Timetable	FallAB Thu1,2
Grade	1, 2Year
Instructor	Eiji Mizushima
Course	This course covers the principles and features of organizing information and resources. The
Overview	topics of this course are: 1) principles and basic concepts of information/resource organiza-
	tion, including organization in different contexts like libraries, archives; 2) metadata design
	and management, embracing (a) conceptual modeling of resources, and other metadata de-
	sign process, and (b) current situation of metadata creation; 3) subject analysis, vocabulary
	control, and classification. Class sessions will be a combination of lectures and discussions.
	Student 's presentation on a related topic is usually required at every class.
Remarks	Open in Every Odd Years in English
	Lecture
Objectives	This course covers the principles and features of organizing information and resources, espe-
	cially museum informatics. The topics of this course are 1) a framework for the theory and
	practice of organizing that integrates information organization in museums, briging the idea
	of collection management, cataloguing, documentation in museums from the museological
	point of view. The students have to prepare summery as a homework (reading the textbook)
	for a class.
Schedule	1)Museum information as a foundations for Organizing Systems
	2)Museum Activities in Organizing Systems, such as cataloguing, documentation, collection
	management
	3)Resources in Organizing Systems, museum conection
	4) Resource Description and Metadata for making catalogue
	6)Cetagorization: Describing Resources Classes and Type, natural resources, artificial re-
	o)Catagorization. Describing Resources Classes and Type, natural resources, artificial re-
	7)Classification: Assiging Resources to Categories and image data
	8)The Forms of Descriptions, catalogue data
	9)Interactions with Resources, utilization of the data
	10)The Organizing System Roadmap, new creation of the knowledge
Grading	attendance (30%), participation for the class (30%), report (40%)
Text	1. Jenny KIDD, MUSEUMS IN THE NEW MEDIASCAPE, ASHGATE, 2014
References	
Office Hours	Office hour : Thursday 13:45 15:00
	7D303 mizushima@slis.tsukuba.ac.jp
	Monday, 15:15-18:00
	7D303 mizushima at slis.tsukuba.ac.jp
Remarks	

Metadata
01MB307
2.0Credits
FallAB Tue1,2
1, 2Year
Shigeo Sugimoto
Basic concepts and models of metadata oriented to networked information environment are
presented and discussed in this class. The followings are the main topics of this class. *
Basic concepts of metadata in the networked information environment and digital libraries.
\ast Major metadata standards used in networked information environment - Dublin Core,
MODS, etc. * Model and description scheme of metadata and schemes for the Web - Re-
source Description Framework and Linked Open Data \ast Issues for metadata interoperability,
primarily based on Dublin Core and Semantic Web
Open in Every Even Years in English
Lecture
The goal of this class for students is to understand basic concepts and models of metadata for
networked information environment and metadata technologies to support digital libraries
and archives.
The first half of the class will cover general issues on metadata in the networked information
environment and digital libraries. The second half of the class will include assigned readings
by students, focusing on specific topics of metadata which will be determined in accordance
with the students enrolled in the class.
1)Week 1) Introduction - general introduction of metadata in the context of Internet and
Digital Archives/Libraries
2)Week 2-3) General description about digital libraries and archives - some example services
and discussions about them
3)Week 4-8) Description about metadta
Metadta Standards - Dublin Core, FRBR, OAIS, METS, etc.
Semantic Web Resource Description Framework and related issues
4) Weeks 9-10) Assigned readings and discussion
5)
Active participation and engagement in the discussions at the class is required
No taythook will be used
Class materials will be handed at the class
Beading materials and references will be given during the class
Viewing and using Digital Archives/Libraris on the Web by yourself in advance to this class.
is strongly suggested.
Specifications and reports available at Dublin Core Metadata Initiative
(http://dublincore.org/). Semantic Web and Data Activity at World Wide Web Consortium
(http://www.w3.org/2013/data/) are referred in the class.

Office Hours	By request
	sugimoto at slis.tsukuba.ac.jp
Remarks	It is not required but strongly suggested for students to have basic knowledge about tech-
	nologies for XML and Web in advance.

Course Name	Public Libraries
Course No.	01MB309
Credits	2.0Credits
Timetable	FallAB Thu3,4
Grade	1, 2Year
Instructor	Atsushi Ikeuchi, Masanori Koizumi
Course	This course intends to teach multiple perspectives of public libraries, such as concepts,
Overview	current status, evaluation/assessment, roles, management, and so on. Especially we focus
	on recent trends within the public library world. This course involves lecture, reading
	research books, and discussion about hot topics of public libraries.
Remarks	Lecture
Objectives	You will learn basic knowledge about public libraries.
	You will learn roles of public libraries in societies.
	You will learn how public libraries appropriately deal with issues in the current environment.
	You will learn the importance of public libraries' activities and services in societies.
Schedule	1)Introduction
	2)Concepts and Current Situation of Public Libraries
	3)Social Roles of Public libraries
	4)Elements/Components of Public Libraries
	5)Utility of Public Libraries
	6)Library Management
	7)Library Evaluation/Assessment
	8)Political perspectives of Public Libraries
	9)Policies of Social Educational Facilities
	10)Policies of Public Libraries
Grading	We grade based on reports and discussion
Text	We don't use any text book.
	1. Koizumi, Masanori,Inherent Strategies in Library Management. 1st Edition, Oxford,
	UK, Chandos Publishing, 2017, 240p., ISBN 9780081012772.
References	1. 糸賀雅児; 片山善博, 地方自治と図書館:「知の地域づくり」を地域再生の切り札に. 東京; 勁草
	書房, 2017, 242p.
Office Hours	Atsushi Ikeuchi atsushi at slis.tsukuba.ac.jp
	Masanori Koizumi koizumi at slis.tsukuba.ac.jp
Remarks	

