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実践報告

Neuroscience Nursing Course Evaluation at the Graduate School of Nursing, St. Luke's International University: Results from 2016-2024

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聖路加国際大学大学院看護学研究科 ニューロサイエンス看護学における科目評価(2016~2024年度)

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[Abstract]

St. Luke's International University Graduate School of Nursing Neuroscience Nursing introduced a master's program in 2016, and a doctoral program in 2019. As 2025 approaches, marking the program's 10th anniversary, we reflect on the subjects and course content to date and identify future challenges. Enrollment in the master's and doctoral programs has steadily increased, and all students have passed the professional nursing examinations. The evaluation of courses by graduate students also showed high satisfaction and high evaluation scores. However, there were some comments, such as the need for an orientation on educational methods and course management. It is necessary to provide graduate students with a comprehensive course orientation prior to the commencement of classes. Additionally, to secure more graduate students, it is essential to take the initiative to develop online classes and accept international students, thus facilitating opportunities for interaction among graduate students and strengthening second language skills.

(Key words) Neuroscience Nursing, Master Course, Doctoral Course, Doctor of Nursing Practice, Advanced Practice Nurse

〔要旨〕

聖路加国際大学大学院看護学研究科Neuroscience Nursingは、2016年度に修士課程、2019年度に博士 課程を開講した。2025年には開講10周年となることから、これまでの科目や授業内容を振り返り、今後 の課題を明らかにした。着実に修士課程入学者数、博士課程入学者数は増加し、専門看護師試験は全員 が合格している。大学院生からの科目評価も満足度ならびに評価点数は高値を示し高評価であった。し かしながら教育方法や科目運営に対するオリエンテーションの必要性などの意見も認められた。大学院

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生に対して授業開始前に丁寧な科目オリエンテーションを行うなどを考慮する必要がある。また大学院 生の更なる確保のためにオンライン授業の展開,外国人留学生の受け入れを率先して行う必要があり, これらは院生同士の交流機会の確保,第2外国語力の強化に繋がる。

[キーワーズ] ニューロサイエンス看護学,修士課程,博士課程,DNPコース,高度実践看護師コース

I. Introduction

St. Luke's International University Graduate School of Nursing Neuroscience Nursing is a Japan-originated academic field that established a master's course (Master Thesis Course, Advanced Practice Course) in 2016 and a doctoral course (Researcher Course, DNP Course) in 2019. Nursing is a prevalent discipline in Europe, the United States, and other countries, but it is an unfamiliar term in Japan. In the academic nursing field, it is generally part of chronic and acute care nursing.¹⁾

Neuroscience Nursing is a field of study that explores nursing care for patients with neurological diseases from the acute phase to the maintenance phase at home, as well as nursing care for prevention before the onset of diseases. The primary focus is developing and advancing neurological nursing care by using evidence from research on patients with neurological disorders and supporting anatomy, physiology, and basic research. There is a need to provide patient-centered nursing care to patients with neurological diseases who are prone to disorders of consciousness, speech, and motor skills and whose self-expression and decisionmaking are easily impaired. Thus, it is essential to cultivate advanced practice nurses who can provide ethics-centered nursing care and who will conduct research to improve the quality of life. Training advanced practice nurses and researchers is crucial for delivering ethically sound nursing care supported by research and advanced knowledge.20 These are the principles of our Neuroscience Nursing program, which has continued to the present day. As the number of students who have completed the master's and doctoral programs exceeds 20, and 2025 will mark the 10th anniversary of the program, we will review the courses and content of our Neuroscience Nursing program to date and consider suggestions for the future.

I. Neuroscience Nursing Master's Course Outline

The graduate school curriculum is based on a twosemester system, with spring admission as the main system, with the first semester beginning in April and the second semester beginning in October. In consideration of international students, we have also introduced fall admission, with the first semester beginning in October and the second semester starting in April. The curriculum is structured per the course curriculum regulations.

a. Master Thesis Course

This course is designed to enhance expertise in Neuroscience Nursing and develop research skills. While studying research methods in nursing, students explore research themes common worldwide in the field of the brain and nervous system and strive to clarify phenomena and establish evidence for nursing techniques through the writing of research theses. Students earn 30 credits or more: 16 credits from required courses, 4 credits from elective courses, at least 2 credits from elective courses, and 8 credits from Master Thesis (Tables 1 and 2).

b. Advanced Practical Course

This course is designed to develop practical skills to deepen expertise to function as an advanced practitioner of nursing care in Neuroscience Nursing. This course develops practical skills to deepen the students' professionalism. Students must obtain 44 credits or more, including 36 credits from required courses and 8 credits from elective courses (Tables 3 and 4).

