

教養・共通教育通信

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巻頭言



村中孝史
国際高等教育院教育院長

京都大学では、対話を根幹とした自学自習を尊重し、百年を超える歴史の中で「自由の学風」を培ってきました。その基礎には、学問とは、自ら考え、経験し、自由な対話を行うことを通じて、未知の課題を見出し、原理・原則から人間、社会そして自然現象を探究することにより、新たな知的地平を切り拓いていくものであるという信念があります。もちろん、学問を行うためには、先人の業績を謙虚に学ぶ姿勢が大切です。しかし、それを踏まえて、未知なる課題に取り組み、新たなものを創造・発見することこそ、学問の意義があります。そのためには、既にある知識の効率的な学習から抜け出し、自ら新たな知を発見・創造する知的営為へと転換を図る必要があります。「自学自習」とは、一人閉じこもって学習することではなく、発見・創造に向け、教員との、あるいは学生相互間での対話を通じ、自ら議論を深め合うことを意味します。このような知的営為の転換を通じて、学生の皆さんは学問の道に第一歩を踏み出すこととなります。本学の教養・共通教育の目標は、その第一歩にふさわしい、自由で闊達な知的空間を築くことにあります。

現在の学問は、その発展に伴って、専門分野の細分化が進んでいます。しかし、他方で、地球社会が抱える課題はますます複雑化・高度化し、専門分野を横断する形で生じるようになっています。このような課題に取り組む

には、自らの専門分野を学ぶだけでなく、多様な視点から事象を見つめることが必要です。本学の教養・共通教育は、人間、社会、自然に関する科目、さらにはこれらを融合した科目(統合科学)を幅広く提供することで、学生の皆さんが多様な視点を身につけられるよう配慮しています。

また、国際化が進化した現代社会において活躍するには、従前以上に国際的なコミュニケーション力を身につけることが必要となっています。この力は、語学力だけを意味するのではなく、異文化や異なる思想・価値観を理解し、又、互いの存在を認め合う力をも包含するものです。そのため、本学の教養・共通教育においては、英語学習を強化だけでなく、それ以外の言語や、それと密接に結びついた文化や思想を学べるよう配慮するとともに、各国・地域の歴史や現状を様々な視点から学べるように配慮しています。

国際高等教育院は、以上のような観点に立った知的空間を創造し、その中で、学生の皆さんが自ら主体的に、仲間や教員との対話を通じて、自らの学問を見出していけるよう、努力を重ねています。京都大学には学部や研究科だけでなく、多くの研究所やセンターもあります。それらすべてにより、国際高等教育院が企画・実施する教養・共通教育は支えられています。それは、学生を学問の世界へと誘うことこそが大学の最重要課題であるからに他なりません。学生の皆さんが学問の世界へと踏み込み、その素晴らしさに気づいてもらえるよう、心より期待しています。

Takashi Muranaka

Director,
Institute for Liberal Arts and Sciences

Throughout its more than 100-year history, Kyoto University has fostered a tradition of academic freedom under the banner of “self-teaching and self-learning” based on dialogue. At the core of this is the conviction that learning is a process of uncovering hitherto unrecognized issues through self-thinking, experience, and free dialogue, and of opening up new intellectual horizons by inquiring into humanity, society, and natural phenomena according to fundamental principles. Of course, it is also important to have an attitude of respectfully learning from the achievements of those who have come before us. At the same time, while maintaining that attitude, pursuing the significance of learning resides in endeavors to investigate the unknown and to create and discover new things. To this end, it is necessary to shift the direction of advanced learning away from efficient absorption of existing knowledge and toward discovery and creation of new knowledge on your own initiative. “Self-teaching and self-learning” does not mean shutting yourself up for learning, but engaging in deeper discussions through dialogues with faculty members or between students, thereby striving to realize discovery and creation. This shift in the direction of advanced learning will enable you as students to take the first step into academia. The primary goal of Kyoto University’s liberal arts and general education is to create an intellectual space that is free, open, and conducive to taking that initial step.

Rapid progress in academic research means that specialized fields are becoming increasingly segmented. Meanwhile, the global community is being confronted with more complicated and advanced issues that involve different specialized fields. To tackle these issues, it is not enough to

merely learn your specialized subjects; you must observe events from various perspectives. Kyoto University’s liberal arts and general education has been designed to enable you to learn a wide variety of subjects concerning humanity, society, and nature, as well as the Interdisciplinary Sciences, which brings these subjects together, so that you can attain diverse perspectives.

To play an active role in today’s global society, it is becoming more and more necessary to attain international communication skills, which involve not only language proficiency, but also capabilities in understanding different cultures, philosophies, and values, as well as recognizing one another’s individuality. Accordingly, the liberal arts and general education of Kyoto University has been organized so that you can not only improve your English proficiency but also learn other languages, as well as cultures and philosophies closely related to those languages, and learn the histories and current conditions of various countries and regions from a wide range of perspectives.

Based on these viewpoints, at the Institute for Liberal Arts and Sciences, we are continuing efforts to create an intellectual space where you can establish your own identity as an active participant in the academic arena on your own initiative through dialogues with friends and faculty members. Kyoto University features not only faculties and graduate schools, but also many laboratories and research centers, all of which underpin the liberal arts and general education designed and provided by the Institute for Liberal Arts and Sciences. This is only because the university’s top-priority issue is to invite students to the world of academia. We sincerely hope that you will set your sails for the world of academia and seek excellence in the world.

Foreword

悩み多き若者たちへ

～学生生活のメンタルヘルス～

京都大学は、数多くのノーベル賞受賞者を輩出してきた、世界的に見てもトップレベルの研究水準を誇る素晴らしい大学です。しかしその一方で、悲しいことに京都大学における学生の自殺は、わが国の大学生の平均と比べて高い水準にあります。このことを思うとき、京都大学が生みだしてきたどんな輝かしい研究成果も、その光を失うような気がします。

学生総合支援センターのカウンセリングルームには、日々、心に重い悩みを抱えている人が相談に訪れています。学生生活には悩みがつきものです。人間関係の悩み、恋愛の悩み、学業の悩み、家族関係の悩み、性格の悩み、生きる意味をめぐる悩み、などなど。悩みのないのがよい人生だと思っている人もいるかもしれませんが、そんなことはないと思います。真剣に生きていけば、悩みは深くなります。人間的な成長は豊かに悩むことから生じてきます。むしろ悩みのない人は、ほんやり生きているのかもしれませんが、悩みのない人には悩みに目覚めさせ、悩んでいる人にはより深く悩めるよう導くこと、つまりみなさんに豊かに悩む力をつけてもらうことこそ、大学教育の使命だと私は思います。

けれども、ときには悩みが大きく重くなりすぎて、抱えきれないほどになることもあるでしょう。悩みが圧倒

的になると、眠れなくなる、食欲がなくなる、お腹の調子が悪くなるなど、身体的にも不調が出てくるものです。衝動的な行動が抑えにくくなることもあります。最後には、生きていても周りに迷惑をかけるだけだ、死んでしまいたいというような考えが出てきてしまいます。そうしたときには、一人で抱え込まず、誰かと一緒に悩むことが役に立つでしょう。また、もし眉間に皺を寄せて思い詰めて悩んでいるのなら、大きく息を吐いて、どっしりと安定した姿勢を取り、口元に微笑みを浮かべながら、優しく悩みを抱きかかえてみるのもいいでしょう。あるいは、いったんその悩みを悩むことをお休みし、しばらく寝かせておくのがよいかもかもしれません。そうやって、手強い悩みに取り組むための気力や体力をまずは回復させるのです。悩むこともスキルです。上手に悩めるようスキルアップしていきましょう。

ますます効率を追い求める現代社会において、じっくりと悩む時間を持つことは、もはや贅沢となりつつあるのかもしれませんが、京都大学の学生が、身近な仲間や先生たちと相互に支え合いながら、力強く創造的に悩むことができるよう、今後とも応援していきたいと思っています。

杉原保史

学生総合支援センター
(カウンセリングルーム)
センター長・教授
専門分野：臨床心理学・
心理療法への統合的アプローチ
趣味：悩むこと、近所の散歩、
猫をごろごろ言わすこと



To our struggling young people: Mental health in student life

Kyoto University is a wonderful school, known as one of the top universities in the world for its high level of scholarship and as the alma mater of numerous Nobel laureates. On the other hand, the suicide rate among students at Kyoto University is regrettably high compared to the student average nationwide. When I think of this fact, all the fame and glory that outstanding research results have brought to Kyoto University seem to dim and lose color.

The Counseling Office at the General Student Support Center is visited daily by people who are burdened with internal struggles. Student life is not easy. Struggles with other people, of love, about studying and credits, with their own disposition, related to family, involving the search for the meaning of life... the list is endless. Some say that a struggle-free life is a good life, but I beg to differ. If you live sincerely and in earnest, your internal struggles intensify. People grow by overcoming various struggles. Maybe people who are struggle-free are just drifting through life. The mission of university education, in my opinion, is to awaken those drifting through life to face their internal struggles, and to teach those who are currently struggling to dig deeper; in other words, to teach all of you to acquire the skills to live a meaningful life by satisfactorily resolving various internal struggles.

However, there will be times when the struggle becomes overwhelming and gets out of hand. When this happens, you may begin to see psychosomatic symptoms such as insomnia, lack of appetite, and gastrointestinal trouble. You may also experience an increase in impulsive behavior. You may eventually begin to think that you are only a burden to others, and that you wish to die. If this happens, instead of struggling alone, it is always better to have someone at your side to struggle with you. If you are struggling and anguished with a furrowed brow, try taking deep breaths, get yourself into a secure and comfortable position, put a little smile on your lips, and embrace your problems like you would be a friend. Or, take a break from struggling with your problems, and let it be for a while. This way, you can first recover your mental and physical strength before going back to tackling difficult problems. Internal struggles require skills. Let's try to improve your skills so that you can struggle in a better way.

In this modern society, where everyone strives for efficiency, taking ample time to deal with internal struggles may have become a luxury. We hope to continue offering our support to Kyoto University students so that they can develop their skills to benefit from the meaningful resolution of various internal struggles, along with the help of their friends and their professors.