Course Name	Library and Information Services in Culturally Diverse Communities
Course No.	01MB310
Credits	2.0Credits
Timetable	SprAB Mon3,4
Grade	1, 2Year
Instructor	Yuko Yoshida
Course	Cultural diversity is an important aspect of contemporary libraries. Public libraries need
Overview	to offer appropriate services based on the cultural characteristics of users in light of race,
	ethnicity, gender, sexual orientation and age. This course focuses on library services for
	minority groups that are traditionally underrepresented. Firstly, this course examines par-
	ticular cases in Japan, North America and Scandinavian countries. Secondly, the course
	examines challenges and problems of library and information services to diverse library
	users. Thirdly, the course deals with the conceptual framework and theories of the issues
	with special reference to the relationship of library institutions to their contemporary so-
	cial, cultural and political environments. Lastly, the course provides the skills of evaluating
	programs for diverse library users.
Remarks	Open in Every Odd Years in English
	Lecture
Objectives	Through the course, students will be able to:
	-Understand the needs of diverse user groups
	-Understand the theory and concepts of library and information services for diverse users
	-Appreciate challenges and possibilities of library and information services for diverse users
Schedule	1)Cultural diversity and library services: Introduction
	2)Cultural diversity and library services: Philosophy
	3)Cultural diversity and library services in Japan
	4)Cultural diversity and library services in North America- 1
	5)Cultural diversity and library services in North America- 2
	6)Cultural diversity and library services in Scandinavian countries- 1
	7)Cultural diversity and library services in Scandinavian countries- 2
	8)Appropriate services according to the cultural characteristics of communities- library ser-
	vices for sexual minorities
	9)Appropriate services according to the cultural characteristics of communities- indigenous
<u> </u>	10)Cultural diversity and library services: Future challenge
Grading	Class participation (20%), First presentation (30%), Second presentation (30%), Discussion
Text	Course materials will be posted to the learning management system "manaba".
	Related materials will be introduced by the instructor.
References	1. Sondra Cuban, Serving New Immigrant Communities in the Library, Westport, Conn.,
	Libraries Unlimited, 2007, 272p.
	2. Carol Smallwood & Kim Bechel eds. Library Services for Multicultural Patrons: Strate-
	gies to Encourage Library Use, Lannam, Maryland, Scarecrow Press, 2012, 338p.
	5. Ener Greenblatt ed. Serving LGD11Q Library and Archives Users (Jenerson, N. C.: McEurland & Co. 2011, 346p.
	Wichanand & Co., 2011, 540p.
	4. Katmeen Durns, Ann Doyle, Gene Joseph, Amson Krebs, Indigenous Librarianship, Encyclopedia of Library and Information Sciences, and ed. New York, Taylor and Encreis
	Encyclopedia of Library and Information Sciences, 5rd ed., New York, Taylor and Francis,
	± 2000 n $-2330-2346$

Remarks	

Course Name	Management of Libraries
Course No.	01MB311
Credits	2.0Credits
Timetable	SprAB Mon3,4
Grade	1, 2Year
Instructor	Ichiro Ohba
Course	This course introduces theories, principles and techniques in Management Science and their
Overview	application to libraries and information services. Topics to be studied include libraries's
	roles, types, systems, management, organizational structures, service design, and human
	resource management. In particular, the present situation of human resource management,
	social needs, and training and staff development are examined.
Remarks	Open in Every Even Years in English
	Lecture
Objectives	\cdot Students will understand theories, principles and techniques in Management Science and
	their application to libraries and information services.
	\cdot Students will have knowledge on organizational structures and information services based
	on the Management Science.
	\cdot Students will have knowledge on making their master thesis (reading manner, making
	summary and description techniques of cited literatures).
Schedule	In this class, using literatures of 15-20 papers, lecture will be made, and students are re-
	quested to make presentation and discussion. Students are, every week, requested to read
	assigned literatures, and to make a report. Method to make report will be explained at the
	first class time. The class planned is as follows.
	1)Orientation
	2)
	3)An Introduction to Management
	4)
	5)Planning in Libraries and Information Services
	6)
	7)Organizational Design
	8)
	9)Stakeholder Management
	11)Human Resources Management
	13)Communication and Team Work
	16)
	10) 17)Eir en siel Mens mensent
	1) Financial Management
	18) 10) Marketing and Drawsting
	19)Marketing and Promotion
	20)