II. Neuroscience Nursing Doctoral Course Outline

a. Researcher PhD Course

In this course, students study theories and research methods to develop the basic skills to conduct research and work toward completion by conducting multiple

Category	Subjects	Number of credits	Number of credits	Time of offering
	Nursing Theory	2	2	First semester of first year
	Nursing Research MethodsI	2	2	First semester of first year
	Nursing Research Methods		2	Second semester of first year
Compulsory	Advanced Statistics	2	2	First semester of first year
subjects	Neuroscience Nursing Advanced Lecture I	2	2	First semester of first year
	Neuroscience Nursing Advanced Lecture II	2	2	Second semester of first year
	Neurosciene Nursing Advanced Practice I	2	2	First semester of first year
	Neurosciene Nursing Advanced Practice II	2	2	Second semester of first year
	Advanced Lecture I in Other Fields	2		
Elective	Advanced Lecture II in Other Fields	2	4	
subjects	Advanced Lecture III in Other Fields	2		
*Select one field other than your major, and acquire 4 credits			in the Advanced Le	ecture offered in that field.
Elective subjects	Select from subjects other than the 20 credits you acquire above.		2	
Master Thesis Neuroscience Nursing Master Thesis		8	8	Year of completion
Number of credits required for completion				30 credits

Table 1: Neuroscience Nursing, Master of Nursing Science, Research Cource

Table 2: Subjects in Neuroscience Nursing, Master of Nursing Science, Research Course

Subjects	Course Outline
Neuroscience Nursing Advanced Lecture I	Learn about the interaction between people with impaired consciousness and others, and the psychological processes of people with motor disabilities and their families, from various theories.
Neuroscience Nursing Advanced Lecture II	Learn about dignity, decision-making and advocacy for people with impaired consciousness and motor function and their families from various theories.
Neurosciene Nursing Advanced Practice I	Learn how to assess consciousness and motor disorders, and understand the physical and mental reactions of patients with neurological disorders and their families, as well as assistive technology.
Neuroscience Nursing Advanced Practice II	Conduct a systematic review of neuroscience nursing to understand the research findings, limitations, and issues
Neuroscience Nursing Advanced Practice III	Learn research methods related to to neuroscience nursing
Neuroscience Nursing Master Thesis	Conduct research based on the master's thesis research plan, write a research paper, and give a presentation on the research results.

research projects with a faculty advisor per their research themes. Students acquire a total of 23 credits: 5 credits from required courses in basic fields, 1 or more credits from elective courses in basic fields, 4 or more credits from required courses in specialized fields, 3 or more credits from elective courses, 4 credits from Proposal, and 6 credits from preparatory courses

(Table 5 and 6).

b. DNP (Doctor of Nursing Practice) Course

This course fosters reformers of practice in nursing practice, who plan, practice, and evaluate research projects to reform and change practice in their own fields using evidence and academic methodologies. The

