



## Division of Nature- and Culture-based Tourism, Faculty of Urban Environmental Sciences

### Regional Development with Tourism Course

The mission of our division is to provide students with a place to learn and together develop a new tourism science that incorporates physical methods such as geography and ecology; urban engineering methods including transportation planning, urban planning, conservation and utilization of historical heritage; and also information science methods such as identifying and promoting new attractive tourist destinations. Our instructors' expertise in various specialized areas well represents the characteristics of the division and department as a tourism-related track in the Science and Engineering Faculty and graduate school. The division is structured according to two pillars – culture-based tourism, which applies the engineering approach, and nature-based tourism, which applies the scientific approach – linked by the tourism policy and information.

No.	Subject Titles
1	Transport Planning and Management for Tourism Promotion
2	Regional Environmental Studies
3	Environmental Ecology I
4	Environmental Ecology II
5	Town Planning in Tourism
6	Tourism Theories and Practice
7	Tourism Theory II
8	Tourism Informatics
9	Regional environment science: practical field training
10	Exercise on Town Planning in Tourism
11	Exercise on Geographic Information Science for Tourism
12	Nature- and culture-based tourism science Seminar I

Course Title	Transport Planning and Management for Tourism Promotion		Class Code	K423	Credit	2
Instructor	Tetsuo Shimizu	2 <sup>nd</sup> Semester	Wednesday	2 <sup>st</sup> Period	Minami-Osawa Campus	
Subject Teaching Policy Theme	Transport system is inevitable for tourism promotion in regions and cities. Planning a sustainable transport system requires fundamental knowledge in various study fields. This course provides knowledge especially on engineering, economics and management methods which have the most important roles in the transport planning process.					
Knowledge & skills students can obtain through the class, objective of the class	Students will be able to acquire engineers' sense and ideas on process management on making a transport system which is inevitable to be a transport planner.					
Schedule and contents of class	1) Introduction 2-5) Part1: Understanding of Transport System from Economical Aspect -Demand and Supply Structure, Fare Setting, Regulation and De-regulation, etc. 6-10) Part2: Understanding of Transport System from Technological Aspect -Traffic Flow Analysis, Capacity Analysis, Facility Design 11-14) Part3: Understanding of Transport System from Planning Aspect -Planning Process, Demand Forecast Analysis, Project Evaluation, etc. 15) Summary					
Text or reference books	To be introduced in the course.					
Performance Evaluation	To be based on part-end papers.					
Remarks	Students are advised to have a good command of English, which is equivalent to TOEIC 700 or higher, in advance of taking this course.					

Course Title	Regional Environmental Studies			Class Code	K420	Credit	2
Instructor	Toshio KIKUCHI	2 <sup>nd</sup> Semester	Monday	5 <sup>th</sup> period	Minami-Osawa Campus		
Subject Teaching Policy Theme	Agriculture and rural area in Japan changed drastically in the latter half of twentieth century. The present rural space is characterized by the increased role of consumption rather than the traditional activity of production. This situation may be understood as “commodification of rural spaces”.						
Knowledge & skills students can obtain through the class, objective of the class	Thus this study scrutinizes the changing process and characteristics of rural spaces in Japan from the viewpoint of rural commodification. Students will be able to understand how to make commodification of rural spaces and how to make conservation of rural resources with appropriate use of regional characteristics.						
Schedule and contents of class	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Concept of Commodification in Rural Spaces</li> <li>3. Classification of Commodification in Japanese Rural Spaces</li> <li>4. Commodification of Rural Spaces in Urban Areas</li> <li>5. Commodification of Rural Spaces in Urban Fringes</li> <li>6. Commodification of Rural Spaces in Outer Suburban Areas</li> <li>7. Commodification of Rural Spaces in the Hinterland of Urban Areas</li> <li>8. Commodification of Rural Spaces in Marginal Areas of Urban Area</li> <li>9. Commodification of Rural Spaces in Mountainous Areas</li> <li>10. Commodification of Rural Spaces with Development of Tourism and Recreation</li> <li>11. Commodification of Rural Spaces with Development of Intensive Farming</li> <li>12. Commodification of Rural Spaces as Rural Restructuring</li> <li>13. Commodification of Rural Spaces as the Regulation System between Rurality and Urbanity</li> <li>14. Sustainable Commodification of Rural Spaces</li> <li>15. Conclusions</li> </ol>						
Text or reference books	There is no textbook. Handouts will be distributed before each class.						
Performance Evaluation	Comprehensive evaluation based on participation to discussions during class and the results of the test/report.						
Remarks	<p>Students are advised to have a good command of English, which is equivalent to TOEIC 700 or higher, in advance of taking this module.</p> <p>This course is especially designed for exchange students at Tokyo Metropolitan University, Tokyo University of Agriculture and Technology, Ibaragi University.</p> <p>This course is delivered with English.</p>						