	21)Report / Test
	22)
Grading	Assessment will be made with following three points, attendance and activity in class (pre-
	sentation and discussion) (ca.30%), reports on literatures (ca.35%), report or test (with no
	text) (ca.35%). However, if one of three marks is extremely low, total assessment will be
	lowered.
Text	At the first class time, textbooks (ca. three books) and assigned literatures will be an-
	nounced (students should buy the textbooks).
References	
Office Hours	Mon2
	7D113 iohba at slis.tsukuba.ac.jp
Remarks	• Students who want to join the class, are registered to make application using TWINS
	sooner.
	• On the materials to be used at the first class time, they will be noticed on a board until
	the first week in April. Please join the class with them.
	• At the first lecture, outline of the course will be explained. As the class is planned based
	on full participation for the class, if you miss any of the class, you will have disadvantage.
	• In each class, new theme will be set, if you miss the class, you will have trouble to under-
	stand successive lectures. So, you need to join the class with a mind of full participation.

Course Name	Media Education
Course No.	01MB312
Credits	2.0Credits
Timetable	SprAB Tue3,4
Grade	1, 2Year
Instructor	Kanae Suzuki
Course	The course will introduce you to media literacy and the current state of media education in
Overview	Japan and foreign countries. The future issues related to media education will be discussed,
	along with the course contents. The course also includes content analysis of media messages
	and educational programs to deepen the comprehension of media and media education and
	consider the advanced programs.
Remarks	Not open in 2017.
	Open in Every Even Years in English
	Lecture
	01MB522 との重複履修不可
Objectives	The goals of this course are to understand
	- the recent media environment surrounding children
	- the concept of media literacy
	- the media effect and related theories
	- the way to analyze media messages
	- the history and the current state of media education
	- the way to analyze various practices and programs of media education
	- the future issues related to media education and their resolutions
Schedule	1)Introduction
	2)The concept of media literacy and the recent media environment
	3)The effect of various media and the theories
	4)The effect of various media and the theories
	5)Analysis of media messages
	6)The practices of media education in Japan and overseas
	7)The practices of media education in Japan and overseas
	8)The practices of media education in Japan and overseas
	9)Analysis of media educational programs
	10)The future issues related to media education
Grading	Participation, short reports and oral presentations, and final examination
Text	Printed material will be distributed and reference books will be introduced in classes.
References	1. Grizzle, A. and Calvo, M. C. T. (Eds.)(2013). "Media and
	information literacy Policy and strategy guidelines " .
	UNESCO. (online), available from
	http://www.unesco.org/new/en/
	communication-and-information/resources/
	publications-and-communication-materials/
	publications/full-list/media-and-information-literacy
	-policy-and-strategy-guidelines/
	(accessed 2016-01-20).
	2. 菅谷明子 (2000). メディア・リテラシー:世界の現場から 岩波新書
	3. 坂元章 (編)(2003). メディアと人間の発達 学文社
Office Hours	

Remarks	

Course Name	Management of School Libraries and Media Centers
Course No.	01MB313
Credits	2.0Credits
Timetable	FallAB Mon1,2
Grade	1, 2Year
Instructor	Yuji Hirakue
Course	We discuss some important issues regarding management, professional education, the role
Overview	of personnel of school library media centers on the basis of academic basic papers in Japan
	and United State America. The classes are constituted of lectures and presentations by
	students taking this class. In the presentations students select some papers on management
	of school library centers and report them, and then we discuss them.
Remarks	Lecture
	01MB521 との重複履修不可
Objectives	The first time: Introduction of this class (Lecture)
	The second time: The present trends of school library media centers in Japan (Lecture)
	The third time to the fifth time: the present topics of school library media centers in Japan
	(Presentation)
	The sixth time: The present trend of school library media centers in U. S. (Lecture)
	The seventh time to the eighth time: Comparison of school library media centers between
	Japan and U. S. (Lecture and Presentation)
	The tenth: The summary of what we did (Discussion)
Schedule	1)
	2)
	3)
	4)
	5)
	6)
	7)
	8)
	9)
	10)
Grading	
Text	
References	1. 日本図書館情報学会研究委員会編,学校図書館メディアセンター論の構築に向けて:学校図書
	館の理論と実践
Office Hours	hirakue at slis.tsukuba.ac.jp
Remarks	