Category	Subjects Number of credits		Number of credits	Time of offering
	Pathophysiology	2	2	Second semester of first year
	Pharmacology	2	2	Second semester of first year
	Physical Assessment	2	2	First semester of first year
	Diagnosis and Treatment	2	2	First semester of first year
	Neuroscience Nursing Advanced Lecture I	2	2	First semester of first year
	Neuroscience Nursing Advanced Lecture II	2	2	Second semester of first year
	Neuroscience Nursing Advanced Lecture III	2	2	First semester of first year
Compulsory	Neuroscience Nursing Advanced Lecture IV	2	2	First semester of first year
subjects	Neuroscience Nursing Advanced Lecture V	2	2	First semester of second year
	Neurosciene Nursing Advanced Practice I	2	2	First semester of first year
	Neurosciene Nursing Advanced Practice II	2	2	Second semester of first year
	Neurosciene Nursing Advanced Practice III	2	2	Second semester of first year
	Neurosciene Nursing Advanced Clinical Training I	2	2	Second semester of first year
	Neurosciene Nursing Advanced Clinical Training II	2	2	Second year
	Neurosciene Nursing Advanced Clinical Training III	6	6	Second year
	Neurosciene Nursing CNS's Research	2	2	Year of completion
	Nursing Theory	2		First semester
	Nursing Research Methods I	2		First semester
Elective compulsory	Introduction to Nursing Ethics	2	8	Second semester
subjects	Advanced Nursing Education I	2		First semester
	Advaned Nursing Management I	aned Nursing Management I 2		First semester
	Select from subjects ot	her than the 8 credits	listed above.	
Number of credits required for completion44 credits				

Table 3: Neuroscience Nursing, Master of Nursing Science, Advanced Practice Nurse Course

course fosters ethical and solid reform or transformation skills appropriate for a doctoral degree. Obtain a total of at least 23 credits: 4 credits from required courses in the foundational fields, at least 4 credits from elective courses needed in the foundational fields, 10 credits from required courses in specialized fields, 2 credits from courses for preparing DNP Research Proposals, and 3 credits from courses for preparing DNP Implementation Research (**Tables 7** and 8).

IV. Student Evaluation and Analysis Methods for Each Subject

1. Student Evaluations of Each Subject

Courses in the Neuroscience Nursing area (Neuroscience Nursing Advanced Lecture I-V, Advanced Practice I-III, Advanced Clinical Training I-III, CNS The survey items were 5 items in total, and the results are shown in the following table. The survey items were "1. Were the learning objectives clear?", "2. Were students able to master the learning contents they needed to master? ". The "5. Overall Satisfaction" was rated on a 10-point scale. The university's Academic Affairs Division distributed and collected the questionnaires via the intranet.

2. Methods of Analyzing Student Evaluations

The course evaluation questionnaires from 2016 to the first semester of 2024 were used to determine the mean and standard deviation of the scores of the questionnaire item results for each course. Statistics were based on the number of responses that could be collected in the free response section of the data.

Table 4: Subjects in Neuroscience Ni	ursing, Master	of Nursing Science,	Advanced Practice Nurse Course
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Subjects	Course Outline
Neuroscience Nursing Advanced Lecture I	Learn about the interaction between people with impaired consciousness and others, and the psychological processes of people with motor disabilities and their families, from various theories.
Neuroscience Nursing Advanced Lecture II	Learn about dignity, decision-making and advocacy for people with impaired consciousness and motor function and their families from various theories.
Neuroscience Nursing Advanced Lecture III	Learn about the latest tests, drug therapies and rehabilitation for the treatment of neurological disorders. Also, learn about patient education for patients with neurological disorders, self- management support, rehabilitation nursing and terminal care.
Neuroscience Nursing Advanced Lecture IV	Learn about the symptoms caused by neurological disorders and comprehensive assessment. Strengthen comprehensive assessment by deepening understanding of anatomy.
Neuroscience Nursing Advanced Lecture V	Learn about systems and policies for patients with neurological disorders who have consciousness or movement disorders. Based on this learning, learn about measures for patients and their families to lead high-quality lives.
Neurosciene Nursing Advanced Practice I	Learn how to assess consciousness and motor disorders, and understand the physical and mental reactions of patients with neurological disorders and their families, as well as assistive technology.
Neurosciene Nursing Advanced Practice II	Learn about the current state of medical and welfare systems and community support for patients with neurological disorders and their families, and understand the nature of support and issues.
Neurosciene Nursing Advanced Practice III	Learn about the role of APN in patients with neurological disorders
Neurosciene Nursing Advanced Clinical Training I (~2018年 Neurosciene Nursing Advanced PracticeIV)	Through practical training, learn about comprehensive assessment and nursing practice for behavioral disorders in people with neurological disorders.
Neurosciene Nursing Advanced Clinical Training II (~2018年 Neurosciene Nursing Advanced PracticeV)	Through practical training, acquire techniques to provide comprehensive assessment and nursing care for people with neurological disorders who have difficulty
Neurosciene Nursing Advanced Clinical Training III (~2018年Neurosciene Nursing Advanced Clinical Training)	Through practical training, students learn about the changes that occur in patients with neurological disorders from the onset of the disease to death, and acquire the role and nursing activities of a neuroscience nurse APN.
Neurosciene Nursing CNS's Research	Set a research theme, create a research plan and carry it out, and write a paper. Understand the significance of research in neuroscience nursing practice.