Course Title	Environmental Ecology I			Class Code	K427	Credit	2
Instructor	Takashi KOSAKI	2 <sup>nd</sup> Semester	Tuesday	3 <sup>th</sup> period	Minami-Osawa Campus		
Subject Teaching Policy Theme	Characteristics and function of ecosystems, particularly terrestrial ecosystem or soil ecosystem, and their proper management for sustainable use are discussed in association with human activities including tourism.						
Knowledge & skills students can obtain through the class, objective of the class	Students are expected to obtain basic knowledge and principle of a variety of terrestrial ecosystems, to learn global as well as local environmental issues due to misuse thereof, and consider and propose their wise and proper options for sustainable use for future by themselves.						
Schedule and contents of class	<ol style="list-style-type: none"> <li>1. What is ecosystem?</li> <li>2. Terrestrial ecosystem 1: climate, vegetation, and relief as a factor of soil formation.</li> <li>3. Terrestrial ecosystem 2: land and sea water controlling elemental cycling.</li> <li>4-5. History of the science of terrestrial ecosystem and soil.</li> <li>6-7. Components of soil system (organic and inorganic matter, water, air).</li> <li>8-10. Characteristics of soil (physics, mineralogy, chemistry, biology).</li> <li>11-12. Function of soil (biomass production, environmental conservation).</li> <li>13. Degradation and remediation of terrestrial ecosystem due to natural disaster and global and local environmental problems.</li> <li>14. Sustainable use of terrestrial ecosystem and development planning for tourism.</li> <li>15. Examination and conclusion.</li> </ol>						
Text or reference books	Reference book: “Ecology: Concepts and Applications” by Manuel C. Molles, McGraw-Hill. “Environmental Science” by R.T. Wright and B.J. Nebel, Prentice-Hall. “Fundamental of Soil Science” by H.D. Foth, John Wiley and Sons.						
Performance Evaluation	To be based on a daily quiz and term-end examination.						
Remarks	Office hour: Anytime (appointment by email <a href="mailto:kosakit8@tmu.ac.jp">kosakit8@tmu.ac.jp</a> recommended).						

Course Title	Environmental Ecology II			Class Code	K422	Credit	2
Instructor	Shinya Numata	2 <sup>nd</sup> Semester	Monday	2 <sup>th</sup> period	Minami-Osawa Campus		
Subject Teaching Policy Theme	This lecture will focus on an introduction to biological issues of natural environment in Japan and the rest of world; environmental degradation, major threats to biodiversity, and contemporary strategies for biodiversity conservation.						
Knowledge & skills students can obtain through the class, objective of the class	<p>To understand environmental issues in Japan and elsewhere</p> <p>To understand biodiversity and ecosystem functioning</p> <p>To understand the important current threats to biodiversity as well as contemporary strategies for biological conservation</p>						
Schedule and contents of class	<p>1: Orientation</p> <p>2: Environmental issues in Japan and elsewhere</p> <p>3-6: Biodiversity in Japan and elsewhere</p> <p>7-9: Threats to biodiversity</p> <p>10-14: Conserving biodiversity</p> <p>15: Final examination</p>						
Text or reference books	"A Primer of Conservation Biology" (Richard B. Primack) Sinauer Associates, Inc.						
Performance Evaluation	Score is evaluated by examination and/or report.						
Remarks							

