

## **1-7 Graduate School Curriculum Formulation and Implementation Policy (Curriculum Policy)**

### **Master's Program Curriculum Formulation and Implementation Policy**

1. In the master's program, students will further develop the skills and knowledge they acquired during their undergraduate studies, gain deep and detailed knowledge from a broad perspective in the context of the University's diverse, interdisciplinary academic research, and develop the ability to engage in research in the field of specialty or the advanced skills needed for jobs, etc., that require a high level of specialization.
2. In the master's program, we will develop human resources who have the creative abilities that are required to conduct high-level specialized education and interdisciplinary research established on the foundation of the area of specialty, the research capabilities required to conduct research activities independently or engage in other high-level specialized work, and the wealth of knowledge that will serve as a foundation for those abilities.
3. We will design and implement a curriculum that is characterized by its interdisciplinary nature and fusion of the humanities and sciences without being restricted by existing areas of specialty, to enable students to position their own research from a broad perspective. Further, we will set up a guidance structure consisting of multiple teaching staff members, and establish minors and partnerships between universities, to implement research that takes on the challenge of knowledge creation that expands profusely while standing on a foundation of high expertise.
4. By emphasizing internationality and designing a curriculum that partners proactively with overseas research institutes, we will provide opportunities to come into contact with the results of leading research, while at the same time fostering the ability to be active in the international community that promotes interdisciplinary research on a foundation of multicultural mutual understanding.
5. We will partner with society and conduct education and research geared toward societal needs, in order to enable students to be sensitive to changes in society while at the same time taking a consistent attitude of seeking truth, and to develop researchers and high-level professionals who are able to achieve a desirable cycle of knowledge with society.

### **Master's Program Curriculum Formulation and Implementation Policy**

#### **Division of Comparative Studies of Societies and Cultures Curriculum Formulation and Implementation Policy**

The purpose of the four language and culture area departments (Japanese Language and Literature, Asian Languages, Literatures, and Cultures, English and French Languages, Literatures, and Cultures, and Applied Japanese Linguistics) and the five humanities departments (Philosophy, History and Art History, Cultural and Historical Studies, Dance, and Music) in the Division of Comparative Studies of Societies and Cultures is to broadly address human cultural activities in a diachronic and synchronic manner and conduct comprehensive research from a specialized yet interdisciplinary perspective, in order to build a high level of expertise related to the humanities, focusing on language, thought, history, and art, and to develop human resources who have rich and varied interdisciplinary research capabilities based on a broad range of learning.

#### **(1) Department of Japanese Language and Literature**

The Department of Japanese Language and Literature will aim to help students learn more full-scale research methods related to the Japanese literature of each period from ancient to contemporary times, as well as the history and structure of the Japanese language, taking into consideration the knowledge acquired during the students' undergraduate studies.

#### **(2) Department of Asian Languages, Literatures, and Cultures**

The Department of Asian Languages, Literatures, and Cultures will develop human resources who are able to conduct a wide range of research on Asia, on a foundation of learning methods for research that targets language and literature in mainland China, Taiwan, Hong Kong, East Asia, and other Chinese-speaking regions.

#### **(3) Department of English and French Languages, Literatures, and Cultures**

The Department of English and French Languages, Literatures, and Cultures will aim to help students acquire specialized knowledge related to theory and practice regarding the English language, the French language, and the literatures and cultures of the English-speaking and French-speaking regions, and to learn relevant research methodology. The Department will help students further improve the French and English language skills they acquired in their undergraduate studies and reach a high level of proficiency, while at the same time enabling them to gain the ability to accurately understand and communicate scholarly thought.

#### **(4) Department of Applied Japanese Linguistics**

The Department of Applied Japanese Linguistics will utilize lectures and exercises to develop Japanese language education specialists in the global society who understand learners who come from diverse linguistic and cultural backgrounds, and who know the language learning theories and methods and have the specialization and ability to put things into action that are the foundation for improving the communication skills of language learners.

**(5) Department of Philosophy**

The Department of Philosophy will help students gain specialized and systematic knowledge of philosophy and ethics, understand the diversity of ways of thinking, and expand the possibilities of their thought, as well as develop the ability to think theoretically and flexibly, while taking into consideration the concrete issues faced by contemporary society.