Course Name	Higher Education and Information Professionals
Course No.	01MB314
Credits	2.0Credits
Timetable	FallAB Fri3,4
Grade	1, 2Year
Instructor	Chieko Mizoue
Course	This course will give students a chance to explore the university setting, as the environment
Overview	in which librarians and other professionals receive their training and as an example of an
	academic workplace for information professionals. Students will come to an understanding
	of the purposes/goals and management of higher education institutions from a theoretical
	perspective. Furthermore, students will gain insight into the system of professional education
	through an analysis of education of librarians and information professionals.
Remarks	Open in Every Even Years in English
	Lecture
Objectives	* The students will be able to understand a meaning of education and a history of higher
	education in North America and Japan.
	* The students will be able to understand the problems of professional education.
Schedule	This course covers the followings;
	1)Guidance
	2)Meaning of education
	3)History of higher education
	4)Organization of higher education North America and Japan
	5)Degree and curriculum - North America and Japan
	6)Accreditation - USA
	7)University extension movement UK and USA
	8)Continuing education - Japan
	9)Professional School and Information professionals - North America and Japan
	10)Students ' presentation
Grading	Grading is based on class reports (70%) and end-term presentation (30%) .
Text	No text. The students have to read the reading assignments which are provided by the
	lecture at the first week.
References	
Office Hours	
Remarks	

Course Name	Academic Libraries and Information Infrastructure
Course No.	01MB315
Credits	2.0Credits
Timetable	FallAB Mon3,4
Grade	1, 2Year
Instructor	Hiroshi Itsumura
Course	This course is designed to prepare students to function effectively in academic libraries and
Overview	information infrastructure. Students will study a wide variety of governance, principles,
	problems, and trends, relating to academic librarianship.
Remarks	Open in Every Odd Years in English
	Lecture
Objectives	1) Understand history and evolution of higher education in Japan and the transformation
	of scholarship, all of which shaped the development of academic libraries.
	2) Understand the service, collecting, preservation, organization, and access functions of
	academic libraries.
	3) Understand the governance issues of academic libraries.
Schedule	1)History of academic libraries and information infrastructure in Japan.
	2)Governance of academic libraries and information infrastructure.
	3)History of Higher education.
	4)Transformation of scholarship.
	5)Service, collecting, preservation, organization, and access functions of academic libraries.
	6)Electronic Journal
	7)Open access, institutional repository and consortia.
	8)Learning and academic libraries.
	9)Digital archives
	10)Where we go from here
Grading	Report, essay, and examination.
Text	1. 逸村裕, 竹内比呂也共編. 変わりゆく大学図書館. 勁草書房. 2005.
References	
Office Hours	hits at slis.tsukuba.ac.jp
Remarks	

Course Name	Information Media Seminar A (Library and Information Sciences)
Course No.	01MB351
Credits	2.0Credits
Timetable	SprAB Thu3,4
Grade	1Year
Instructor	Atsushi Toshimori
Course	This course provides the basics of research method through a design, analysis, and report
Overview	of questionnaire survey. for the students of LIS full-time program.
Remarks	Seminar
Objectives	
Schedule	1)
	2)Guidance
	3)
	4)Research topics from faculties 1
	5)
	6)Research topics from faculties 2
	7)
	8)Planning the survey research
	9)
	10)Questionnaire design
	11)
	12)Preliminary survey
	13)
	14)Conducting survey and data input
	15)
	16)Analysis and graph presentaion
	17)
	18)Presentation of survey result 1
	19)
	20)Presentation of survey result 2
Grading	
Text	
References	
Office Hours	Wed. 9:30-11:30
	7B213(学類長室) tosimori at slis.tsukuba.ac.jp
Remarks	

Course Name	Research Methods in Informatics
Course No.	01MB401
Credits	2.0Credits
Timetable	FallAB Mon1,2
Grade	1Year
Instructor	Tetsuya Maeshiro, Yoichi Ochiai, Haitao Yu
Course	This course provides an overview on research goal settings and research methodologies prac-
Overview	ticed in Informatics, focusing on the properties inherent in those research methods. Namely,
	we will address methods to extract information and knowledge represented in varied con-
	formations, procedures to study them, and analytical techniques to interpret the results.
	Individual research methods are treated through case studies.
Remarks	Lecture
Objectives	Be able to explain basic research methodologies used in Informatics.
Schedule	It treats research methodologies of the fields that constitute Informatics and Media Studies.
	Some case studies of actual researches are also discussed.
	1)Introduction
	2)Case study of successful research
	3)Research problem formulation
	4)Hypothesis formulation
	5)Modeling - I
	6)Modeling - II
	7)Model validation
	8)Measurement and quantification
	9)Special topic - I
	10)Special topic - II
Grading	Based on the achievement of problem sets and tasks
Text	Indicated on the need basis
References	
Office Hours	Tetsuya Maeshiro maeshiro at slis.tsukuba.ac.jp
Remarks	Have to complete all problem sets and tasks.
	Active participation is mandatory.