Yasushi Sugihara

Professor and Director of the General Student Support Center (Counseling Office)
Specialized Field: Clinical psychology
(Integrative approach to psychotherapy)
Hobby: Contemplating on things, strolling around the neighborhood, playing with my cat

語学学習について

「語学ができる」とは、どういうことだろう。試験でいい成績が取れても、残念ながら「語学ができる」とは言えない。効率よく点を取るための試験勉強が、外国語を使って相手の話を理解し、自分の考えを伝えたいという気持ちとうまく結びついていないからである。

本来言語は、意思疎通のツールである。だから、「語学ができる」とは、外国語で正しく理解し合えることである。それには、言葉だけでなく、文化的相違の理解も必要だ。それがいかに大切か、地続きの諸外国は、数々の戦争や紛争を通じていやというほど味わってきた。その危機感が島国の日本人にはあまりない。外国語を学術的な目的で使おうと思った時そのことに気づいても、上学年で専門外の学習に費やせる時間は非常に限られている。だからこそ国際高等教育院は、言う、1～2回生のうちに「使える外国語」を習得してほしいと。

では、「使える外国語」を学ぶにはどうしたらうまくいくか。それには、国際人として「相手をわかり、相手にわかってもらう」という自覚をしっかりと持つことが必要である。

まず興味のある分野の知りたい内容を、報道番組やニュースレターなどの情報源から日常的に外国語で短時間に読んだり、聴いたりしてみる。「使い慣れ」は重要だ。もちろん最初は日本語のようにスイスイとは頭に入らない。だから、「知りたいという気持ちとの根競べ」になる。しかし、好きな分野の語彙は、信じられないほど楽に覚えらるから試してほしい。

次に、自分の意見を発言用にとめる癖をつけよう。受け取った情報や発言に黙っていると、全てに同意している（又は頭が悪い）と誤解されかねない。言わずとも自分の気持ちを押し量ってくれるだろうなどと甘えてはいけない。信頼や尊敬、友情さえも、自分の意見を言葉にして初めて



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国際高等教育院教授
専門：ドイツ社会保障法
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Specialized Fields: German/Austrian Social Security Laws
Languages: German, English, (French, Italian)

得られるものだと心せよ。人前での発言が苦手な人も、自分に国際的な第2の人格を作るくらいの覚悟で乗り越えてほしい。

最後に、初めから完璧を求めないこと。日本人、特にプライドを持つ京大生は、失敗や誤りを極端に恐れる。ゆえに、失敗するくらいならやらない方がいいという結論になりがちだ。しかし特に Speaking は、「話さなければうまくならない!」。自信がつくまで、自宅でこっそり練習でもよい。そしてなるべく早く家の外で英語を使ってみよう。どんなに苦しい時でも根気よく続けること。「継続は力なり」とは、言語学習のためにある。

国際高等教育院附属国際学術言語研究センター(i-ARRC)の課外教育活動は、単に単位を取るためだけではない学術的外国語学習を応援している。<https://www.i-arrc.kyoto-u.ac.jp> のポータルサイトでは、英語を中心に自宅学習用の無料アプリ、自習用ブースやiPadの学内貸し出し、言語学習や留学関連の催し物及び会話クラブ情報などが掲載されている。TOEFL/TOEIC/IELTS等の無料講習会や同模擬試験無料配布等のお知らせもある。勉強の仕方が分からなければ、上記サイトから学習相談も予約できる。国際高等教育院はいつでも、「使える外国語」を目指す京大生を応援している。

On learning foreign languages

What does “being proficient in a foreign language” mean? Unfortunately, good exam scores is not a good indicator of foreign language proficiency. This is because the study required to ensure high scores on exams has little to do with the desire to understand someone’s story and communicate thoughts in another language.

Language is, by nature, a tool for communication. Therefore, being proficient in a foreign language means being able to understand one another in that foreign language. This requires not only words, but also an understanding of cultural differences. Countries that share borders are reminded over and over again of the extreme importance of having such an understanding, through numerous wars and conflicts. However, the Japanese people, who remain isolated in their island nation, tend to lack this sense of crisis. If students only realize this in their third or fourth year of school when faced with the situation of using foreign languages in an academic setting, there is very little time left to learn things outside of their specialties. This is why the Institute for Liberal Arts and Sciences insists that students become “proficient” in foreign languages during their first and second years.

Now, how can students become proficient? First, it is necessary to become “cosmopolitan” with the intent to “communicate to understand one another.” Use snippets of time on a daily basis to read about or listen to news on subjects that interest you via news programs, newsletters and other information sources in the foreign language of your choice. Becoming familiar with the language is a key. Of course, understanding such input will not be as easy as in Japanese. This results in an internal conflict between the wish to give up and the desire to know. However, please give this a try, because you will find that learning vocabulary pertaining to fields that you are interested in is surprisingly easy.

Next, get into the habit of processing your thoughts into comments and opinions. If you stay silent after receiving information

or hearing someone speak, people may think you are in agreement with everything (or, that you are intellectually subpar). Don’t make the mistake of assuming that they will try to understand your feelings without your speaking up. Realize that voicing your opinions is the only way to gain trust, respect and even friendship. You may be afraid to speak in public, but try your best and overcome such a fear by creating a secondary, cosmopolitan personality for yourself.

Lastly, do not expect perfection from the start. Japanese people, especially Kyoto University students who tend to be rather proud, are extremely afraid of failure and making mistakes. This is why they often reach the conclusion that taking no action is better than falling on their faces. However, in speaking a foreign language, “improvement comes with practice.” If you need to build up your confidence, practice in the privacy of your own home at first. Then, try out your foreign language elsewhere as soon as possible. Continue learning, even when it’s difficult. “Persistence pays off” is the perfect proverb for language learning.

The extracurricular education activities of the International Academic Research and Resource Center for Language Education (i-ARRC) supports language learning that is aimed not to simply pass exams, but for practical academic use as well. Its portal site (<https://www.i-arrc.kyoto-u.ac.jp>) offers information on free apps for language learning at home (mainly English), study booths, iPad rentals within the University, events related to language learning and exchange programs, conversation club activities, etc. Notifications of free workshops, distribution of free practice tests, etc. regarding TOEFL, TOEIC, IELTS and other tests are also found here. If you don’t know how to study, you can make reservations from the above website for study consultations. We at the Institute for Liberal Arts and Sciences are always providing support to Kyoto University students who aim to become proficient in a foreign language.



E科目へのいざない



桂山康司
国際高等教育院 英語教室主任
人間・環境学研究所 教授
専門: イギリス文学・詩、英語教育
趣味: 能楽、カラオケ、英語の授業

Invitation to “E” Classes

Kohji Katsurayama
English Program Chair, Institute for Liberal Arts and Sciences
Professor, Graduate School of Human and Environmental Studies
Specialized Field: British literature and poetry, and English education
Hobbies: noh, karaoke, and English classes

皆さん、E科目って聞いたことありますか。

「英語によるコミュニケーション能力の向上と国際性の涵養を図るため、全学共通科目で開講されている科目の中から、英語力強化に資すると考えられる科目を選び」指定した科目をいいます。要するに、英語を通じて、国際的に通用する人材を育てようというわけです！それには3種類あります：

E1: 英語テキストの講読を中心的な内容とする科目(英文学、英語圏文化を教授する科目)

E2: 英語を使用言語として実施される科目(原則として外国人教員が英語による授業を行う科目)

E3: 英語スキルの向上を目的とする科目(英語を用いた討論、発表などの技術力向上を目指す科目)

このなかで、すでに開講されている E2 科目は、1 年生から取得でき、すでに、皆さんには馴染みの科目かもしれませんね。使用言語は英語で講師も外国人教員ということで、日本にいながらにして留学気分が味わえる—ここで自信を得て、さらに本当の留学にも挑戦してください。

それに対して、E1、E3 科目は平成 29 年度からの開講で、2 年生以上が対象となる科目です。E1 科目

では、学術的文献に特異な語彙や表現に習熟することを目指し、E3 科目では、「聞く、話す、読む、書く」の4技能それぞれのスキル向上や各種試験にも対応したクラスが用意されています。ともあれ、様々な英語に、しっかり慣れ親しんでもらおうということです。でも、もちろん、ここは大学ですから、英語といっても学術的言語技能(学術文献の読解力、英語を用いた討論、発表などの技術力をいいます)の育成を通じて、学問の場にいるものにふさわしい教養の涵養を目指すものとなっています。

まずは、学問的な雰囲気を感じ取ってください。それは、単に知識の摂取に終わるのではなく、異文化たる英語との格闘を通じて、既成の知識の枠を取っ払い、自らをより広い、自由な世界に解き放つことです。一方で、そのことを通じて、逆に日本文化の良さをあらためてより深く認識できることになるかもしれませんね。皆さんの可能性を引き出すために、いろいろな選択肢が京大には用意されていますが、世界に開かれた大学として、異文化間能力を涵養するというのもその大きな柱の一つです。言語は文化の箱舟です。まずは、身近な国際語である英語を攻略して、多様な発想法を身につけてください。共通教育における外国語学習が新たな学問の世界へのよき道案内人となってくれることを祈っています。



Have you ever heard of “E” classes?

Expecting to contribute to reinforcing your English proficiency, they have been selected from among classes taught in the liberal arts and general education courses in order to improve your English communication skills and enhance your international mindset. In a word, “E” classes strive to foster individuals who can play active roles in international society by providing opportunities to learn English. These classes are categorized into the following three groups:

E1: Classes mainly consisting of reading and discussing English texts (classes on English literature and English-language cultures)

E2: Classes taught in English (classes taught in English by non-Japanese faculty members, in principle)

E3: Classes whose purpose is to improve one’s English skills (classes where students strive to improve their technical capabilities, such as for English discussions and presentations)

Of these groups, E2 classes, which have already been opened, can be taken even by freshmen, and you may already know well about them. These classes are taught in English by non-Japanese faculty members, enabling you to feel as if you were studying abroad while in Japan. I hope you will take this opportunity to build your confidence, and then actually study abroad.