**(6) Department of History and Art History**

The Department of History and Art History will foster the ability to logically and creatively clarify the politico-economic and socio-cultural problems faced by Japan, Europe, and Asia, by helping students learn the historiographical techniques that will be the foundation for comprehension of diverse historical materials. In addition, students will learn art history research methods through high-level experience, in an aim to foster their ability to interpret visual culture critically. Deep expertise and a wide range of learning and knowledge to support it are required in both the study of history and the study of art history.

**(7) Department of Cultural and Historical Studies**

The Department of Cultural and Historical Studies will help students acquire a broad range of learning and a wide perspective on life and culture, as well as specialized knowledge and the ability to conduct creative analysis, and will foster the ability to communicate cultural and historical theory both in Japan and abroad as the path to understanding humans, through the utilization of the techniques of comparative cultural theory, ethnology, and historiography to conduct multifaceted research on the culture and history that are the context for the clothing, housing, crafts, design, and other elements of the formation of daily life.

**(8) Department of Dance**

The Department of Dance will utilize lectures and exercises to foster the high-level specialized skills that are needed to theoretically analyze dance, sports, and other types of artistic expression, and develop rich and varied interdisciplinary research capabilities that are based on a wide range of learning and the implementation of artistic expression.

**(9) Department of Music**

The Department of Music will utilize lectures and exercises to foster the ability to theoretically analyze and implement music, aim to help students get a sense of being “on site,” and develop human resources who have a broad range of learning related to music.

**Division of Human Developmental Sciences Curriculum Formulation and Implementation Policy**

1. The Division of Human Developmental Sciences consists of five departments: Educational Sciences, Psychology, Developmental and Clinical Psychology, Applied Sociology, and Child and Child Care Studies. These departments will help students learn the fundamentals of empirical scientific methodology, and develop human resources who have the theoretical knowledge needed to make a comprehensive and organic connection between society, humans, and development, based on a practical awareness of issues directed toward the resolution of societal and psychological ills.
2. The Division will aim to develop female researchers who have the research capabilities required to solve problems that have a high societal need in the area of human development, as well as the ability to function as leading highly specialized professionals.
3. The Division will aim to develop female researchers and human resources who not only combine research fields, but also take an interdisciplinary approach, which is the philosophy of the Division. This includes not only female human resources who have a mutual understanding of the human developmental sciences and the social sciences and are focused on advancement to a doctoral program, but also human resources who specialize in educational science, psychology, and sociology, etc., and have credentials as civil servants, research associates, clinical psychologists, and social researchers, etc., who possess the ability to put knowledge into action, as well as childcare and education advisors at child consultation centers, etc., who have gained knowledge and learned methodology related to child care and pedagogy, and faculty and faculty leaders, etc., who have attained a high

level of ability to formulate and implement policy.

**(1) Department of Educational Sciences**

The Department of Educational Sciences will develop individuals who will advance to doctoral programs and utilize educational thought, education history, educational sociology, educational method/curriculum theory, educational development theory, life-long education, and a variety of other research methodologies to study the processes of development and education throughout human life in a scientific manner, as well as high-level specialized professionals who will contribute to the resolution of educational problems.

**(2) Department of Psychology**

The Department of Psychology will help students gain the ability to conduct specialized research in psychology, as well as the ability to take a multidimensional and comprehensive approach to the problems of human psychology, and will develop human resources who can engage in professions that require a high level of specialization in psychology.

**(3) Department of Developmental and Clinical Psychology**

The Department of Developmental and Clinical Psychology will establish the curriculum needed to foster the basic research capabilities required to conduct research in developmental psychology on the pillars of clinical psychology, and the ability to address human clinical psychology and developmental problems in the home and in the educational, medical, welfare, judiciary, industrial, and other fields, in a specialized manner. The Department has been designated by the Foundation of the Japanese Certification Board for Clinical Psychologists as a Class 1 school, and will establish the curriculum necessary for certification.

**(4) Department of Applied Sociology**

The Department of Applied Sociology will develop human resources who have the ability to conduct basic research on sociology, as well as to utilize sociological methods to clarify the various societal issues (family, community, disparity and exclusion, law, communication, welfare, etc.) from an interdisciplinary perspective, and contribute to the resolution of those issues through research activities or occupational activities with a high level of expertise.

**(5) Department of Child and Childcare Studies**

The Department of Child and Childcare Studies will develop human resources who can provide effective support to the home and child care/educational sites as researchers in the field of child care and pedagogy or as practitioners who have the perspective of a researcher, as well as human resources who research the ideal nature of that support.