Course Name	Introduction to Library and Information Science
Course No.	01MB402
Credits	2.0Credits
Timetable	FallAB Wed1,2
Grade	1, 2Year
Instructor	Lo, Patrick
Course	This course provides an overview of the library and information science profession. Stu-
Overview	dents will obtain an understanding of the nature and core functions of the library and
	information profession(s) under different settings. In addition, students will acquire an ap-
	preciation and understanding of the professional contributions librarians make, and how
	libraries/information centres function in societies past, present, and future, etc.
Remarks	Lecture
Objectives	This course introduces concepts of library organization, types of libraries, library terminolo-
	gies, duties of library personnel, developments and history of libraries, current issues library
	services, as well as different challenges faced by librarians/information professionals today,
	etc. At the conclusion of this course, students will be able to: Become acquainted with a
	variety of aspects of their chosen profession, and identify specific areas of interest within the
	library and information profession.
	1. Understand the history, philosophy, principles, and policies of library and information
	science, etc.
	2. Familiarize with the various practices and operations, as well as the possible range of
	services offered by different types of libraries, e.g., academic, public, school, special, law,
	medical, art, music, museum, and archive, etc.
	3. Understand the organization, operations and management of libraries, as well as the
	duties of different library personnel.
Schedule	1)Course Guidance & Overview of Library and Information Science Professions
	2)History of Libraries & Librarianship: Past to the 21st Century
	3)Types of Libraries; Changing Roles of Libraries and Librarians and their Social Functions
	4)Functions and Social Roles of the City, State, National and Government Libraries
	5)Libraries as Complex, and User-Centred Institutions & Organizations
	6)Collection Development and Resources Management
	7)Information and User Education, and Other Public Services to Clients
	8)Digital Libraries, Information Systems and Other Automations their Impacts on both
	Libraries & Librarianship
	9)Library and Information Professions: Education and Training for Library Professionals
	and Paraprofessionals ; Career Developments/Opportunities and Job Interviews, etc.
	10)Student Presentations of Term-End Reports ; Wrap-up: Summary and Q&A
Grading	Small assignments/lecture reports (50%) ; Term-end report (40%) ; Attendance and partic-
	ipation (10%)
Text	None. Relevant course materials will be provided at each lecture.
References	1. Fourie, Denise K.& David R. Dowell. (2009) Libraries in the Information Age: an
	Introduction and Career Exploration. 2nd ed. Santa Varbara, Calif. : Libraries Unlimited.
Office Hours	

Remarks	

Course Name	Special Topics 1
Course No.	01MB403
Credits	2.0Credits
Timetable	FallAB Tue3,4
Grade	1, 2Year
Instructor	
Course	This is an advanced seminar class conducted in English. Each week we will examine a
Overview	major area of information, media, and library science. The conceptual frameworks in these
	fields are undergoing upheaval due to active research, new technologies, societal changes,
	and increasing inter-disciplinary interaction.
Remarks	Lectures are conducted in English.
	Not open in 2017.
	Lecture
Objectives	This is an advanced seminar class conducted in English. Each week five lectures explain
	the topics of information, media, and library science. The conceptual frameworks in these
	fields are undergoing upheaval due to active research, new technologies, societal changes,
	and increasing inter-disciplinary interaction.
Schedule	Five lecturers talk about the special topics in turn.
	1)Oct. 6th. Introduction
	Ochiai Yoichi, Physicalization of Computational Resources: Computer Graphics and Inter-
	2)Oct 13rd Ochiai Vaichi Musaum for Ubiquitous Contury: Modia Art and Digital Archiva
	3)Oct. 20th Teruyama Junko Doing ethnography (overview)
	4)Oct. 27th Teruyama Junko, Doing ethnography. (focusing on disability)
	5)Nov 10th Shaoyu Ye To introduce some advanced research about media usage's influ-
	ence from the perspective of intercultural communication.
	6)Nov. 17th. Shaovu Ye. To discuss why media literacy is necessary for intercultural
	communication.
	7)Nov. 24th. Koizumi Masanori. Strategic Management and Organization
	8)Dec. 1st. Koizumi Masanori. Innovation on Libraries
	9)Dec. 8th. Baryshev Eduard. Archives and their diversity: Focusing on historical and
	international dimensions.
	10)Dec. 15th. Baryshev Eduard. Reconsidering Archival Science Classic: From Jacob von
	Rammingen to Peter J. Scott.
Grading	Each lecturer explain his/her grading.
Text	Each lecturer explain his/her text.
References	
Office Hours	
Remarks	

Course Name	Special Topics 2
Course No.	01MB404
Credits	2.0Credits
Timetable	FallC Mon/Thu5,6
Grade	1, 2Year
Instructor	Tetsuji Satoh
Course	The course will be delivered introducing my research, other relevant research, and related
Overview	theories in library and information sciences with the objective of exposing cultural and
	contextual differences. I will try to make the class as interactive as possible.
Remarks	Lectures are conducted in English.
	Not open in 2017.
	Lecture
Objectives	Students will develop an understanding of a lesser researched geographical and cultural
	context (SAARC region, with a special focus on Sri Lanka), linking relevant theories to
	practical research in Library and Information Studies.
Schedule	1)Language, literacy & reading
	2)Legal and policy frameworks
	3)Librarianship in the infosphere
	4)Architecture and interior
	5)Library collections
	6)Knowledge organization and resource discovery
	7)Cooperation and promotion
	8)Instruction and guidance
	9)Productivity
	10)Memoirs as primary sources
Grading	Evaluation will be based on active class participation (20%) , weekly learning log (70%) , and
	final portfolio (10%).
Text	
References	
Office Hours	
Remarks	Reading assignments will be handed over at the start of each week.