Meanwhile, E1 and E3 classes will become available in academic year 2017, targeted for sophomores and up. While E1 classes have been designed for you to become proficient in

vocabulary and expressions peculiar to academic literature, E3 classes have been organized to improve each of the four skills of listening, speaking, reading and writing, and also to prepare for a wide variety of examinations. Anyway, the purpose of “E” classes lies in ensuring that you become familiar with various types of English. However, English classes taught at university have been programmed, of course, to attain a high level of understanding of the liberal arts appropriate to members of the academic arena through the development of academic linguistic proficiency (e.g. the capability to read and comprehend academic literature, and techniques necessary for conducting discussions and presentations in English).

First, please feel the full academic atmosphere. This does not mean merely absorbing knowledge, but pushing the envelope of existing knowledge through struggles with English, which is a different culture than yours, and then releasing yourself to an even wider and freer world. At the same time, this might also help you understand the good points of Japanese culture more deeply once again. At Kyoto University, there is a wide variety of options to draw out your potential. One of the main pillars of these options available at the educational institute open to the world is the development of cross-cultural capabilities. Languages are cultural arks. You first need to master English as an international language, which is the most familiar to you, and then acquire capabilities to think from diverse perspectives. I hope that foreign language classes in the general education courses will serve as a good guide for you to enter a new academic world.

京都大学の全学共通科目は、平成27年度まで5つの群から構成されていましたが、図のとおり平成28年度よりこれを7つの群に再編しました。

人文・社会科学科目群は学問分野ごとに哲学・思想、歴史・文明、芸術・文学・言語、教育・心理・社会、地域・文化、法・政治・経済、外国文献研究、日本理解の8つの分野で構成され、それぞれの分野で扱う内容により基礎と各論に分類して科目が開講されています。

自然科学科目群は、数学、統計学、物理学、化学、生物学、地球科学、図学の7つの学問分野で構成されています。

それぞれ分野で基礎となる講義科目や分野によって、実験・実習科目が用意されていて、重要な科目はクラス指定(基本的に必修ではありません)になっています。

外国語科目群は、英語と8つの初修外国語(独、仏、中、露、伊、西、朝鮮、アラビア)及び日本語(外国人留学生のみ対象)で構成されています。なお、ギリシア語、ラテン語は、外国語科目群ではなく人文・社会科学科目群として開講されています。

情報学科目群は、科目選択の目安となるよう「基礎」と「各論」に分類されており、基礎科目は、情報基礎、情報基礎演習の2科目を中心に開講します。

健康・スポーツ科目群は、健康・スポーツ科学とスポーツ実習から構成されています。

キャリア形成科目群は、将来のキャリアに関連した科目を、コンプライアンス、国際コミュニケーション、学芸員課程、国際交流、COCOLO域^{*}、その他キャリア形成と

いう分野で構成しています。

統合科学科目群は、統合科学、環境、森里海連環学、その他統合科学の分野で構成され、現代社会のさまざまな課題に文系・理系双方の教員を交えた対話型授業を通じ、多元的な視点から、学生が主体的に考察することを目的として開設しています。

少人数教育科目群は、ILASセミナーとして実施し、少人数で担当教員とともに興味ある内容に取り組むことで、大学らしい学び方を身につける科目です。また、英語で行われるILASセミナーも多数開講します。

各学部では、これらの群に沿って修得すべき全学共通科目の単位数が定められており、学部によっては履修すべき分野や科目を指定している場合もありますので、卒業するために、自分はどの群の科目から何単位必要なのか、国際高等教育院のwebサイト上にある、全学共通科目履修の手引きや学部の便覧を見てよく確認し履修計画を立てましょう。

※ COCOLO域は、文部科学省「地(知)の拠点整備事業(大学COC事業)」(京都学教育プログラム)の一環

全学共通科目の

What are the “Groups” of the Liberal Arts and General Education Courses?

群って何?

群 Group		
人文・社会科学科目群 Humanities and Social Sciences	哲学・思想	Philosophy
	歴史・文明	History and Civilization
	芸術・文学・言語	Arts, Literature and Linguistics
	教育・心理・社会	Pedagogy, Psychology and Sociology
	地域・文化	Regions and Cultures
	法・政治・経済	Jurisprudence, Politics and Economics
	外国文献研究	Readings in Humanities and Social Sciences
	日本理解	Understanding Japan
自然科学科目群 Natural Sciences	数学	Mathematics
	統計	Statistics
	物理学	Physics
	化学	Chemistry
	生物学	Biology
	地球科学	Earth Science
	図学	Graphics
外国語科目群 Languages		
情報学科目群 Informatics		
健康・スポーツ科目群 Health and Sports	健康・スポーツ科学	Health and Sports Sciences
	スポーツ実習	Sports Training
	コンプライアンス	Law and Ethics Compliance
	国際コミュニケーション	International Communication
	学芸員課程	Museum Studies National Certification Course
	COCOLO域	Local Collaboration Program
キャリア形成科目群 Career Development	その他キャリア形成	Other Career Development Courses
	統合科学	Interdisciplinary Sciences
	環境	Environmental Sciences
	森里海連環学	Forest, Towns and Oceans Program
	その他統合科学	Other Interdisciplinary Sciences
少人数教育科目群 Seminars in Liberal Arts and Sciences		

番外コラム

科目の「A」「B」「I」「II」とは?

「物理学基礎論 A」「物理学基礎論 B」? 「哲学 I」「哲学 II」?

■ 「A」「B」・・・

科目を連続して履修することが推奨されている場合、アルファベットが付きまします。必ずしも「A」の科目の単位を取っておかないと「B」の科目を履修出来ない訳ではありませんが、「B」の内容を理解するためには「A」の内容を理解していることが前提になります。ただし、「A」「B」連続履修を推奨するものの、「B」から履修しても問題ないよう配慮されている科目もありますので、シラバスで確認してください。

■ 「I」「II」「III」・・・

一方、ローマ数字は科目の並列を意味します。科目内容に共通点が多いものの、授業展開や扱うトピックが異なる場合に、この符号で区別されます。「I」→「II」→「III」と順番に履修する必要はありません。例えば「III」の科目のみ履修するといったことも可能です。

and 8) Arabic; and Japanese (available only to international students). Greek and Latin are covered not in the Languages, but in the Humanities and Social Sciences.

In the Informatics, subjects are divided into foundations and issues studies, in order to help students select which subjects they should take. As basic subjects, Basic Informatics and Practice of Basic Informatics are held.

The Health and Sports consists of health and sports sciences and sports training.

The Career Development comprises subjects related to career development. Such subjects are divided into law and ethics compliance, international communication, museum studies national certification course, local collaboration program*, and other career development courses.

The Interdisciplinary Sciences consists of interdisciplinary sciences, environmental sciences, forest, towns and oceans program, and other interdisciplinary sciences. This course has been established for the purpose of encouraging students to consider a wide variety of contemporary problems on their own initiative from multi-angle perspectives through interactive classes taught by both humanities- and science-related faculty.

The Seminars in Liberal Arts and Sciences is provided as ILAS Seminars. By providing opportunities for students to study in a small group and work on subjects of their choice together with teaching staff, the course helps the students to acquire a style of study appropriate for university students. In addition, many ILAS Seminars are provided in English.

Each faculty has set the number of credits that you need to earn in each of the Liberal Arts and General Education Courses. Some faculties have designated which field you need to study and which subjects you need to register for. Accordingly, you need to understand how many subject credits of which course you need to earn in order to graduate. Please create a subject-registration plan after carefully checking the Handbook of the Liberal Arts and General Education Courses available on the website of the Institute for Liberal Arts and Sciences, as well as the registration manual provided by each faculty.

*local collaboration program (COCOLO-iki in Japanese Syllabus) forms part of the university's initiative (Kyoto University Educational Program) selected as a Center of Community (COC) Program by the Ministry of Education, Culture, Sports, Science and Technology.

Extra Column

What do “A,” “B,” “I,” and “II” denote?

“Fundamental Physics A,” and “Fundamental Physics B?” “Philosophy I” and “Philosophy II?”

■ “A” and “B”

If subjects are recommended to be taken consecutively, the names of those subjects contain “A” and “B.” This does not necessarily mean that you cannot register subject “B” before earning the credit for subject “A.” However, to understand the content of subject “B,” it is imperative to first understand the content of subject “A.” Nevertheless, although it is recommended to take “A” and “B” subjects consecutively in that order, some subjects are designed to allow students to take “B” first. Please read the relevant subject's syllabus for more information.

■ “I,” “II,” and “III”

These Roman numbers represent similarities between the relevant subjects. These numbers are used to distinguish between subjects that feature many similarities, but that provide a different class development and handle different topics. There is no need to take such classes in the ascending order of “I,” “II,” and “III.” Accordingly, it is possible to take only subject “III.”

柴山桂太

人間・環境学研究科准教授
1974年生
専門分野：経済思想、現代社会論

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人文・社会科学科目群 経済学を学ぶ目的は…

Humanities and Social Sciences Group The Purpose of Studying Economics is...

戦後を代表する経済学者の一人、J・ロビンソンは経済学を学ぶ目的について次のように述べている。「経済学を学ぶ目的は、経済問題について出来合いの答えを得るためではなく、経済学者に騙されないようにするためである。」経済学を学ぶ者が、胸に刻むべき言葉である。

私が担当する講義(「経済学Ⅰ」「経済学Ⅱ」)の目的は、マクロ経済学の基本的な考え方を学ぶことにある。扱うのは、GDPや物価、失業率などの経済指標が、どのような要因によって動くのかという問題だ。

日々のニュースで、これらの経済指標を目にする機会が多い。景気が悪くなれば、GDPは減り失業率は上がる。経済成長は、人口一人当たりで見たGDPが長期的に上昇していく現象だ。なぜ、景気は悪くなったり良くなったりするのか？ 不況やインフレに直面した政府は、どのような対策を取るべきなのか？ なぜある国の経済は成長し、別の国では停滞が続いているのか？ これらの問題を考えるべく、経済学者はさまざまな道具(モデル)を生み出してきた。講義では、そのうち最も基本的なものを紹介しつつ、現在の日本経済や世界経済が直面する諸問題(バブル崩壊後の長期停滞やリーマン・ショック、欧州債務危機など)について解説を行っている。

しかし、私が講義で紹介しているものはすべて「経済問題についての出来合いの答え」である。財政・金融政策の効果も、経済成長の基本的なメカニズムも、すべて過去の経済学者がその時々状況に応じて作り出した道具である。昔は通用した道具も、今は古くなって問題の解決には役立たないかもしれない。事実、世の中には既

Joan Robinson, a representative economist in the post-WWII era, stated about the purpose of studying economics as follows: “The purpose of studying economics is not to acquire a set of ready-made answers to economic questions, but to learn how to avoid being deceived by economists.” (*Contributions to Modern Economics*, 1978). Every economics student should keep these words in mind.