V. Ethical Consideration

The graduate student evaluations for each course are distributed and collected by the Academic Affairs Division of the University to the graduate students, not through the faculty members in charge of the courses. When the graduate students responded to the course evaluations, we assured them of strict anonymity and protection of their privacy and personal information. We explained that the assessments would be posted on the university website and published in print. The students were assumed to have agreed to these conditions when they responded to the questionnaire.

M. Result

1. Master's Program in Neuroscience Nursing (Table 9)

Neuroscience Nursing Advanced Lecture I and II and Advanced Practice I and II are required courses for both Advanced Practice and Master Thesis courses. and graduate students in both courses take them. The course satisfaction scores for Advanced Lecture I and Advanced Lecture II were high, averaging 9.36 ± 0.79 and 9.07 ± 0.53 points, respectively. For questions 1-4, both Advanced Lecture I and II also had high scores with means ranging from $3.50-3.95 \pm 0.18-0.54$. Advanced Practice I and II had mean satisfaction scores of $8.75-8.89 \pm 0.61-1.04$, with high mean scores of $3.44-4.0\pm0.0-0.58$ for each of the questions 1-4. Among the free comments on Advanced Lecture I, the following comments were made: "I realized how difficult it is to communicate to others by carefully reading and summarizing the scope of the material each time and presenting it," "My own presentation content improved as the class went on, and I had a meaningful time by sharing knowledge with everyone," and "It was a good opportunity for me to learn more about the subject matter. The class content will be the

Category	Subjects Number of credits		Number of credits	Time of offering
	Concepts, Basic Theory, Intermediate Theory		1	First semester of first year
Compulsory subjects in foundation field	Systematic Review	2	2	Second semester of first year
loundation noid	Academic Writing	Academic Writing 2 2		Second semester of first year
	Nursing Theory	1		First semester
	Development of Conceptual Framework	1		Second semester
Elective compulsory	Statistical Methods	2		First semester
subjects in foundation	Qualitative Research Methods	1	1	Second semester
neid	Advanced Statiscal Methods	2		First semester
	Intervation Study (Quantitative Research Methods, Mixed Research Methods)	2		Second semester
Elective compulsory	Neuroscience Nursing Advanced Lecture 2 4		All Year	
field of study	Neuroscience Nursing Advanced Practice	2		All Year
Elective subjects	jects Select from subjects other than the 3 credits acquired above.		3	
PhD Research Proposal Neuroscience Nursing PhD Research Proposal		4	4	
Doctoral Thesis Neuroscience Nursing PhD Research		6	6	
Number of credits required for completion 23 credits				

	Table 5: Ne	uroscience	Nursing,	Doctor	of	Philosophy	Course
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Table 6: Subjects in Neuroscience Nursing, Master of Nursing Science, Research Cource

Subjects	Course Outline
Neuroscience Nursing Advanced Lecture	Acquire the skills necessary for evidence- and theory-based nursing practice and education, and will explore the research issues in today's nursing. In particular, explore research issues related to supporting the health and lives of people and families in the field of neuroscience nursing, and devise methods for evidence- and theory-based nursing practice and education.
Neuroscience Nursing Advanced Practice	Analyze the background of a problem in a specific area of interest, search for related theories and existing research, and describe them logically.
Neuroscience Nursing PhD Research Proposal	Set research topics in the field of neuroscience nursing and conduct preliminary research. Ultimately, prepare a doctoral dissertation research plan.
Neuroscience Nursing PhD Research	The research will be conducted and analyzed based on the doctoral dissertation research plan, and a doctoral dissertation will be written. It will also be summarized and presented as a presentation.

foundation for the future. Conversely, some participants asked for supplementary explanations on learning methods, stating they did not understand how to learn and make presentations.