Course Name	Practical Seminar A
Course No.	01MB451
Credits	2.0Credits
Timetable	FallAB Fri5,6
Grade	1Year
Instructor	Lo, Patrick
Course	This course provides students with opportunities to deepen the knowledge of cultural and
Overview	organizational aspects of Library and Information Science such as the history, management
	and services of the library and information center. Students will carry out an extensive
	literature survey on a relevant topic and give a presentation to report and discuss the main
	findings.
Remarks	Seminar
Objectives	Through the course, students will be able to:
	- understand the history, management and services of the library and information center
	- identify a appropriate literature for a relevant topic
	- understand how to make a bibliography
	- develop skills of critical discussions
Schedule	1)Introduction
	2)Overview of the history of the library and information centers
	3)Overview of the management of the library and information centers
	4)Overview of the services of the library and information centers
	5)Presentation procedures / Selection of materials for presentations
	6)Presentation and discussion 1
	7)Presentation and discussion 2
	8)Presentation and discussion 3
	9)Presentation and discussion 4
	10)Conclusion
Grading	attendance (20%) , first presentation (30%) , second presentation (30%) , discussion (20%)
Text	None. Other reading materials will be introduced by the instructor.
References	
Office Hours	Wed 1-2
	7D315 plo at slis.tsukuba.ac.jp
Remarks	

Course Name	Practical Seminar B
Course No.	01MB452
Credits	2.0Credits
Timetable	SprAB Mon5,6
Grade	1Year
Instructor	Yuzuru Hiraga, Tomoo Inoue
Course	This course provides students with opportunities to deepen the knowledge of technological
Overview	and cognitive aspects of Library and Information Science such as programming, multimedia
	data, and knowledge representation. Students will develop and evaluate a prototype or
	mockup system using a relevant technology and give a presentation to report and discuss
	the main findings.
Remarks	Seminar
Objectives	Through the course, students will be able to:
	- understand the history, management and services of the library and information center
	- identify a appropriate literature for a relevant topic
	- understand how to make a bibliography
	- develop skills of critical discussions
Schedule	1)Introduction
	2)Philosophy of librarianship
	3)Service and access 1
	4)Service and access 2
	5)Service and access 3
	6)Service and access 4
	7)Social responsibility
	8)Intellectual freedom
	9)Privacy protection
	10)Conclusion
Grading	attendance (20%) , presentation (60%) , discussion (20%)
Text	Materials will be introduced by the instructor.
References	
Office Hours	
Remarks	In this course, the following formal languages will be used for exercises:
	- Computer programming: Ruby, and
	- Markup: XML and HTML.
	The latest information of this course will be presented on the web page
	http://www.sakalab.org/lectures/.

Course Name	Digital Libraries
Course No.	01MB503
Credits	2.0Credits
Timetable	SprAB Sat5,6
Grade	1, 2Year
Instructor	Norihiko Uda, Masao Takaku
Course	In this course, we lecture on design, specification, implementation and management of digital
Overview	libraries in pragmatical approach. Especially, we explain construction of university library
	system from OPAC to discovery services. Moreover, we discuss and solve operational prob-
	lems about digital library service.
Remarks	Lecture
	01MB303 との重複履修不可
Objectives	Students can understand features of digital libraries in web environment.
	Students can understand element technologies of digital libraries.
	Students can know recent tendency of digital libraries.
Schedule	1) history of digital libraries
	2)academic libraries and academic information system
	3)digital libraries and Google
	4)information resource management and open access
	5)institutional repositories
	6) from next generation OPAC to discovery service
	7)system for library jobs and for users
	8) information behavior
	9)web service and API
	10)future of digital libraries
Grading	
Text	
References	
Office Hours	Norihiko Uda uda at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~uda/
Remarks	