**Division of Gender and Social Sciences Curriculum Formulation and Implementation Policy**

1. The Division of Gender and Social Sciences is characterized by its research to clarify new problem areas by connecting the research methodologies of sociology, law, political science, economics, development studies, geography, environmental studies, cultural anthropology, and other social scientific fields to analysis from the perspective of gender.
2. The Division focuses on developing human resources who can contribute to the creation of a gender-equal society and international activities in a global society by fostering research capabilities in the family, labor, economics, legal policy, social activism, international relations, development, regional studies, the natural and social environments, technology, welfare, healthcare, medical space, international migration, and other fields.
3. Students are also able to participate in exercises, etc., that cross into three different departments and can request a secondary advisor in other departments according to the research theme, in order to effectively examine the research themes in a multifaceted and pluralistic manner.
4. The Division will provide systematic, step-by-step research guidance for each student's master's thesis, under an advisement structure that is centered on the main advisor, but also includes all faculty in the department, as well as faculty from other departments as necessary, to enable students to produce high-level research results that can contribute to the progress of research in the relevant field.

**(1) Department of Social and Family Policies**

- (a) The Department of Social and Family Policies will aim to foster the ability to utilize social scientific theory and methodology to clarify the problems related to civic and family life, consumption, labor, and the way of living of men and women, and to propose measures to solve those problems. The Department emphasizes the

learning of analytical techniques from the fundamentals to application of law studies, political science, economics, and sociology, and the development of the sense needed to set agendas that incorporate the perspective of gender.

- (b) The Department has established diverse courses on law, political science, economics, and sociology, focused on courses common to the entire Division and courses required by each department, in order to enable students to develop a broad perspective and absorb the results of cutting-edge research related to the research themes they have selected themselves.

## **(2) Department of Geography and Environmental Studies**

- (a) The Department of Geography and Environmental Studies will foster the ability to conduct research on issues related to space, region, and environment that transform with the spread of globalization, from the perspectives of the relationship between humans and the environment, socioeconomic spatiality, human migration and community, health and welfare, and the feel and identity of locations in daily life, etc.
- (b) The Department has established diverse lecture, exercise, and practical training courses such as geography, environmental studies, international political science, and development studies, in order to enable students to learn research methods related to fieldwork, observation, GIS, and statistical analysis, etc., as a rule with students independently advancing research activities on a research theme they have selected themselves, in accordance with a research plan they have created under the direction of faculty members.

## **(3) Department of Gender and Development Studies**

- (a) The Department of Gender and Development Studies utilizes a curriculum that introduces the perspective of gender into conventional academic research, and pursues the possibilities of new interdisciplinary research. The Department aims to develop students who have diverse interests and abilities, including in development, international cooperation, and other applied fields, in addition to theoretical analysis.
- (b) The Department has established courses common to the entire Division and courses required by each department, in order to enable students to develop a broad perspective on gender research and developmental research and absorb the results of cutting-edge research focused on the research themes they have selected themselves, as well as courses that provide a foundation for the concept of gender and gender research, courses linked to developmental research and international research, courses related to gender policy and global economic research, and courses on research methodology and theory of practice, etc.
- (c) The Department's curriculum has been designed with constant attention to the future participation of students in government, NPOs, and other aspects of the creation of a gender-equal society, as well as international cooperation in the area of "gender and development," further deepening of the students' knowledge of theory and methodology and future continuation of social analysis from the perspective of gender, and other connections to implementation in society and research activities after the completion of the program.

### **Division of Life Sciences Curriculum Formulation and Implementation Policy**

The Division of Life Sciences will foster the ability to integrate and develop the results of education obtained in undergraduate studies in the Faculty of Science and the Faculty of Human Life and Environmental Sciences, take a broad view of the life sciences overall, and approach humans from the perspectives of both life and living, in order to organically integrate the academic fields of science, engineering, and life sciences. To accomplish this, we will design and implement curriculum under the following policies.

1. The Division will develop human resources who have a broad range of understanding of the life sciences, from the fundamentals to application, and who will conduct research in the various areas of the life sciences and engage in professions that require a high level of expertise.
2. The Division will develop the abilities of students to conduct research, assess the adequacy of research, and conduct literature searches, in order to enable them to implement research plans related to the life sciences.
3. The Division will strive to implement educational research exchange with partner organizations, and in addition to increasing the students' awareness of cutting-edge research and the close connection to society, further cultivate a broad perspective.
4. The cross-departmental lecture Theory of Life Sciences will be a required course. Students will write a master's thesis, or a research report on a specific issue in lieu of a master's thesis, under a multiple-advisor system that includes the main advisor and secondary advisors.