Course Title	Town Planning in Tourism			Class Code	K424	Credit	2
Instructor	.Hideki AZUMA, Naoaki Furukawa	2 <sup>nd</sup> Semester	Wednesday	3 <sup>th</sup> period	Minami-Osawa Campus		
Subject Teaching Policy Theme	The theme of this lecture is town planning in tourism, which is one of the most remarkable issues in the recent Japanese tourism studies.						
Knowledge & skills students can obtain through the class, objective of the class	The lectures include town planning in tourism, its meaning, history, discovery and product of tourism resources, implementation and evaluation. There are cases in Japan and foreign countries. The students who take this class will expand their knowledge of the relation between town planning and tourism.						
Schedule and contents of class	<ol style="list-style-type: none"> <li>1. Orientation</li> <li>2. Meaning of town planning in tourism</li> <li>3. History of town planning in tourism(1)</li> <li>4. History of town planning in tourism(2)</li> <li>5. Discovery of the tourism resources for planning</li> <li>6. Production of the tourism resources for planning(1)</li> <li>7. Production of the tourism resources for planning(2)</li> <li>8. Implementation of town planning in tourism(1)</li> <li>9. Implementation of town planning in tourism (2)</li> <li>10. Roles of officers,firms ,citizens and tourists in tourism</li> <li>11. Evaluarion of town planning in tourism(1)</li> <li>12. Evaluarion of town planning in tourism(2)</li> <li>13. Cases in overseas countries(1)</li> <li>14. Cases in overseas countries(2)</li> <li>15. Review</li> </ol>						
Text or reference books	To be advised in the class						
Performance Evaluation	The academic record is evaluated by papers(70%),which you have to write <u>every lecture</u> , and the presentations (30%,you have to do it <u>at least once</u> ) . Moreover, you have to attend more than 10 times(that is 2/3),otherwise you fail to pass.						
Remarks	Students are advised to have a good command of English, which is equivalent to TOEIC 700 or higher, in advance of taking this module.						

Course Title	Tourism Theories and Practice			Class Code	X035	Credit	2
Instructor	Takeo Naoi et al.	2 <sup>nd</sup> Semester	Tuesday	1 <sup>st</sup> Period	Minami-Osawa Campus		
Subject Teaching Policy Theme	Tourism is a composite of people, resources and businesses, which provides tourists with experiences that cannot be sought in their daily lives, and entails various impacts on visited environments. This module aims to offer students a scientific perspective of tourism management.						
Knowledge & skills students can obtain through the class, objective of the class	Students will be able to understand how to keep a good balance between tourism promotion and conservation with appropriate use of natural and cultural resources, transportation and information.						
Schedule and contents of class	<ol style="list-style-type: none"> <li>1. Introduction (Naoi)</li> <li>2. Attracting tourists to Japan (Naoi)</li> <li>3. Concepts and definitions of tourism (Naoi)</li> <li>4. Characteristics of tourists (Naoi)</li> <li>5. Tourism demands (Naoi)</li> <li>6. Tourism resources and their attributes (Naoi)</li> <li>7. Transport planning and management in tourism (Shimizu)</li> <li>8. Community-based tourism (Kawahara)</li> <li>9. Tourism and environmental education (Kosaki)</li> <li>10. Rural development and management in tourism (Kikuchi)</li> <li>11. Gamification and Tourism (Kurata)</li> <li>12. Computer-Aided Tour Planning (Kurata)</li> <li>13. Formation of tourist gaze (Naoi)</li> <li>14. Contributions of tourism science (Naoi)</li> <li>15. Conclusions (Naoi)</li> </ol>						
Text or reference books	To be advised.						
Performance Evaluation	To be based on a term-end paper.						
Remarks	Students are advised to have a good command of English, which is equivalent to TOEIC 700 or higher, in advance of taking this module.						

Course Title	Tourism Theory II			Class Code	K426	Credit	2
Instructor	Taketo Naoi		2 <sup>nd</sup> Semester	Tuesday	4 <sup>th</sup> period	Minami-Osawa Campus	
Subject Teaching Policy Theme	<p>Images that tourists have of their potential destinations have been argued to play significant roles in their destination choice process. This subject aims to offer students opportunities to learn theories and methods that are necessary for analysis of the formation and structure of tourism destination image. This will be attempted through lectures, which are designed to offer students foundational knowledge of relevant theories and methods, and group works, which give students opportunities to apply the acquired theories and methods to particular cases.</p> <p>※This module will be provided only in English.</p>						
Knowledge & skills students can obtain through the class, objective of the class	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>- explain types of information that may transmit tourism destination image to potential tourists</li> <li>- extract the attributes of tourism destination image from the primary and secondary information sources and classify the attributes</li> <li>- elucidate relationship between tourism destination image and relevant factors (both endogenous and exogenous)</li> </ul>						
Schedule and contents of class	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Tourism system &amp; Group work: introductory research</li> <li>3. Group work: analysis, presentation &amp; Commentary by the lecturer</li> <li>4. Attributes of tourism destination image (review of past studies)</li> <li>5. Attributes of tourism destination image (methods for their extraction)</li> <li>6. Distribution channels of tourism destination image (commercial sources)</li> <li>7. Distribution channels of tourism destination image (others)</li> <li>8. Tourists' motives</li> <li>9. The trends of investigations on tourism destination image</li> <li>10. Group work: explanation of the task</li> <li>11. Group work: research design</li> <li>12. Group work: research execution</li> <li>13. Group work: analysis</li> <li>14. Group work: presentation &amp; Commentary by the lecturer</li> <li>15. Conclusions (Naoi)</li> </ol>						
Text or reference books	To be advised.						
Performance Evaluation	To be based on the outcomes of the tasks worked on in the class room (50%) and the term-end paper (50%).						
Remarks	Students are advised to have a good command of English, which is equivalent to TOEIC 700 or higher, in advance of taking this module.						