Course Name	Selected Topics in Digital Contents
Course No.	01MB504
Credits	3.0Credits
Timetable	FallABC Mon7,8
Grade	1, 2Year
Instructor	宇陀則彦ほか
Course	In this course, we lecture on digital contents of library services. We explain service devel-
Overview	opment video media, recent issues about copyright, security of web service systems.
Remarks	Lecture
Objectives	Students understand technologies, laws and future of digital contents.
Schedule	1)introduction to digital contents Instructor:Norihiko Uda
	2)current state of digital video contents Instructor:Yasuaki Tsuji
	3)category of intellectual property Instructor:Maiko Murai
	4) development of digital video delivery service Instructor: Yasuaki Tsuji
	5)outline of copyright Instructor:Maiko Murai
	6)recent state of digital video media Instructor:Yasuaki Tsuji
	7)current issues of copyright Instructor:Maiko Murai
	8)current issues of library system Instructor:Norihiko Uda
	9)new web services 1 Instructor:宇陀則彦ほか
	10)new web services 2 Instructor:宇陀則彦ほか
	11)digital books Instructor:宇陀則彦ほか
	12)Internet of things and libraries Instructor:Tetsuo Sakaguchi
	13)reading tools of digital contents Instructor:Tetsuo Sakaguchi
	14)security of digital contents Instructor:Tetsuo Sakaguchi
	15)summary and discussion Instructor:Norihiko Uda
Grading	
Text	1. 資料を配布する。
References	1. 飯野勝則 『図書館を変える! ウェブスケールディスカバリー入門』, 出版ニュース社, 2016
	2. 辻 泰明 『映像メディア論 映画からテレビへ、そしてインターネットへ』和泉書院,2016(9月
	30 日刊行)
	3. 田村善之『知的財産法』第 5 版, 有斐閣, 2010
	4. 情報処理推進機構 『情報セキュリティ読本 四訂版』, 実教出版, 2013
Office Hours	
Remarks	

Course Name	Practical Use of Information
Course No.	01MB512
Credits	2.0Credits
Timetable	FallAB Wed7,8
Grade	1, 2Year
Instructor	Kei Wakabayashi, Taro Teduka
Course	This course introduces concepts and methods of analysis that leverage data resources for
Overview	applications in library information services. The course provides case studies regarding var-
	ious data resources including statistics in library, patent documents, physical experimental
	data and social information.
Remarks	Lecture
Objectives	Students will be able to recognize what kinds of facts are obtained by analyzing data and
	how they can be used.
Schedule	1)Introduction
	2)Probability and distribution
	3)Parameter and estimator
	4)Modeling with latent variables
	5)Gaussian process regression
	6)Categorization and processing of data (1)
	7)Categorization and processing of data (2)
	8)Methods of knowledge discovory and data mining (1)
	9)Methods of knowledge discovory and data mining (2)
	10)Methods of knowledge discovory and data mining (3)
Grading	The grade will be determined by assignments (quick tests and reports) and participation to
	the class.
Text	Learning materials will be provided in the lecture.
References	1. Foster Provost, Tom Fawcett (著), 竹田正和 (訳), 戦略的データサイエンス入門 ビジネス
	に活かすコンセプトとテクニック. オライリージャパン, 2014.
Office Hours	
Remarks	

Course Name	Selected Topics in Library Services
Course No.	01MB523
Credits	3.0Credits
Timetable	SprABC Fri7,8
Grade	1, 2Year
Instructor	吉田右子ほか
Course	This subject gives students a good understanding of public librarianship and wide variety of
Overview	topics related to library services i.e., including organization of knowledge resources, children '
	s service, library users with various backgrounds, collection development, MLA collaboration
	etc. Students will learn the significance of various kinds of services delivered and specific
	service strategies in the 21st century through lecture and discussion.
Remarks	Lecture
Objectives	
Schedule	1)The significance of public libraries
	2)Book start and children's service 1
	3)Book start and children's service 2
	4)Book start and children's service 3
	5)Organization of knowledge resources 1
	6)Organization of knowledge resources 2
	7)Organization of knowledge resources 3
	8)Community-led library service
	9)Library services for older people
	10)Dementia and library services
	11)Library services and collection development 1
	12)Library services and collection development 2
	13)Local materials and MLA collaboration 1
	14)Local materials and MLA collaboration 2
	15)Local materials and MLA collaboration 3
	16)An optional extra day
Grading	
Text	
References	
Office Hours	Nobuyuki Midorikawa midorika at slis.tsukuba.ac.jp
	Tetsuya Shirai tetsushi at slis.tsukuba.ac.jp
	Saori Donkai donkai at slis.tsukuba.ac.jp
	Hideo Joho Thu 4 and 5th Period
	7D408 hideo at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~hideo/
Remarks	