The courses I teach (Economics I and Economics II) aim to enable students to learn the basic principles of macroeconomics. The courses address the question of what factors cause changes in economic indicators such as GDPs, prices, and unemployment rates.

You may often catch news about these economic indicators almost every day. A slowing economy means a decrease in the GDP and an increase in the unemployment rate. Economic growth denotes the phenomenon of a long-term increase in the GDP per capita. Why does an economy decline and boom by turns? What measures should a government take when facing an economic slump or inflation? Why is an economy growing while another has been in recession? Economists have created various tools (models) to tackle these questions. While introducing students to the most basic ones among these models, the courses I teach are dedicated to explaining recent problems faced by the Japanese and global economies (e.g. the post-bubble long-term stagnation of the Japanese economy, the financial crisis mainly triggered by the Lehman Brothers bankruptcy, and the European debt crisis).

However, my lectures deal with only “a set of ready-made answers to economic questions.” Both the effects of fiscal and financial policies and the basic mechanism of economic growth are “tools” devised by economists in

存のモデルではうまく説明できない現象がたくさんある。バブル崩壊後の日本経済が、なぜ20年以上も停滞を続けているのか。日本銀行が実施している量的・質的緩和やマイナス金利政策は本当に効果があるのか。これらの問題の完全な答えは、まだ見つかっていない。

経済の現実、経済学の理論のはるか先を行っている。「経済学者に騙されるな」とは、経済問題には唯一無二の答えはないという意味で理解するべきだろう。現実の見方は一つではない。経済問題への答えも、本当は複数ある。この曖昧さは、経済学を含めた社会科学に共通した特徴だ。しかし、曖昧な問題を、事実と照らし合わせながら厳密に考えることはできる。これが社会科学の、特に経済学を学ぶ醍醐味だと私は考える。

経済の動きは複雑だ。過去の偉大な経済学者が生み出した様々な理論は、その複雑さを読み解くのに必要な道具を、私たちに提供してくれる。

past times according to the immediate situation. Some tools that worked well in the past may be out of date now and not work well to resolve current problems. The world today is in fact filled with many phenomena beyond explanation by existing models. Why has the post-bubble Japanese economy stagnated for more than 20 years? Are quantitative and qualitative easing and the negative interest rate policy adopted by the Bank of Japan really effective? No answers have yet been provided to these questions.

The realities of the economy are far ahead of economic theories. We should understand that by “avoid being deceived by economists,” Joan Robinson meant that there is no single answer to any economic question. A reality can be understood in various ways. An economic question really has multiple answers. This kind of ambiguity is a characteristic common to social sciences, including economics. However, we can rigorously examine ambiguous questions by referring to reliable facts. I believe this is the essence of studying social sciences, and economics in particular.

The economy moves in complex ways. Various theories produced by great economists in the past provide us with the necessary tools for exploring such complexity.



人文・社会科学科目群 Japanese History – E2

Humanities and Social Sciences Group Japanese History - E2

蒙古襲来を失敗させたのは「神風」ではなかったし、倭寇の大部分は「倭」でも「寇」でもなかった。そして、アヘン戦争の原因はアヘンでなかった。これらの事実を意外と思われない方は、これ以上読み続けなくて結構ですが、興味がそそられた方には、この授業紹介を最後まで目を通し、来年度の「Japanese History - E2」(I 前期、II 後期)の履修をおすすめします。

よく勘違いされるのですが、歴史という分野の対象は、実はいわゆる「過去」そのものではありません。今という瞬間に起こっていることが一秒でもたったら「過去」になるし、それだけで物事がいきなり特別な意義を帯びるわけでもありません。むしろ、変更不可能である「過去」に対し、可能性に満ちている「現在」と「未来」が私たちにとって意義のある「時」だと、歴史家の私も思っています。

では、「過去」であること以上に、歴史家は歴史に何を求めているかという、すなわち変化です。変化がなければ、歴史は成立しません。変化というのは、とくに王室の家系や戦争のオンパレードに限ったものではありません。機関においてか、個人においてか、行動か思想か、意識的か無意識的か、インパクトの大小を問わず、すべての変化が歴史的に意味を持っています。私たちが生きているこの世の中のすべてが、絶えず変化していることを自覚することが歴史という作業の大前提であり、それを学生の皆さんに共鳴してもらうことが、本授業の最低限の目標です。

しかし、その前提を踏まえて、歴史の究極の目標となるのは、変化を説明することです。というのも、すべての出来事が、複雑な社会・政治的状況のもと、異なる背景・能力・思想をもつ複数の主体の行動によって起こっ

ファンステーンパールニールス

教育学研究科准教授
専門分野：日本教育史・思想史

Niels Van Steenpaal

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Area of Expertise: Japanese intellectual and educational history



The failure of the Mongol invasion of Japan had nothing to do with divine winds, and the majority of so-called “Japanese pirates” were neither Japanese nor pirates. Also, the Opium War was not really about opium. If none of this surprises you, don't bother reading any further. If it does, please keep reading and consider signing up for my full-year Japanese History course (spring semester, I; fall semester, II).

Despite widely held misconceptions, the discipline of history is not concerned with the past as such. The present is turning into the past as we speak and does not by that very fact suddenly gain in significance. If anything, I would argue that the present and future are much more precious and urgent due to the simple fact that we can still impact the way in which they will unfold.

What historians look for in history is not the past itself, but the changes that happened in it over time. History has no meaning other than in change. To be sure, this change is not restricted to dull successions of kings and battles. Rather, change can take any form: within institutions or people, actions or thought, small or large. The realization that everything around us is subject to constant change is the essential precondition for historical inquiry. As such, it is the bare minimum that I hope to relay to my students in this course.

The true challenge of historical inquiry, however, is trying to understand the reasons for change. After all, events unfold in complex socio-political circumstances, involving a variety of different actors each with different backgrounds, skills and goals, thus making it extremely hard—if not impossible—to assign direct causality. The task of the historian is therefore not to decide on one single narrative of events, but to critically assess all possible narratives with an open mind. Getting students to adopt such a historical viewpoint—both in and out of class—is the ultimate goal as a teacher of history.



“The Yellow Peril,” *Puck*, Vol. 55, No. 1412 (March 23, 1904).

ているため、歴史的变化にはっきりとした因果関係をつけることが難しいどころか、事実上不可能です。よって、歴史家の使命は、一つしかない絶対的な物語を作成することにあるのではなく、可能となるすべての説明を批判的に見渡し、自分なりに整理することにあります。このスキルを学生の皆さんが身に付けることが出来たら、それ以上に嬉しいことはありません。

日本で育った方ならば、学校やメディアなどを通して、ある程度整った日本史のストーリーが頭の中に出来上がっているはずですが、「Japanese History - E2」の目標は、そのストーリーを複雑化することです。そのために以下の二つの視点を重視します。第一に、一国史を超えたグローバルな視点。荘園制や藤原家の細部まで掘りおこすのではなく、「日本」というものを日本にした越境的な要素を検討します。第二に、中華文明に重点を置く視点。日本史はもちろん、前近代の世界史を理解するカギとなるのは中国にほかなりません。

今までなんとなく覚えてきた日本史を、以上の二つの視点からもう一度読み返す、もしくは読み直すことに興味がある方は是非履修にチャレンジしてみてください。

Although those students who have grown up in Japan will by now—through school and media—have acquired a more or less stable picture of Japanese history, this course will try to add nuance and complexity to this picture by introducing two narratives: (1) A global perspective that provides badly needed context and significance to national developments. Rather than focusing on the intricacies of matters such as the Shōen system or the Fujiwara family tree, we will explore the transcultural factors that made “Japan” into Japan; and (2) A Sino-centric perspective that stresses the importance of China to the historical development of not only Japan, but of the entire premodern world.

If you are interested in seeing how well your own narrative of Japanese history holds up when seen through these two perspectives, you are very welcome to join this course.

自然科学科目群

「微分積分学(講義・演義)」、
「線形代数学(講義・演義)」

Natural Sciences Group

“Calculus with Exercises” and “Linear Algebra with Exercises”

微分積分学、線形代数学は、共に現代の科学技術を支える数学の根幹をなすものであり、多くの理系の学生にとって必須の内容になっています。(例えば線形代数学はウェブ検索に応用されます。詳しくはウェブ検索してみてください。) 微分積分学では、高校の数学IIIで学習した微分積分の精度を高めて、種々の現象を記述する関数の振る舞いを詳しく調べる手法を学びます。高校では関数を微分する、つまり関数のグラフが定める曲線に接線をひくことで関数の様子を調べました。これを“高次元化”すると、曲面の接平面を考えることでその曲面の元になる2変数関数の様子をすることも出来るようになります。接線や接平面は1次式で表されますから、複雑な関数を簡単な1次式で近似しているわけです。一方の線形代数学では、その1次式を、連立1次方程式のような具体的なものから始めて抽象的なレベルまで、徹底して学びます。このように微分積分学と線形代数学は、それぞれが重要であるとともに相互に結びついています。

「微分積分学(講義・演義)」、「線形代数学(講義・演義)」は理系の基礎科目として理学部にクラス配当されています(一部の学科を除く)。この2つの科目は、「講義・演義」と科目名にありますように、週1コマの講義と隔週1コマの演義との組み合わせで構成されており、一つの講義クラスに対して、その半分のクラスサイズで講義に対応した問題演習を行う演義授業を進めます。数学では自分で考えてみる、解いてみるのが極めて大事ですから、単に講義を聞くだけでなく演義を有効に使って数学力を身につけていただくことを期待します。

加藤信一

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Arts and Sciences
(Graduate School of Science)

Calculus and linear algebra form the basis of the mathematics that support modern-day science and technology, and are required for many science and engineering majors. (For example, we can apply linear algebra to online search engines. For details, try doing an online search.) In calculus, we will delve further into the calculus already learned in Mathematics III in high school, and learn methods to investigate in detail the behavior of functions that describe various phenomena. In order to study the properties of a function, we differentiate it, or we draw a tangent line to a curve given by the graph of it in high school. In a “higher dimensional” case, looking at the tangent plane of a curved surface will tell us about the function of two variables from which the surface originated. Tangent lines or planes are expressed by polynomials of first degree, and therefore, complex functions are being approximated by simple linear functions. On the other hand, in linear algebra, we will thoroughly explore this linearity, starting from the concrete level such as a system of linear equations, all the way up to the abstract level. As you can see, calculus and linear algebra are both important and mutually connected.