## **(1) Department of Biological Sciences**

Currently, understanding and applying biological science is viewed as necessary learning and a required

technique in all facets of human society. The Department of Biological Science develops highly skilled professionals who will engage in research and development to meet that need. To accomplish this, the Department will help students learn a wide range of science and technology, extending to biotechnology, while conducting basic research targeting all living things to answer the question of what it means to be alive. In addition, the Department aims to develop human resources who can be active in the elementary and secondary science education and scientific communication fields. Based on the aforementioned point of view, we will design and implement elective courses and departmental courses for the production of a master's thesis.

## **(2) Department of Human Environmental Sciences**

The purpose of the Department of Human Environmental Sciences is to address the various issues related to the environment, focusing on human life, as well as to conduct research on the characteristics and physiological mechanism of humans as living organisms, and the interaction between the human body and the environment. In addition, the Department will develop human resources who are able to grasp the essence of the borderline region (interface) between humans and the environment scientifically and technically from the perspective of humans and the environment, and who have the ability to propose concrete measures to improve the interface, thereby improving our lives. Based on the aforementioned point of view, we will design and implement departmental courses focused on master's thesis advisement.

## **(3) Department of Food and Nutritional Sciences**

The purpose of the Department of Food and Nutritional Sciences will be to build a wholesome dietary life and analyze and resolve the issues of food-related illness and food safety, etc., in areas extending from basic research to applied development related to food and nutrition. In addition, the Department will develop researchers and developers for food companies, national registered dietitian leaders, and other "food specialists" who are able to handle everything from basic research on food and nutrition to applied development and clinical approaches. Based on the aforementioned point of view, we will design and implement departmental courses focused on master's thesis advisement.

## **(4) Department of Genetic Counseling**

The Department of Genetic Counseling will develop professionals who understand the medical and psychological impact, as well as the impact on the family, of the genetic implications of diseases at healthcare sites, who are able to conduct genetic counseling to support adaptation, and who have a high level of expertise. In addition, students will learn the fundamentals needed to conduct "genetic counseling research to clarify evidence" required for implementation of that knowledge and skills. The curriculum is designed to conform to the requirements needed to qualify as a certified genetic counselor as a specialized profession. Students will learn the most recent biological science that serves as the foundation of medical genetics, human genetics, genomic medicine, and other basic knowledge of medical science needed to work as a specialist, as well as the fundamentals and exercises of medical interviews, clinical genetics, and genetic counseling as required subjects, and participate in practical training by attending genetic counseling sessions at partner medical institutions, in order to develop communication skills and the ability to understand the concept of team medical care. In addition, through the master's thesis, students will learn the fundamentals of logical scientific thinking and genetic counseling research.

### **Division of Advanced Sciences Curriculum Formulation and Implementation Policy**

The purpose of the Division of Advanced Sciences is to help students acquire the specialized knowledge and research techniques required by researchers, technicians, and high-level professionals, in the fields of mathematics, physical science, chemistry, biological chemistry, and information sciences, on the foundation of the basic scientific systems learned during the students' undergraduate studies. To achieve this, the Division has developed a curriculum that consists of lectures, exercises, and experiments, etc., and is focused on special studies, in accordance with the characteristics of each field.

## **(1) Department of Mathematics**

The Department of Mathematics has developed lectures and exercises (seminars) to increase each graduate student's specialization in the individual fields of analysis, geometry, and algebra on the foundation of the basic learning acquired during the student's undergraduate studies. At the same time, the Department has established required courses to develop a diverse understanding of other fields. The purpose is to cultivate logical problem-solving skills as well as the ability to research problems, and to identify and organize the essence of those problems.

## **(2) Department of Physics**

The purpose of the Department of Physics is to develop researchers or highly skilled professionals and educators who are able to handle specialized fields of physical science in a flexible manner, by helping students further develop the basic physical science methodology they learned in their undergraduate studies, and learn the latest specialized knowledge and theoretical research techniques. To achieve this, the Department has developed a curriculum that consists of lectures and exercises provided by University and outside specialists, focusing on special studies in specialized research and educational environments that cover a wide range including space, elementary particles, theory of condensed matter, and condensed matter experiments.