Course Name	Library Governance
Course No.	01MB544
Credits	2.0Credits
Timetable	SprAB Mon7,8
Grade	1, 2Year
Instructor	Atsushi Ikeuchi, Masanori Koizumi
Course	This course provides an introduction to theories, methods, and concerns of library gover-
Overview	nance. It has four goals: 1. To provide students with rudimentary training in the skills and
	methods of library management based on case methods. 2. To prepare students for subse-
	quent course work at Bunkyo Campus of the University of Tsukuba. 3. To give students
	a base level of sophistication regarding current issues and concerns in library governance 4.
	To become knowledgeable about the concept of 'Good Library' and to be able to utilize
	theories in practical/actual situations in libraries.
Remarks	Lecture
Objectives	1)Understanding concepts related to Library Governance
	2)Understanding the library 's mission, objectives, functions, and relationships with local
	communities
	3)Identifying problems of library activities and how to solve them
	4)Developing knowledge and skills for creating library activity plans
	5)Learning basic knowledge and skills in order to govern libraries with local communities
	from the perspective of library management
Schedule	Library Governance is governing libraries with local communities based on concepts that
	are very familiar in library management. This class consists of two parts; Lectures and
	Discussion Based on Case Studies. Students will learn Management, Organisation, User
	Behaviour, and Local Community from the diverse perspective of good library governance.
	Finally, students will gain the basic knowledge and skills to govern libraries with local
	communities.
	1)Public Governance and Libraries
	2)Strategic Management for Libraries
	3)Organisational Theories for Libraries
	4)Librarians' Specialties
	5)Public Relationship of Libraries among Local Communities
	5)Problems of Current Libraries - 1
	2)Problems of Current Libraries - 2
	0)Problems of Current Libraries - 4
	10)Problems of Current Libraries - 5
Grading	We grade based on reports and discussion
Text	We don't use any text book
References	
Office Hours	Atsushi Ikeuchi atsushi at slis tsukuba ac ip
	Masanori Koizumi koizumi at slis tsukuba ac in
	maanon Kolzum Kolzum at Sistekkuba.ac.Jp

Remarks	

Course Name	Research Trends of Library and Information Studies
Course No.	01MB551
Credits	2.0Credits
Timetable	SprAB Tue7,8
Grade	1, 2Year
Instructor	Nobuyuki Midorikawa and others
Course	This course gives an overview of latest research trends in Library and Information Science
Overview	and related fields. Topics are presented from instructors' current research results.
Remarks	Lecture
Objectives	Students can explain the latest trend of various study fields.
	Students understand characteristics of each research topics presented in the class.
Schedule	1)Guidance/Users' Survey
	2)Digital Library, Digital Archives, and Metadata
	3)Classifications, Ontology, and SKOS
	4)Learning Supports and University Library
	5)Humanities and Computer Technology: Current status and issues
	6)Digital Library and Information Seeking Behavior
	7)Statistical Language Processing and Information Retrieval
	8)Support and Expansion for Communication
	9)Museum Information and Collection Management
	10)Learning the Media, Learning by the Media
Grading	
Text	
References	
Office Hours	
Remarks	

Course Name	Introduction to Research Methods
Course No.	01MB552
Credits	2.0Credits
Timetable	SprAB Sat3,4
Grade	1, 2Year
Instructor	Nobuyuki Midorikawa, Mamiko Matsubayashi, Fuyuki Yoshikane, Hideo Joho
Course	Design of research paper, methods of surveys and experiments, publication of research re-
Overview	sults, and related topics are explained with a mind to master thesis.
Remarks	Seminar
Objectives	
Schedule	1)Introduction
	2)Design of research
	3)Use of information sources
	4)Method of research and experiment 1: Quantitative research
	5)Method of research and experiment 2: Qualitative research
	6)Method of research and experiment 3: Literary research
	7)Presentation
	8)Research ethics and publication of research results
	9)Writing research paper
	10)Presentation by students
Grading	
Text	
References	
Office Hours	Nobuyuki Midorikawa midorika at slis.tsukuba.ac.jp
Remarks	

Course Name	Introduction to Social Research Method
Course No.	01MB553
Credits	2.0Credits
Timetable	FallAB Sat3,4
Grade	1, 2Year
Instructor	Yoshihiro Goto
Course	The method of Social Research (questionnaire survey in particular) developed as one of the
Overview	sociological methodology. In the first half of this class, the lecturer explains the concept of
	statistics and questionnaire survey and a basic method of the qualitative research. In last
	half of this class, each member of this class must build a hypothesis of his own to produce
	a questionnaire. Finally each member of this class will master the basics of questionnaire
	survey and qualitative research.
Remarks	Seminar
Objectives	The method of Social Research (questionnaire survey in particular) developed as one of the
	sociological methodology.
	In the first half of this class, the lecturer explains the concept of statistics and questionnaire
	survey and a basic method of the qualitative research.
	In last half of this class, each member of this class must build a hypothesis of his own to
	produce a questionnaire.
	Finally each member of this class will master the basics of questionnaire survey and quali-
	tative research.
Schedule	1)Regarding a method of building of hypothesis of your research
	2)About the relationship among concepts, variables, questions
	3)What is social sciences? What is questionnaire survey and qualitative research?
	4)Presentation of your own hypothesis
	5)Basic concepts of statistics
	6)Regarding the basic points of attention to make questionnaire
	7)The method of qualitative research
	8) Presentation of questionnaire of each members (1)
	9)Presentation of questionnaire of each members(2)
	10)Presentation of questionnaire of each members(3)
	11)Regarding the basic points of attention to add up quantitative data
Grading	
Text	
References	
Office Hours	ygoto at slis.tsukuba.ac.jp http://www.slis.tsukuba.ac.jp/~ygoto/index.html
Remarks	