“Calculus with Exercises” and “Linear Algebra with Exercises” are foundation courses for science and engineering majors, and students in these majors (excluding some divisions) are assigned to classes for these courses. As the names suggest, these two courses consist of one course hour of lectures per week and one course hour of exercises every two weeks. The class population for each exercise session will be half that of the lectures, and students will work on problems corresponding to the lectures. It is extremely important in mathematics to think on your own and to solve problems hands on, and therefore, I expect you

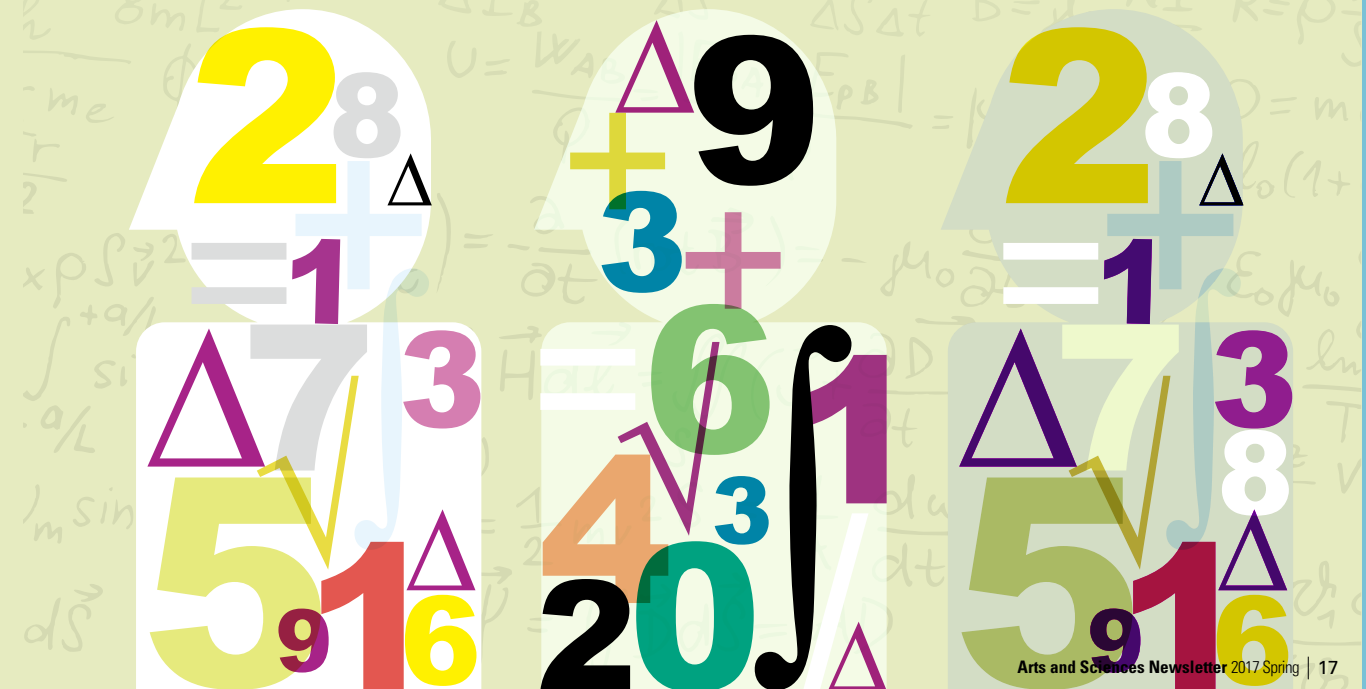
大学で数学を学ぶことは、皆さんが自然科学の言語としての数学を習得して、数学ユーザーとして活躍できるようになるためだけではなく、皆さんの論理的な思考能力を高めるという側面もあります。大学の数学の授業は、高校までと比べてより抽象的、論理的なものになるため、講義を聴いて直ぐ理解するのはなかなか難しいかもしれません。初めて触れる大学の数学に戸惑いを感じる人は、高校までの数学で培ってきた計算力などを活かして、是非手を動かして具体的な問題を解いてみてください。そのような体験を重ねることによって大学の数学が身近に感じられるようになると思います。一方、抽象的なものが好きで数学を厳密に扱いたいという人は、講義・演義の授業を参考にしながら、例えば自学自習で実数の構成法について学ぶなど、自分のペースで学習を進めていただければよいでしょう。

大学初年次での数学の授業が、皆さんにとって有意義なものになることを願っています。

to not only pay attention to the lectures, but also use the exercise time effectively in order to acquire strong mathematical skills.

Learning mathematics at university level allows you to become fluent in the language of the natural sciences and to thrive as a user of mathematics, but it does not end there; it also heightens your logical thinking abilities. University mathematics courses become more and more abstract and logical compared to what is taught in high school, and therefore, it may be difficult to immediately understand everything or lost with university-level mathematics, please call on the calculation and other skills you have acquired up to now, and use your hands to tackle and solve actual problems. Accumulating experiences like this will allow you to familiarize yourself with this new level of study. On the other hand, if you love the abstract and wish to learn in a rigorous way, you could learn, for example, construction of the real numbers on your own while attending lectures and exercises.

I hope that the mathematics courses during your first year at the university will prove to be most meaningful.



自然科学科目群 生物学のすすめ

Natural Sciences Group Why Not Study Biology?

高校生をしていた皆さんは、これまで「生物学」にどのように向き合ってきましたか？多くの方は、①センター入試で必要であったから勉強した。②生物学を扱う学部に入ったが、試験対策の関係で物理・化学だけを勉強した。③これまでも、この先も生物学とは無縁。の何れかだと思います。①には文系学部の人に多く、②③には理系学部の人が多く当てはまると思います。その一方で、高校での学習を通して、生物学に大きな魅力を感じている人も居ると思います。

現代の生物学は、分子生物学の分野もフィールド科学の分野でも発展が著しく、第一線で研究に勤しむ私たちも勉強の連続です。ちょうど歴史の教科書が年々厚くなって行くのと同じように、生物学の学習内容も高度化・多様化が進んでいます。ですから、京都大学の教養・共通教育における限られた時間の中で「何を学ぶか」ということの選定には、教員も大いに悩みました。そこで、「総論」と「各論」の二つの分野を作りました。

「総論」は生物学を基礎的なレベルで学習する授業と実習です。多くの履修者が履修の機会を得られるように、同じ名前でも複数の同じ授業・実習が開講されています。生物学を必要とする学部に進学したものの、高等学校で生物学を履修しなかった人には、とくに勧めます。異なる曜日と時間帯に、複数の同じ授業や実習を開講しているため、各自の時間割の都合に合わせて履修できるようにしてあります。

「各論」は、植物学や動物学、分子生物学のような特定の分野について、基礎的なレベルで学習する授業です。こちらの授業でも、高等学校における生物学の履修経験は必ずしも必要としていません。文系の学部にも所属する学生が履修しやすい科目も設定されています。

瀬戸口浩彰

人間・環境学研究所より出向して、国際高等教育院の企画評価専門委員、生物部会長を担当。植物の進化学と保全生物学が専門。学生時代は南太平洋諸島を一人旅で調査して学位論文を書いた。



Hiroaki Setoguchi

Currently on loan from the Graduate School of Human & Environmental Studies, he serves as a member of the Committee for Planning and Evaluation at the Institute for Liberal Arts and Sciences and as the chair of the Committee for Biology. He specializes in plant evolutionary biology and conservation biology, and wrote his degree thesis after traveling alone in the South Pacific islands to conduct student research.

When you were high school students, how did you see biology? I guess many of you might categorize yourself in any of these ways: 1) you studied because you needed to take the biology examination for university admissions tests; 2) you are currently enrolled in a faculty where biology is needed after studying only physics and chemistry in preparation for your university entrance exam; and 3) you have been and will be free from biology. I assume that reason 1 will apply to those in humanities-related faculties, while reasons 2 and 3 will hold true for those in science-related faculties. At the same time, I am convinced that some students feel greatly attracted to biology through their studies in high school.

In biology today, remarkable progress can be found both in the areas of molecular biology and field science, necessitating those on the front lines of research like us to continue studying. With history textbooks becoming thicker year by year, the study contents in biology are becoming more sophisticated and diverse. This is why, as faculty members, we were quite troubled with the topic study selections within the limited time available in Kyoto University's Liberal Arts and General Education courses. Consequently, we have created the two fields of "General Discussion" and "Detailed Explanation."

The General Discussion field consists of classes and training courses in fundamental biology. To allow many students to register, we hold a multiple number of classes and training courses with the same contents and names. These are recommended especially for those enrolled in faculties where biology is needed but who did not study the discipline in high school. Since more than one class and training course with the same contents are offered at different periods on different days, you can schedule the most convenient period for you when registering.

In the Detailed Explanation field, you can study specific fields, such as botany, zoology and molecular biology, on the fundamental level. This type also does not necessarily require any experience in biology from high school. Some subjects have

受験勉強の教材では、図で全ての説明を受けてきたと思います。ひたすら記憶してきたことの実物を見て、知識と現実のギャップを埋めることも、大学で行う大切な学習内容です。

When you were studying for entrance exams, you probably learned everything using text descriptions and illustrations. Seeing real objects to fill a gap between reality and knowledge you patiently learned by heart is also an important lesson at university.