## **(3) Department of Chemistry and Biochemistry**

Considering that chemistry and biological chemistry are academic fields that develop in close cooperation with all fields of the natural sciences, with atoms and molecules as the intermediaries, the purpose of the Department of Chemistry and Biochemistry is to help students not only learn the specialized knowledge and research techniques needed to allow them to engage in research in chemistry and biological chemistry based on the fundamental scientific systems they learned during their undergraduate studies, but also to enable them to apply such knowledge and techniques to other related areas. To achieve this, the Department has developed a curriculum that consists of lectures, exercises, and experiments, etc., and is focused on special studies, in accordance with the characteristics of each field.

## **(4) Department of Computer Science**

The purpose of the Department of Computer Science is to help students grow as independent researchers or highly skilled professionals in the field of information sciences, on a foundation of the basic scientific systems they learned during their undergraduate studies. To achieve this, the Department has designed a well-developed curriculum consisting of fully enhanced lectures and exercises, etc., that further deepen the students' basic theory and technical skills as information science, and conduct special studies based on the knowledge that they have obtained.

### **Division of Cooperative Major in Human Centered Engineering Curriculum Formulation and Implementation Policy**

The following curriculum shall be formulated to cultivate the ability to make concrete proposals of measures in the field of human-centered engineering to improve the living environment and enhance lives. This major is a Cooperative Major in Human Centered Engineering held in partnership with Graduate School of Humanities and Sciences, Nara Women's University. Hereinafter, the universities will be referred to as “the student’s university” (Ochanomizu University) and “the partner university” (Nara Women's University). Students can also take cooperative major courses at the partner university. A requirement of the Cooperative Major is to acquire ten or more credits in courses at the partner university.

1. Students shall learn techniques to find and resolve research issues in this field of study, and cultivate the ability to establish, resolve, and evaluate issues, in order to approach the various issues related to daily living flexibly from the consumer’s perspective.
2. In addition to cultivating the ability to acquire and apply the theories and knowledge in engineering required to resolve issues related to daily living, students shall recognize the importance of collaboration with other fields of study, and learn techniques for mutually matching lifestyle/environment and scientific technology.
3. Students shall gain an awareness of their own ethical responsibilities as a researcher/technician, and acquire a compliance mindset to contribute to the development of society through excellent research outcomes.
4. Students shall write a thesis/dissertation under a multiple-advisor system that includes the main advisor and secondary advisors. Through creation of a thesis/dissertation, students shall also cultivate the ability to implement research, the ability to make judgments related to the adequacy of research, and the ability to conduct a literature search, etc.

### **Doctoral Program Curriculum Formulation and Implementation Policy**

#### **Division of Comparative Studies of Societies and Cultures Curriculum Formulation and Implementation Policy**

The purpose of the Division of Comparative Studies of Societies and Cultures is to develop high-level researchers and specialists who reconsider human understanding, social understanding, and cultural structure in response to the nature of humans, society, and culture, possess the accompanying cross-disciplinary point of view,

and advance interdisciplinary international research that stands on a foundation of multicultural mutual understanding. Accordingly, in the four departments that have been reorganized from the nine departments of the master's program (Department of Japanese Studies in a Global Perspective, Department of Language, Literature, and Culture, Department of Comparative Social Studies, and Department of Arts and Representational Studies), the Division will strive to provide students with educational guidance that continues in a consistent manner from the master's program and deepen their specialized knowledge, as well as to help them develop cross-disciplinary creative abilities. Further, the Division offers international conferences hosted jointly with overseas partner universities, as well as a student overseas visit program, to provide students with the opportunities to conduct investigative research and present research overseas. Particular mention should be given to the double degree program that has been operated in partnership with University of London, School of Oriental and African Studies (SOAS) since 2010.

**(1) Department of Japanese Studies in a Global Perspective**

The Department of Japanese Studies in a Global Perspective will develop human resources who will advance Japanese studies within an international perspective, and communicate to the world Japanese studies as a comprehensive study of literature, linguistics, historiography, archaeology, philosophy, culture, and body theory. The Department will help students conduct advanced research in each area of specialization, as well as to obtain comprehensive knowledge based on interdisciplinary interests that take specialization into consideration, and develop the ability to actively engage in research exchange.

**(2) Department of Language, Literature, and Culture**

Through lectures and exercises, the Department of Language, Literature, and Culture will develop human resources who research the literature/cultural representation and critical theory of the Chinese, English, French, and German-speaking world, promote research and education on language learning theory, including linguistics and Japanese language education, and deepen their specialized knowledge of the literatures and languages of each country, while at the same time fostering a cross-disciplinary research perspective, and developing individuals who will proactively develop and recommend contemporary cultural and critical functions that utilize the medium of language, from the aspect of international cooperation as well.