Course Title	Tourism Informatics			Class Code	K425	Credit	2
Instructor	Yohei Kurata	2 <sup>nd</sup> Semester	Tuesday	3 <sup>th</sup> period	Minami-Osawa Campus		
Subject Teaching Policy Theme	This class introduces the latest information/communication technologies (especially, those in spatial information science) which will be important for considering tourist information services, and seeks the possibilities of their applications to tourism.						
Knowledge & skills students can obtain through the class, objective of the class	Knowledge about information/communication technologies that support tourist information services, with which we can propose a future vision of tourist information services from the viewpoint of tourism science						
Schedule and contents of class	<ol style="list-style-type: none"> <li>1. Guidance</li> <li>2. Location-based Service and Underlying Technologies</li> <li>3. Augmented Reality and Tourism</li> <li>4-5. Gamification and Tourism</li> <li>6. User Participation and Mass-collaboration</li> <li>7. Student Presentation I: Reporting Unique Tourist Information Tools</li> <li>8. Maps in Human Mind</li> <li>9. Personalized Tourist Information</li> <li>10. Recommendation of Tour Plans</li> <li>11. Wearable Computing and Tourism</li> <li>12. Fundamentals of Tourist Information</li> <li>13. Student Presentation II: Proposing Future Tourist Information Tools</li> <li>14. Discussion: What Information We Should Provide to Foreign Tourists</li> <li>15. Exam &amp; Comments</li> </ol>						
Text or reference books	To be advised.						
Performance Evaluation	Presentation 50%, Exam 50%.						
Remarks							

Course Title	Regional environment science: practical field training		Class Code	K421	Credit	1
Instructor	Toshio KIKUCHI	2 <sup>nd</sup> Semester	An intensive Course		Minami-Osawa Campus	
Subject Teaching Policy Theme	Students learn practical approaches, methods and techniques used in field investigations of regional environments. They also acquire needed skills as organizing information and data from field surveys, engage in scientific debate and give presentations.					
Knowledge & skills students can obtain through the class, objective of the class	Among the methods for field surveys are interviews, use of previous literature, maps and historical documents; geographical methods like land use surveys, land condition surveys, questionnaires are also used. In the process of discussing issues students will learn to master an integrative, panoramic approach necessary in organizing data and finalizing the research report.					
Schedule and contents of class	Practical field training will be implemented. 2 tutoring sessions are also scheduled. The meeting preceding implementation will introduce the socio-demographic and economic context and the cultural features of the target area. This will be followed by choosing the main issues of the survey and planning of the fieldwork. The final meeting will focus on organizing/analyzing and mapping statistical data and information, crystallizing the results of the investigation, based on discussions with teaching staff and other students.					
Text or reference books	There is no textbook. Necessary materials will be distributed as handouts. Literature in the field will also be introduced when needed.					
Performance Evaluation	Evaluation based on attendance, contribution to field survey and discussions and the final research report.					
Remarks	Students are expected to attend the 2 tutoring sessions preceding and concluding the course.					