山で植物の野外観察をしている様子。生身の植物を観ることは「小学校以来初めて」というひとが大多数です。

Students observing plants on a hill slope. For many students, this was the first time since elementary school they had examined real plants in the wild.



キャンパス内で、外来種と在来種のタンポポの生殖の違いを観察する実験。

An experiment of observing the differences in reproduction between native and non-native dandelions on campus



真冬に霜を纏って生き続ける植物。なぜ凍死しないのか、理由を考えたことはありませんか？

Some plants stay alive under frost during the winter. Have you ever thought of why or how they can survive without freezing to death?

この他に「実習」科目が用意されていますので、座学の内容を実感することもお勧めします。

生物学の内容は非常に多岐に亘ります。そして生物学の境界は他の分野に越境していて不明瞭になります。京都大学では多くの部局が生物学を研究・教育しており、そして多数の教員が居ます。学部から独立した附置研究所まで含めると相当な数になるでしょう。生物学とは何か？という問いに答えるのは容易ではありません。全学共通科目では、多数の生物学・生命科学関係科目を開講することによって、皆さんの学習意欲に応えるようにしています。

皆さんが生きる将来は、地球の人口増加や食糧問題、環境問題、生命の根幹に関わる医療や食物の改変のような、いかにも生物学に関わる課題から、裁判員裁判におけるDNA鑑定の判断のような社会活動に至るまで、生物学が深く関わっていることでしょう。社会人が持つべき素養として、生物学を学び、楽しんでもらいたいと願っています。

been designed so that students in humanities-related faculties can study without much difficulty.

In addition, training courses are available. We recommend that you take these so you can get actual experience in the topics you have studied in the classroom.

Biology comprises a wide variety of fields, and crosses disciplinary boundaries with other science fields, making the borders blur. Kyoto University has many divisions committed to biology research and education, as well as many biology faculty members. The number of such divisions is even larger when counting laboratories independent of faculties. The essence of what biology is is not easy to answer. By offering many subjects related to biology and life sciences in the Liberal Arts and General Education courses, we hope to boost your eagerness to study.

In the future, you will see an even deeper involvement of biology in a wider range of issues, from global population increase, food problems, environmental problems, medicine and food modification that affects the basis of human lives, and other topics that are very likely related to biology, even to social activities as well, such as judgment of DNA analyses for lay judge systems. I hope that you will enjoy studying biology as important knowledge to obtain for starting your career after graduation.



Erik Walinda
Assistant Professor,
Graduate School of Medicine
Specialty: Nuclear Magnetic Resonance



Seminars in Liberal Arts and Sciences ILAS Seminar E2 Presentation and Debate on Biomedical Science

The world is coming to an end.

At least, you might think so if you attend a presentation at an academic conference in the 21st century.

The speaker is facing the screen, and simply reading text off a slide. Word by word, line by line, slide by slide. Desperately, seemingly endlessly, and with no end in sight, no hope in sight. The audience is trying so hard not to fall asleep. You can feel them pondering “When is this finally going to end?” Audience members are interested in the topic of the talk; this is why they’re here. But the topic is not the problem. The technical data aren’t wrong either. Still. . . “How many more of these talks must we listen to?” And then, darkness falls on the room. This slowly but surely invites the audience to slumber. Ah, finally! A stroke of hope on the dark horizon. In the bottom right corner of the current slide it says in tiny letters “76 of 77.” Yes!!! Finally, the end is in sight. . .

This cruel, ironic reality raises the question: Is this really what we want? Is this what a presentation should be like? Must presentations be as dead serious as an instruction manual and equally boring?

In other words, wouldn’t it be great if presentations were actually enjoyable? Imagine leaving the room after a meeting and telling your friends, “That was a great talk! I’m so excited!”

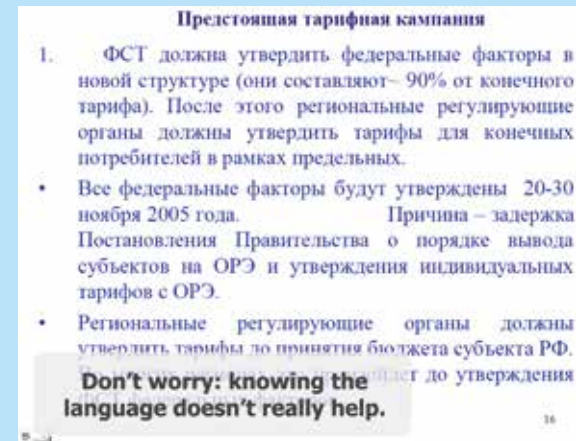
Well, such presentations actually do exist. The irony is that most people actually do know about them. Take TED talks for example. Many people enjoy watching a TED talk in their free time. Just for fun. Yes, for fun. Not falling

asleep, not longing for the end.

This is not to say that every TED talk is perfect. But many of these talks can really teach, persuade, and inspire, and also be fun to watch. Many speakers at TED make an excellent connection with the audience, making it fun to listen. It is fun, because it feels like having a normal conversation with the speaker. Just like talking to a friend near the coffee machine. So maybe we can learn something from TED and others to make our own presentations more persuasive?

If you don’t know TED, maybe you know Steve Jobs. He was indeed a great master of the art of presentation. Maybe I should say the master. His speech was clear. He rarely, if ever, used difficult words. Almost all of his sentences were simple and short. His slides only contained a single picture or number or word. Sometimes, the slides were completely empty. But the audience understood, got engaged and were moved by his talks. There are many lessons we can learn from him.

To grasp the contrast that I am hinting at, consider these two images. The first one shows a slide used in a typical (really, really bad) visual aid. Yes, typical means bad in the world of 2016. Don’t worry, it doesn’t help if you know the language. The point is that with this much text thrown at you, you will either read the entire slide on your own (and ignore the presenter) or you ignore the slide (closing your eyes) and just listen to the presenter. The human brain just cannot process this amount of written text and spoken words at the same time. In this dilemma, most people choose to just read the slide. In fact, they will finish reading faster than the presenter speaks. But



Bad visual aid. Probability of falling asleep: 97%. [Source: Slideshare]

if everybody just reads the text, then why is the presenter even there? Why not just email the text to everyone?

Now consider the slide on the right. Aren’t we curious what this means? Just looking at the slide, we don’t know what this is all about. Sure, we know about blogs. And we also know about sharks. But without a presenter, we can only guess the connection. So we become curious. We want the presenter to explain his or her assertion. We want to hear his story. And even after the presentation is over, we will surely remember that big, big shark. That’s some impact.

It is topics like this that we discuss in this class. The goal is not to imitate TED or others, but to see the logic behind what makes a good presentation. Which techniques are effective and why? It is not about art, or style, but rather about the logic of communication. How to share an idea? How to make it clear? How to move an audience? No matter how good your message, if nobody understands you, you are lost. No matter how good your message, if nobody cares about it, you are lost.

We started this class in academic year 2016. Our students delivered excellent presentations in English in front of an unknown, mixed, international audience. Their topics covered a broad range of topics, from medicine and debating to traffic jams. Although none of the audience members were experts in any of these fields, the students really succeeded in making the audience (1) understand, and (2) care. We then had some great debates, where the students demonstrated that they didn’t need slides to prove their point. It is as Steve Jobs once said: “People who know what they’re talking about don’t need PowerPoint.”



Excellent visual aid. Raises curiosity, prevents sleeping. [Source: Slideshare]

Even half a year later, when I ask them, those in the audience that day still remember the messages of the students’ presentations.

As a result, I now strongly believe that Kyoto University students are not only bright in written tests; they are also extremely creative and engaging. Without a doubt, our students are able to stand up, speak out, and imprint their ideas on the canvas of the world.

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統合科学科目群 統合科学

Interdisciplinary Sciences Group Interdisciplinary Sciences

「統合科学：〇〇」というちょっと変わった授業(?)が昨年度後期から始まりました。環境分野と森里海連環学分野などと一緒に統合科学科目群に含まれていますが、他の分野がその名前から内容を想像し易いのに対し、「統合科学」では何のことやら分かり難かったようです。授業開設にあたり、本誌前号(21巻)で『現代社会が抱える問題の多くは、自然や人類の営みの物質的側面に起因する構成員間の利害対立から生じているように思われます。理系の立場からは、人間をとりまく自然の成立を理解し、その理解に基づく技術によって物質的豊かさを追求します。他方、文系の立場からは、まさにその豊かさがもたらす利害関係の構造を明らかにし、利害を調整あるいは解消する仕組みを模索します。特に、環境や生命をはじめ、現代社会が直面する重要な課題に取り組むには、文系、理系それぞれの領域に閉塞した思考様式の殻を破り、それぞれに欠けている視座を補完しあうことが望まれます。そこで、六つの主題「〇〇」について15クラスの双方向型の授業を企画しました。』と宣伝したのですが、残念ながら学生の皆さんの参加は低調なものに終わりました(^_^;

そこで、今一度の宣伝を兼ねて、私が担当する「閉じた地球で生きる(エネルギー消費と環境)」がどうであったかを簡単に紹介します。まず、学生の皆さんに私たちが消費するエネルギー源とその流れを整理してもらいました(図)。次に、消費エネルギーの90%を占める過去の太陽光エネルギーによって作られた化石燃料(化学エネルギー)と核エネルギー資源の確埋埋蔵量を調べ、今後の人口推移も考慮してそれらに依拠できる年数を推算してもらいました。結果は70~100年でした。この結果は既にいわれている年数の確認に過ぎませんが、自身が導いた結果の持つ意味はかなり深重だったようです。