**(3) Department of Comparative Social Studies**

The Department of Comparative Social Studies will strive to develop human resources who promote mutually cross-comparative research on Japan, Asia, Europe, North America, and Islamic regions, focusing on aspects stretching from philosophical thought and history to sports, and while taking into consideration the philosophy and history of the past, contribute to the formation of the new humanities that contemporary society demands, and aspire to the achievement of liberty and equality. The Department will help students conduct advanced research in each area of specialization, as well as to obtain comprehensive knowledge based on interdisciplinary interests that take specialization into consideration, and develop the ability to actively engage in research exchange.

**(4) Department of Arts and Representational Studies**

Focusing mainly on art, craftwork, clothing, dance, music, and museology, the Department of Arts and Representational Studies will foster the ability to analyze and research cultural representation and expression from multiple perspectives and in a specialized, cross-disciplinary, and critical manner, while striving to integrate theory and practice in the case of dance and music. The Department will develop human resources who have a wide range of knowledge regarding representational art, specialized knowledge, and the ability to conduct creative analysis, and who are motivated to recommend critical art theory to society as a medium for human understanding and international cooperation.

**Division of Human Developmental Sciences Curriculum Formulation and Implementation Policy**

1. The Division of Human Developmental Sciences consists of five departments: Department of Educational Science, Department of Psychology, Department of Developmental and Clinical Psychology, Department of Sociology and Social Policy, and Department of Child and Child Care Studies. On a foundation of these five areas of study, the Division will strive to consolidate a wide range of learning related to human psychological development and the development of the social environment, and conduct interdisciplinary and comprehensive educational research from a broad perspective.
2. The Division will aim to develop female researchers and human resources who have the research capabilities required to solve problems that have a high societal need in the area of human development, as well as the ability

to function as leading highly specialized professionals.

3. To achieve these aims, the Division will design and implement courses focused on doctoral dissertation advisement.

**(1) Department of Educational Science**

The Department of Educational Sciences will develop female researchers who are able to utilize educational thought, education history, educational sociology, educational method/curriculum theory, educational development theory, life-long education, and a variety of other methodologies to study the processes of development and education throughout human life in a scientific manner, as well as acquire the research capabilities required to work independently as specialized researchers and the ability to function as highly skilled professionals who will take leadership roles.

**(2) Department of Psychology**

The Department of Psychology will help students gain the ability to conduct advanced research in psychology, as well as the ability to take a multidimensional and comprehensive approach to analyzing the problems of human psychology, and will develop human resources who can promote creative research as independent researchers.

**(3) Department of Developmental and Clinical Psychology**

The Department of Developmental and Clinical Psychology will establish the curriculum required to engage in education and research in developmental clinical psychology. The Department will foster the ability to address clinical psychology and developmental problems in the home and in the educational, medical, welfare, judiciary, industrial, and other fields, in a specialized manner, and will establish the curriculum needed to foster the high-level research capabilities required to conduct research in developmental psychology on the pillars of clinical psychology.

**(4) Department of Sociology and Social Policy**

The Department of Sociology and Social Policy will help students gain the ability to conduct advanced research that will enable them to take a global perspective and clarify the various problems of society, including public policy issues, with an academic foundation of the social sciences including economics and law, with a focus on sociology, and will develop human resources who will take a leading role in solving societal problems through independent and creative research activities as researchers, or through professional activities with a high level of specialization.

**(5) Department of Child and Child Care Studies**

The Department of Child and Child Care Studies will develop researchers and practitioners who have a high level of specialized knowledge and the ability to implement their ideas, and who are able to analyze and understand in a multifaceted manner the diverse problems that occur at the sites of child care and parenting by regarding them in the light of individual human development and psychology, the ideal nature of on-site interaction, and the society and historical background that serve as the context, then strive to solve those problems.

**Division of Interdisciplinary Gender Studies Curriculum Formulation and Implementation Policy**

**(1) Department of Gender Studies**

- (a) The Department of Gender Studies will conduct research on a broad range of topics from the perspective of gender, including the family, labor, human rights, education, development assistance, economics, legal policy, international relations, regional planning, the environment, scientific technology, welfare, and healthcare. The Department will help students deepen their research under the guidance of advisors, and will take a cross-disciplinary approach that focuses on gender issues.
- (b) Students will submit research plans that are established annually, as well as research reports, geared toward the completion of their doctoral dissertations. In addition, the main advisor and secondary advisors will provide step-by-step guidance. Students will be expected to produce results according to plan through conference presentations, submission of journal articles, and participation in research activities both inside and outside the university, etc.