Advanced Lecture III-V, which are required for the Advanced Practice Course and elective for the Master Thesis Course, had high mean satisfaction scores of $9.09-9.20 \pm 0.39-1.91$ and high scores for each of the questions 1-4 of $3.46-3.93 \pm 0.09-0.80$. The scores for questions 1-4 were also high, ranging from $3.46-3.93 \pm 0.09-0.80$. In the free responses to Advanced Lecture IV, many participants stated that they were able to

learn about the anatomy of the cranial nervous system and that being able to study with actual organs allowed them to learn about specialized fields from the perspective of anatomy, leading to broader knowledge and understanding of the evidence. In the free comments on Advanced Lecture V, some participants commented that they could learn from lectures by health and welfare systems, professional nurses, and survivors related to their specialty areas, which led to Advanced Clinical Training. However, there were opinions that it was difficult to grasp the points to be learned due to the wide range of topics.

Category	Subjects Number of credits		Number of credits	Time of offering
Compulsory	Concepts, Basic Theory, Intermediate Theory	1	1	First semester of first year
subjects in	DNP Lecture I	2	2	First semester of first year
foundation field	foundation field DNP LectureII 1		2	Second semester of first year
	Academic Writing	1		Second semester
	Systematic Review	1		First semester
Elective	Development of Conceptual Framework	2		Seconf semester
compulsory	Qualitative Research Methods	1	4	First semester
foundation field	Advanced Statiscal Methods	2		Seconf semester
	Intervation Study (Quantitative Research Methods, Mixed Research Methods)	2		Seconf semester
	DNP Lecture I : Leadership and the Role of DNP	2	2	First semester of first year
Elective	DNP Lecture II: Health Economics	2	2	First semester of first year
compulsory subjects in your	DNP Lecture III: Human Health and Epidemiology	2	2	Second semester of first year
study	DNP Lecture IV: Evaluation and quality improvement of nursing and medical care	2	2	First semester of second year
	DNP Lecture V: Nursing Practice and Policy	2	2	First semester of second year
DNP Research Proposal	IP ResearchNeuroscience NursingProposalDNP Research Proposal		2	
DNP Implementaion Research	Neuroscience Nursing DNP Implementaion Research	3	3	
1	Number of credits required for completion			23 credits

Table 7: Neuroscience Nursing, Doctor of Nursing Practice Course

Table 8: Subjects in Neuroscience Nursing, Master of Nursing Science, DN	ONP Course
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Subjects	Course Outline
Neuroscience Nursing DNP Research Proposal	Create a project implementation research plan suitable for advanced practitioners who will be responsible for organizational and social change.
Neuroscience Nursing DNP Implementaion Research	Conduct research based on the DNP Project Implementation Research Plan, write research papers, and present research results.

The number of respondents for Advanced Practice III was zero because Advanced Practice was not completed at the course evaluation time, and there was no time for evaluation.

Advanced Clinical Training I and III are required courses for advanced practice courses. The mean satisfaction score for Advanced Clinical Training II was 6, and the mean satisfaction score for each of the questions 1–4 was 3, which was low compared to other courses. However, the number of respondents was also 1. However, the number of respondents was also 1. CNS's Research is a required course for the advanced practice course, but the number of respondents was 0 because the survey collection period coincided with the public review and graduation ceremony.