吉崎武尚

国際高等教育院
副院長・教授

Takenao Yoshizaki

Vice-Director / Professor,
Institute for Liberal Arts and Sciences



Some unconventional classes (?) designated "Interdisciplinary Sciences: XXXX" were introduced in the second semester of the previous academic year. They are included in the Interdisciplinary Sciences Group, along with fields such as Environmental Sciences and Forest, Towns and Oceans Program, but while the names of other fields describe their content clearly, the term "Interdisciplinary Sciences" seems not to do so. When these classes were introduced, the previous issue (No. 21) of this newsletter described them as follows "Many of the issues in modern society seem to arise from conflicts among its members originating from materialistic aspects of the natural world and also the human beings in it. Science majors try to understand structures and mechanisms of the natural world around human beings and to pursue material affluence using technologies based on such understanding. On the other hand, non-science majors try to elucidate structures of the interests among members of society caused by the affluence and to solve the problem. To control the grave problems contemporary society faces, including those of environment and life, it is desirable for both science and non-science majors to break down the barriers that separate them and to work together. Consequently, 15 interactive classes on six subjects have been designed." Unfortunately, however, only a few students were interested and participated in those classes (^_^;

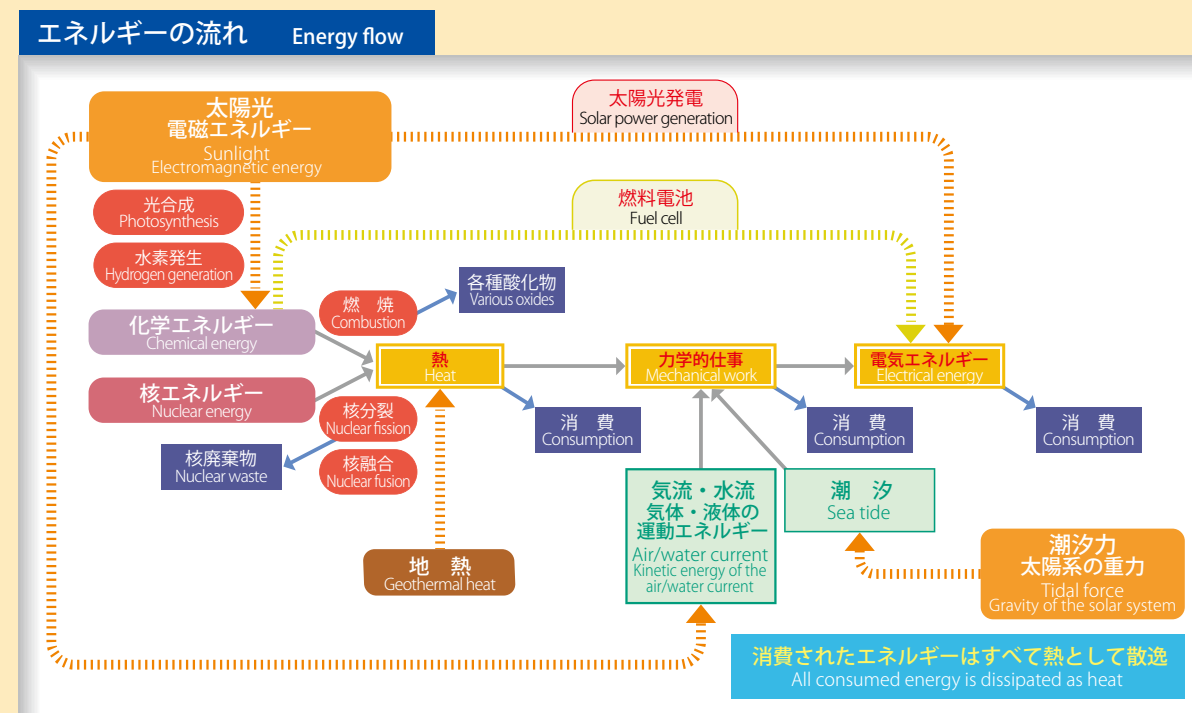
Therefore, in another attempt to promote these courses, I would like to describe how my class, titled "Sustainable living on the earth as a closed system (Energy consumption and the environment)," proceeded. First, I had my students survey sources and flow of energy that we consume (see the diagram). Next, the students investigated the proven reserves of fossil fuels (chemical energy) produced by solar energy in past years which accounts for 90% of all energy consumed, as well as of nuclear energy resources, and estimated the number of years we can remain dependent on them, also taking into account future changes in

さらに、化石燃料を使う際に発生するCO₂と地球温暖化の関係について調べ、今後のエネルギー源を選択する上での判断材料としました。ここでは、CO₂と地球温暖化との相関を認めるのと認めない二つのチームに分かれて議論をしました。最後に、以上の調査と考察に基づいて今後のエネルギー政策について提言を行っていただきました。3人の担当教員は私を含めてエネルギーと環境に関して全くの素人でしたので、学生の皆さんが辿り着いた結論が当を得たものかどうかは怪しいところですが、それなりに説得力がありました。また、各自が調べたデータに基づいて考察する経験は、今後遭遇する色々な局面において役立つのではないかと思います。

何れのクラスにおいても、理系、文系の教員がそれぞれの立場から提供する各主題に関して、自分で調べた情報を基に問題解決に向けてグループ作業と討論を行い、一人ひとりが自分なりの解決策を模索、提案します。教員と一緒に授業を作るといった感じですので、多くの皆さんに参加していただきたいと思います。

population. The projection so obtained was 70 to 100 years. This only confirmed the number of years already estimated, but reaching this conclusion through their own calculations seemed to have grave significance for my students. In addition, we investigated the relationship between CO₂ generated through fossil fuel consumption and global warming, on which we based our decision when choosing the future energy source. In doing so, we split into two teams, one that recognized the correlation between CO₂ and global warming and one that did not, and held a debate. Finally, I had the students make their recommendations regarding future energy policies based on the above research and discussions. The three professors teaching these classes were complete amateurs in the fields of energy and environment, and therefore, we cannot be completely certain that the conclusions reached by our students were valid; but we can say that they were presented convincingly. Also, the experience of discussing a theme based on personally collected data is something that will surely prove useful in various situations in the future.

This is what these classes offer. Professors with backgrounds in arts or sciences provide themes based on their standpoints, and students collect and bring in information to conduct group tasks and discussions in order to solve problems, and each student seeks and proposes their own solution. It is a unique class built in cooperation by professors and students and I encourage all of you to take part.



吉田南構内施設・設備等紹介

GUIDE TO FACILITIES IN YOSHIDA-SOUTH CAMPUS

吉田南構内は、全学共通科目を学ぶみなさんの拠点。その学びがより充実したものとなるよう、授業以外にも様々な設備や環境が整備されています。

The Yoshida-South campus serves as your base when you study in the Liberal Arts and General Education Courses. To make your studies further fulfilling, a wide variety of facilities and spaces have been established.

01 プロムナード Promenade

(※歩行者専用ゾーン *pedestrian-only zone)

地図 01

正門を入ったところに広がる大きな空間がプロムナードです。授業の前後は移動する人で混雑しますが、季節の良い時期はベンチでお弁当を食べたり、しゃべったりと、ゆったりできる空間です。

After going through the main gate, you will find a large space, which is the Promenade. Although the area is crowded before and after classes with students going to and from classes, you can have lunch on a bench, chat with friends, and relax yourselves here, especially in seasons when the climate is comfortable.



02 自由の鐘 Liberty Bell

(吉田南総合館北棟 North Wing, Yoshida-South Campus Academic Center Bldg.)

地図 02

お昼12時を告げる鐘。本部構内・時計台の鐘とは別に、吉田南構内にも鐘があります。旧制三高時代に授業の開始・終了を告げるために使われていたものが、北棟の完成により甦りました。

This bell rings at noon. Along with the bell in the clock tower on the main campus, the Yoshida-South campus has also its own bell. Once used to announce the beginning and end of each class hour in the days of the former Third High School, this bell was renovated to celebrate the completion of North Wing.



03 Student Research Room (SRR)

(吉田南総合館北棟 地下1階 B1 level, North Wing, Yoshida-South Campus Academic Center Bldg.)

地図 03

学生のみなさんの学習をサポートするために設置された自習室です。授業の空き時間や昼休みなどにぜひ利用してみてください。

This self-study room has been established to help your learning. Why not use the room during breaks between classes or during lunch?

- 利用者：本学学生・大学院生・教職員
- 席数：119席
- 利用期間：授業期間中（土・日・祝日を除く）
- 利用時間：10:00～19:00

- Users: Kyoto University undergraduate and graduate students, and faculty and staff
- Capacity: 119 seats
- Open period: Period during which classes are held (excluding Saturdays, Sundays, and national holidays)
- Open hours: 10:00 - 19:00

04 Bell Lounge・フリースペース Bell Lounge/Free Space

(吉田南総合館北棟：1階西側/2階東側 west side on 1st floor/east side on 2nd floor of the North Wing, Yoshida-South Campus Academic Center Bldg.)

地図 04

総合館北棟には、1階西側に「Bell Lounge」、2階東側にフリースペースがあり、歓談や休憩等自由に利用されます。

In the North Wing of the Academic Center Bldg., you can use Bell Lounge on the west side of the 1st floor and a free space on the east side of the 2nd floor, for any purpose you like.



05 国際高等教育院棟 Institute for Liberal Arts and Sciences Building

地図 05

国際高等教育院の発足により、平成28年3月に新設された建物です。

全学共通科目学生窓口やレポートBOXがこの建物の1階にあります。また、2階、3階には講義室や演習室、2階には語学の自学自習に利用できるスピーキングコーナーも新設しています。

This building was newly constructed in March 2016 with the establishment of the Institute for Liberal Arts and Sciences.

The Liberal Arts and General Education Courses Student Desk and report box are on the 1st floor of this building. A room called "Speaking Corner," intended for use as a study room, is installed on the 2nd floor, and seminar rooms are on each of the 2nd and 3rd floors.

06 環on[わおん]一話せる図書館 Waon-Library Where You Can Talk with Each Other

(人間・環境学研究科棟 1階 1st floor of the Graduate School of Human and Environmental Studies Bldg.)