**Division of Life Sciences Curriculum Formulation and Implementation Policy**

1. The Division of Life Sciences will organically integrate the academic fields of science, engineering, and life sciences, and will further cultivate the ability to take a broad view of the life sciences overall, and approach humans from the perspectives of both life and daily living.
2. The Division will develop human resources who have a broad range of understanding of the life sciences, from the fundamentals to application, and who are able to work independently as researchers and take leadership roles in the various areas of the life sciences.
3. Students will be required to establish research topics related to the life sciences, execute research plans, and present research results. Accordingly, the Division will foster the ability to conduct original and highly advanced research, assess the adequacy of research, conduct literature searches, and present their findings, etc.
4. The Division will strive to implement educational research exchange with partner organizations, and in addition to increasing the students' awareness of cutting-edge research and the close connection to society, further cultivate a broad perspective.
5. Students will produce doctoral dissertations under a multiple advisor system that includes the main advisor and secondary advisors.

#### **(1) Department of Biological Sciences**

The Department of Biological Sciences will train researchers and developers who will take the lead in pioneering the biological sciences, which will have significant impact on the future of humankind. The ideal image of such human resources is a leader who is able to conduct research and development independently in leading areas, and serve as a team leader who can convert the team's mission into tangible form. To foster such characteristics, the Department will design a curriculum that enables students to engage in discussions with their advisors on a daily basis, receive guidance from teaching staff in other related fields, and actively participate in workshops, etc., outside the university. In addition, the purpose of the Department is to develop human resources who can take a pace-setting role not only in research, but in education as well. To achieve these aims, the Division will design and implement courses focused on doctoral dissertation advisement.

#### **(2) Department of Human Environmental Sciences**

The purpose of the Department of Human Environmental Sciences is to clarify the relationship between humans and the environments in which they live, then design and control that environment so that it is rational and comfortable for people. The Department will develop human resources who are able to grasp the essence of the borderline region (interface) between humans and the environment scientifically and technically from the perspective of humans and the environment, then propose concrete measures to improve the interface, thereby improving our lives. In addition to fostering the creative skills needed to conduct interdisciplinary comprehensive research in the academic field, the Department will develop independent researchers. Based on the aforementioned point of view, we will design and implement courses focused on doctoral dissertation advisement.

#### **(3) Department of Food and Nutritional Sciences**

The purpose of the Department of Food and Nutritional Sciences will be to build a wholesome dietary life and analyze and resolve the issues of food-related illness and food safety, etc., in areas extending from basic research to applied development related to food. The Department will develop researchers for universities and public research organizations, national registered dietitian leaders, dietitians, national registered dietitian training institute instructors, and other "food specialists" who are able to handle everything from basic research on food and nutrition to applied development and clinical approaches. Based on the aforementioned point of view, we will design and implement courses focused on doctoral dissertation advisement.

#### **(4) Department of Genetic Counseling**

The Department of Genetic Counseling will develop researchers who can clarify to people with genetic issues the evidence needed to better provide genetic counseling, as well as leaders in genetic counseling. The Department will utilize practical training at medical institutions in the doctoral program or work experience as a certified genetic counselor to foster the ability to examine unresolved issues in genetic counseling, on the foundation of the knowledge and abilities acquired by the students in their undergraduate and master's program studies. In addition to conducting their own research, students will continuously take leadership roles as facilitators, etc., in study groups and workshops related to genetic counseling. In addition, students will engage in activities to educate society broadly regarding genetic counseling, and strive to develop the professionalism of certified genetic counselors.

## **(5) Department of Disease Prevention Science**

In addition to giving students a birds-eye view through implementation of a broad range of education in the field of disease prevention, teaching will keep in mind the techniques and methods of analyzing and using individual types of genetic information and information related to disease prevention, methods of handling that information in an ethical manner, and methods of utilization in industry. We will develop in students the ability to understand an overview of medical science, dentistry, pharmacology, food science, informatics, and statistics. We will foster the ability to analyze each type of genetic information and the large amount of information generated by medical devices and each of the other related devices. Students will be trained in societal issues related to the handling of personal information, and methods of addressing those issues. Students will also be given an introduction to management and learn communication theory to enable them to develop the ability to lead the way in research and development.