Course Title	Exercise on Town Planning in Tourism		Class Code	K417	Credit	2
Instructor	S.Kawahara, Naoaki Furukawa, Yu Okamura and Yukiko Katagiri	2 <sup>nd</sup> Semester	An intensive Course		Minami-Osawa Campus	
Subject Teaching Policy Theme	This exercise provides students with opportunities to learn town planning that aims to foster community-based tourism, which is promoted by local governments, community organizations, and local companies, through a field trip to destinations of advanced community-based tourism.					
Knowledge & skills students can obtain through the class, objective of the class	Students will be able to examine how community-based tourism has been practiced in Japan, how it has contributed to local communities, and what constitutes high quality tourism, on the basis of their own experiences as tourists as well as the findings of the field research.					
Schedule and contents of class	In the winter, students will go on a two day one night field trip to domestic destinations that are known for their advanced activities of town planning and tourism promotion. After completion of the pre-trip preliminary survey of the target destinations, students will conduct the following research activities: - Inspection of the target destinations. As part of it, students will participate in the local programs that aim to foster tourism. - Interviews with the local tourism promoters, such as the local governments, community organizations, or local companies.					
Text or reference books	To be advised.					
Performance Evaluation	To be based on a term-end paper.					
Remarks	None					

Course Title	Exercise on Geographic Information Science for Tourism	Class Code	K418	Credit	1
Instructor	Yohei Kurata, Hisatoshi Ai	2 <sup>nd</sup> Semester	Friday	4 <sup>th</sup> period	Minami-Osawa Campus
Subject Teaching Policy Theme	This class aims to offer students an opportunity to exercise how to use Geographical Information System, GIS, in practical analysis. The class includes lecture on basic knowledge on GIS, exercise on spatial analysis methods using GIS software, exercise on how to create a spatial data utilized on GIS software.				
Knowledge & skills students can obtain through the class, objective of the class	Students are expected to gain skills so that they can understand, visualize, share spatial information, to understand data collection method in field work, to master spatial analysis method which can help decision making in tourism management.				
Schedule and contents of class	<ol style="list-style-type: none"> <li>1. Introduction: what is GIS?</li> <li>2. Draw your original guide map! Map drawing with Illustrator</li> <li>3. Visualize statistical data! How to use MANDARA software</li> <li>4. First contact with ArcGIS: Color symbol and labeling</li> <li>5. Design a transportation map! Exercise on thematic map making</li> <li>6. Conduct a spatial analysis! Buffering and Voronoi diagram</li> <li>7. Create spatial data from address book! Geocoding</li> <li>8. Create a GIS data in a park! How to create your original GIS data</li> <li>9. Visualize travel trajectory! Behavior and pass analysis with GPS and GIS</li> <li>10. Where we can see Mt. Fuji? Visible range analysis with Kashmir 3D software</li> <li>11. Take a look at land form! How to use raster data</li> <li>12. Investigate land surface from satellite images! Introduction on remote sensing</li> <li>13-14. Preparation for final presentation</li> <li>15. Final presentation: Present your original guide book made with original data and maps,</li> </ol>				
Text or reference books	PPT handout will be distributed to students.				
Performance Evaluation	Students are ask to submit an outcome of their exercise during the class (70%) Students are ask to make a final presentation using GIS data and skills (30%)				
Remarks	Students who wish to attend this class are advised to study fundamental knowledge on spatial analysis and GIS. Please note that GIS software provided in our work room is Japanese version.				

Course Title	Nature- and culture-based tourism science Seminar I		Class Code	K419	Credit	2
Instructor	All Academic Staffs	2 <sup>nd</sup> Semester	An intensive Course		Minami-Osawa Campus	
Subject Teaching Policy Theme	The present seminar is designed to support students in choosing a research topic, finding appropriate survey methods and, following discussions on the topic, drawing up a final research report					
Knowledge & skills students can obtain through the class, objective of the class	The seminar aims to provide students with the essential skills for surveying the chosen area, identifying and examining the main issues and summing up and writing a research report. The students will first master the basic skills like reviewing existing research and practical approaches, methods and techniques of field investigation.					
Schedule and contents of class	<p>③Concretely, the students will identify the issues and organize information, identify the research areas' main features, plan and implement the field investigation.</p> <p>Finally, they will make presentations and discuss the issues within the seminar.</p> <p>1 guidance</p> <p>2~15 review of existing literature in the field, and write a research report according to the progress in students' research.</p> <p>The first half of the seminar will be dedicated to choosing an appropriate research area, according to students' interests, and exposing the reasons of their choice.</p> <p>The second half focuses on the identification of the main issues in the area, implementation of the field survey and examination and deeper understanding of the issues, based on students' previous knowledge accumulated during various courses. This will be followed by a presentation of the relevant issues identified.</p>					
Text or reference books	Necessary materials will be distributed as handouts. Literature in the field will also be introduced when needed.					
Performance Evaluation	Evaluation based on attendance, the results of research and presentation.					
Remarks						