地図 06

吉田南総合図書館の西側（人間・環境学研究科棟1階）には、話せる図書館『環on[わおん]』があり、個人・グループでの学習や研究会に利用できます。無線LAN、電源コンセントが利用でき、PCを持ち込んでの学習やディスカッションにも適しています。また、ノートPCの貸出も行っています。

On the west side of Yoshida-South Library (1st floor of the Graduate School of Human and Environmental Studies Bldg.), there is a library where you can talk with one another. In this facility, called Waon, you can study alone or in groups, or hold research meetings. Since wireless internet access and electrical outlets are available here, the library is an appropriate place for you to study or engage in discussions using your PCs or mobile devices. Moreover, laptop rental is available free of charge.

- 利用者：本学に所属する方なら誰でも利用可。
- 利用時間：平日9:00～17:00 土日祝休み

- Users: Anyone who belongs to Kyoto University
- Open hours: 9:00 - 17:00 on weekdays, closed Saturdays, Sundays, and national holidays

吉田南構内マップ

— 充実した学びと憩いの場 —

ビデオシラバスについて Video Syllabuses

全学共通科目では、平成29年度より、E科目（英語関連科目）のうちE2科目（英語を使用言語として実施される科目）の一部で、従来のシラバスに加えてビデオシラバスを視聴できるようになりました。ビデオシラバスでは、実際に授業を担当する教員が科目の概要を説明していますので、E2科目を履修登録する際の参考にしてください。KULASISのシラバス（授業内容）ページから視聴可能です。

From academic year 2017, video syllabuses, in addition to conventional syllabuses, are available for some E2 courses (courses taught in the medium of English) among the E courses (English-related courses). In each video syllabus, the instructor who actually gives classes outlines the courses. Refer to video syllabuses when you select E2 courses to be registered for. The video syllabuses are posted on the syllabus (class description) page of the KULASIS website.



出席登録システム Attendance Record System

全学共通科目では、出欠登録のために一部の授業において出席登録システムを導入しています。

教室の出入り口付近に設置されている端末（写真参照）に学生証をかざすことで出席登録ができます。

詳細は、KULASISホームページに掲載のマニュアルを確認してください。

An attendance record system has been introduced for some of the Liberal Arts and General Education Courses. You can register your class attendance by holding your student ID card over the system terminal installed near a doorway of each classroom (see photograph). For details, refer to the manual published on the KULASIS website.



学内無線LANアクセスポイント In-school wireless LAN access point

吉田南構内の一部エリアでは、学内無線LANが利用できます。

詳しくは吉田南構内マップ（p.29）をご覧ください。

On-campus wireless LAN access points are available at the Yoshida-South Campus. For details, see the Yoshida-South Campus Map (page30).



自転車について Bicycles

京都大学では、自転車で通学する学生がとて多くなります。

- 自転車で構内を移動するときは、歩いている人に注意！
- 自転車は、決まった自転車置場にきちんと置きましょう。
- 自転車を運転しているときの事故が増えています。学内では学生教育研究災害傷害保険や学生賠償責任保険を取り扱っています。万が一の事態に備えましょう。

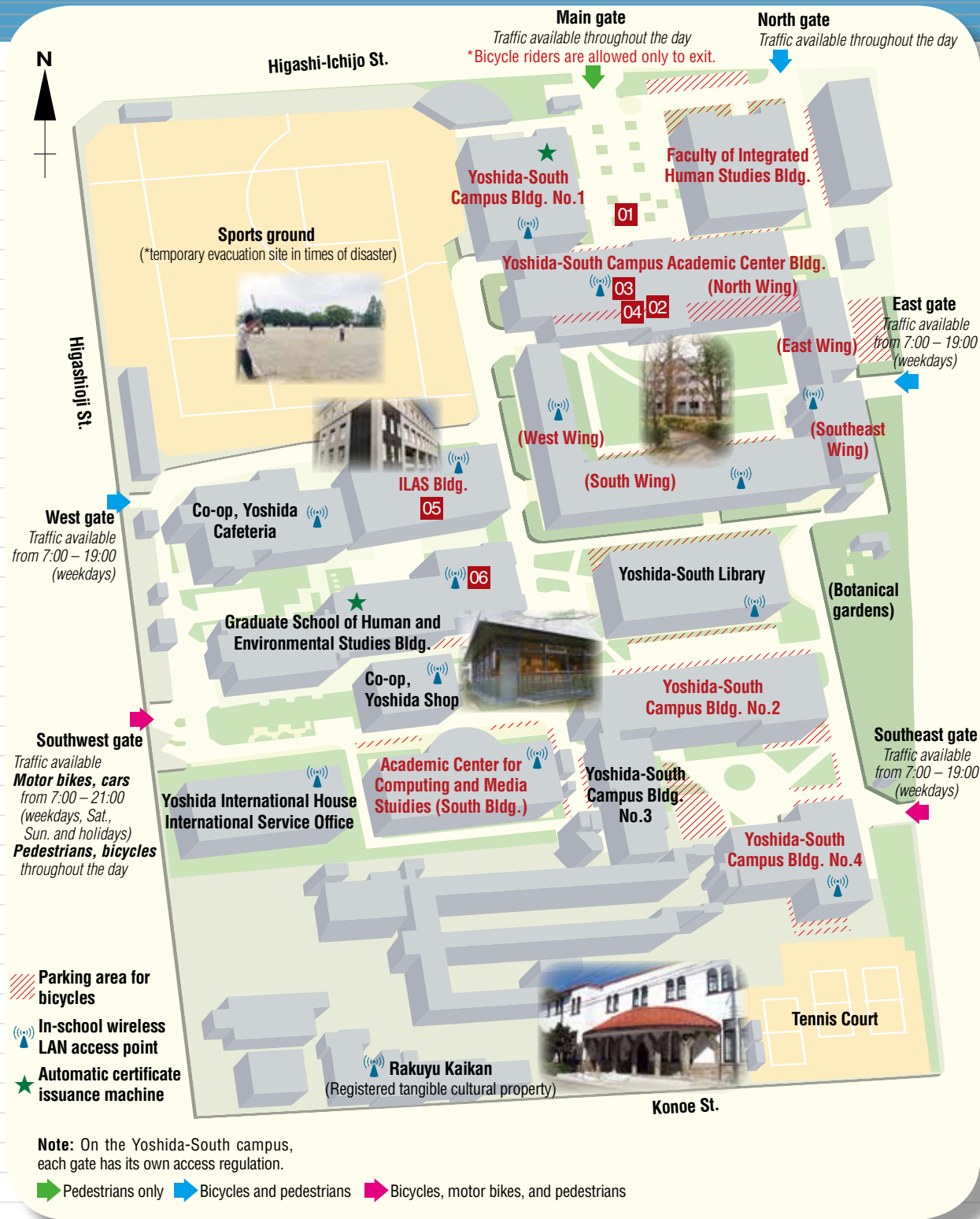
Many Kyoto University students commute by bicycle.

- When riding a bicycle on campus, watch out for pedestrians!
- Be sure to park your bicycle in the designated parking area.
- The number of bicycle accidents is increasing. Through Kyoto University, you can purchase Personal Accident Insurance for Students Pursuing Education and Research, as well as Personal Liability Insurance for Students. Please be prepared!



YOSHIDA-SOUTH CAMPUS MAP

Making Your Study Further Fulfilling and Supporting Your Recreational Moments



編集後記

時代の流れに身をまかせ

国際高等教育院
(工学研究科社会基盤工学専攻)
教授 金 哲佑

もしかするとこのフレーズに聞き覚えのある人がいるかもしれません。実は1986年発表されたテレサ・テンの「時の流れに身をまかせ」という曲名を借りてみたのです。なぜか最近このフレーズを思い出すことが多いように感じます。人工知能、ビッグデータ、イスラム国、難民、ブレグジット、トランプ現象など、急変する時代に対する疲れのせいかもしれません。大学教育、特に教養・共通教育においても変化を感じることが多いです。分野横断、多様性、国際性など、要するに柔軟な思考や教養がますます重要になっていることを実感します。トランプ現象のような出来事は歴史的に類例があるとどこかで読んだけど、なぜ似たような事が繰り返されるのか？ 膨大なデータが集まる時代に求められる知識とは？ 人工知能と差別化できる人間というのはなんだろう？ などなど。なかなか悩ましく、「まあ何も考えずに流れに身をまかせてみようか」と考えているからそのフレーズを思い出したのかもしれませんが。学生時代に教養科目を軽視した私のような者には案外ごわい時代になっています。しかし皆さんは心配無用です。京大の教養・共通教育はこのような時代にも対応できるように工夫されています。教養を求める時代の流れに身をまかせ、京大の教養・共通教育を存分に楽しんでください。さて、歴史というビッグデータから人工知能はトランプ現象を予測できるかな？ う～ん、面白そう！

Going with the Flow of the Time ("Jidai no nagare ni mi o makase")

Kim Chul-Woo

Professor, Institute for Liberal Arts and Sciences
(Department of Civil and Earth Resources Engineering, Graduate School of Engineering)

You may have heard some phrase close to the Japanese title of this postscript in parentheses above. In fact, I borrowed the title of the song "Toki no nagare ni mi o makase" (lit. "Going with the Flow of Time"; this song is known in English as "I Only Care about You") sung by the Taiwanese singer Teresa Teng. This phrase often enters my head for some reason these days. This may be because I am tired from the rapidly changing times, represented by artificial intelligence (AI), big data, the Islamic State, refugees, Brexit, and the Trump phenomenon. I also often feel that university education, and liberal arts and general education in particular, are changing. I strongly feel that interdisciplinarity, diversity, cosmopolitanism and the like—briefly, flexible thought and liberal arts knowledge—are becoming more and more important. Although I have read somewhere that there are some historical precedents for the Trump phenomenon, I am always puzzled about why similar phenomena repeat, what knowledge the era of massive data accumulation requires, what differentiates humans from AI, and other endless questions. This may be why I have remembered this song title, inclining to "go with the flow without being puzzled at anything." The present era may be unexpectedly tough for those who belittled liberal arts courses as a student, including me. But you don't have to worry. Kyoto University provides you with general education well designed to match such an era. Fully enjoy liberal arts and general education at Kyoto University, going with the flow of the time that requires liberal arts knowledge. So, can AI predict the path forward of the Trump phenomenon, using history as big data? It sounds so interesting, aha!

Editor's note



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