### **Division of Advanced Sciences Curriculum Formulation and Implementation Policy**

The purpose of the Division of Advanced Sciences is to help students engage in advanced research in the fields of mathematics, physical science, chemistry, biological chemistry, and information sciences, on the foundation of the scientific research methods learned in the master's program, earn a doctorate, and grow as independent researchers, technicians, or highly skilled professionals. To achieve this, the Division has developed a curriculum that consists of special studies, dissertation advisement, and research guidance, in accordance with the characteristics of each field.

## **(1) Department of Mathematics**

In order to provide more advanced guidance aimed at evolving cross-disciplinary research that has an interdisciplinary nature as pure mathematics or applied mathematics, on a foundation of the knowledge and abilities developed during the master's program, the Department of Mathematics has established exercises to accompany each lecture to design a curriculum that allows students to consecutively perform the series of tasks including proposal of a problem, producing research solutions, and organizing and compiling the findings in a paper. The final goal is submittal of a doctoral dissertation and acquisition of a doctorate.

## **(2) Department of Physics**

The purpose of the Department of Physics is to help students gain the ability to identify and resolve problems on their own in the physical sciences and related fields by conducting cutting-edge research on a foundation of the physical scientific research techniques learned in the master's program, and to develop young researchers who will be the driving force in the physical science and physical engineering fields in the future. To achieve this, the Department provides a research environment that utilizes global, cutting-edge research facilities, and has developed a curriculum that consists of special studies, dissertation advisement, and research guidance, in order to allow students to present their findings both inside and outside the university.

## **(3) Department of Chemistry and Biochemistry**

Considering that chemistry and biological chemistry are academic fields that develop in close cooperation with all fields of the natural sciences, with atoms and molecules as the intermediaries, the purpose of the Department of Chemistry and Biochemistry is to help students not only engage in more advanced research in chemistry and biological chemistry based on the chemical and biochemical research techniques they learned during the master's program, earn a doctorate, and grow as independent researchers, but also to acquire the abilities that are needed by individuals who are leaders in a diverse range of related fields. To achieve this, the Division has developed a curriculum that consists of special studies, dissertation advisement, and research guidance, in accordance with the characteristics of each field.

## **(4) Department of Computer Science**

The Department of Computer Science will help students engage in advanced research in the information sciences, on the foundation of the information scientific research methods learned in the master's program, earn a doctorate, and develop into independent researchers or highly skilled professionals. The Department has designed a curriculum consisting of thorough research guidance and dissertation advisement, and which allows students to engage in special studies, in order to address research topics to provide new knowledge in the information sciences field.

### **Division of Cooperative Major in Human Centered Engineering Curriculum Formulation and Implementation Policy**

Students shall cultivate the ability to make concrete proposals of measures in the field of human-centered engineering to improve the living environment and enhance lives. The following curriculum focused on doctoral dissertation advising shall be formulated and implemented in order to cultivate the creative abilities required to resolve practical issues, as well as to develop self-reliant researchers, through this developing the ability to conduct academic research. This major is a Cooperative Major in Human Centered Engineering held in partnership with Graduate School of Humanities and Sciences, Nara Women's University. Hereinafter, the universities will be referred to as “the student’s university” (Ochanomizu University) and “the partner university” (Nara Women's University). Students can also take cooperative major courses at the partner university.

1. Students shall learn techniques to find and resolve research issues in this field of study, and cultivate the solid ability to establish, resolve, and evaluate issues, in order to approach the various issues related to daily living flexibly from the consumer’s perspective.
2. In addition to cultivating the ability to acquire and apply the theories and knowledge in engineering required to resolve issues related to daily living, students shall deeply recognize the importance and necessity of collaboration with other fields of study, and thoroughly learn techniques for mutually matching lifestyle/environment and scientific technology.
3. Students shall gain an awareness of their own ethical responsibilities as a researcher/technician, and acquire a compliance mindset to contribute to the development of society through excellent research outcomes.
4. Students shall write a thesis/dissertation under a multiple-advisor system that includes the main advisor and secondary advisors. Through creation of a thesis/dissertation, students shall also cultivate the ability to implement highly creative and innovative advanced research, the ability to make judgments related to the adequacy of research, the ability to conduct a literature search, and the ability to make presentations, etc.