2. Doctoral Program in Neuroscience Nursing

The satisfaction scores for the Neuroscience Nursing

	ble 9: Course Evaluation for the Master's Program in Neuroscience Nurs	sing (2016-2024 1st semester)
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Subjects	Questionnaire items	n	means	sd		
Neuroscience Nursing Advanced Lecture I	Satisfaction		9.36	0.79		
	Q1. The learning objectives were clear		3.95	0.18		
	Q2. I was able to master the learning content that I needed to learn	22	3.68	0.37		
	Q3. The teaching-learning methods were appropriate		3.91	0.19		
	Q4. This course was conducted as described in the syllabus.		3.59	0.54		
	Satisfaction		9.07	0.53		
	Q1. The learning objectives were clear	14	3.64	0.41		
Neuroscience Nursing Advanced Lecture II	Q2. I was able to master the learning content that I needed to learn		3.50	0.41		
	Q3. The teaching-learning methods were appropriate		3./1	0.39		
	Q4. This course was conducted as described in the syllabus.		3.79	0.38		
Neuroscience Nursing Advanced Lecture III			9.17	0.62		
	Q1. The learning objectives were clear	10	3.03	0.27		
Neuroscience Nursing Advanced Lecture III	Q2. The teaching learning methods were appropriate	12	3.07	0.21		
	01. The course was conducted as described in the syllabus		3.07	0.21		
	Satisfaction		9.00	0.30		
Neuroscience Nursing Advanced Lecture IV	Q1 The learning objectives were clear	15	3.93	0.00		
	Q2. I was able to master the learning content that I needed to learn		3.60	0.37		
	Q3. The teaching-learning methods were appropriate		3.73	0.24		
	Q4. This course was conducted as described in the syllabus.		3.80	0.24		
Neuroscience Nursing Advanced Lecture V	Satisfaction		9.09	1.91		
	Q1. The learning objectives were clear		3.73	0.40		
	ed Lecture V Q2. I was able to master the learning content that I needed to learn					
	Q3. The teaching-learning methods were appropriate		3.64	0.78		
	Q4. This course was conducted as described in the syllabus.		3.46	0.39		
	Satisfaction		8.89	0.61		
Neurosciene Nursing Advanced Practice I	Q1. The learning objectives were clear	1	3.89	0.13		
	Practice I Q2. I was able to master the learning content that I needed to learn					
	Q3. The teaching-learning methods were appropriate		3.67	0.25		
	Q4. This course was conducted as described in the syllabus.		3.67	0.25		
Neurosciene Nursing Advanced Practice II	Satisfaction		8.75	1.04		
	Q1. The learning objectives were clear		4.00	0.00		
	Actice II Q2. I was able to master the learning content that I needed to learn					
	Q3. The teaching-learning methods were appropriate		3.75	0.58		
	Q4. This course was conducted as described in the syllabus.		3.75	0.29		
	Satisfaction					
Noursesiens Numine Advensed Deseties III	Q1. The learning objectives were clear	0	_	-		
Neurosciene Nursing Advanced Practice III	Q2. The teaching learning methods were appropriate			_		
	Q4. This course was conducted as described in the syllabus		_	_		
	Satisfaction		8.67	0.71		
	Q1. The learning objectives were clear		3.67	0.71		
Training I	Q2. I was able to master the learning content that I needed to learn		3.67	0.35		
(-2018, Neurosciene Nursing Advanced Practice IV)	Q3. The teaching-learning methods were appropriate	-	3.67	0.35		
	Q4. This course was conducted as described in the syllabus.		3.33	0.35		
	Satisfaction		6.00	-		
Neurosciene Nursing Advanced Clinical	Q1. The learning objectives were clear	1	3.00	-		
Training II	Q2. I was able to master the learning content that I needed to learn	1	3.00	-		
(-2018, Neurosciene Nursing Advanced Practice V)	ursing Advanced Practice V) Q3. The teaching-learning methods were appropriate					
	Q4. This course was conducted as described in the syllabus.					
	Satisfaction		8.50	0.47		
Neurosciene Nursing Advanced Clinical	Q1. The learning objectives were clear		4.00	0.00		
Training III (-2018, Neurosciene Nursing Advanced Clinical Training)	Training III Q2. I was able to master the learning content that I needed to learn					
	Q3. The teaching-learning methods were appropriate		3.50	0.47		
	Q4. This course was conducted as described in the syllabus.	ļ	3.50	0.47		
	Satisfaction					
	Q1. The learning objectives were clear			-		
Neurosciene Nursing CNS's Research	Q2. I was able to master the learning content that I needed to learn			-		
	Q3. The teaching-learning methods were appropriate		_	_		
	a i i ine sourse was conducted as described in the synabus.	2				

Advanced Lecture and Advanced Practice were a perfect score of 10, with a perfect score of 4 for each of the questions 1–4. However, the number of respondents was 1.

3. Enrollment and Completion Numbers and Academic Achievements (Table 10)

The number of enrollments was 21 for the master's program and 10 for the Ph.D. program between FY 2016 and FY 2024. In addition, 2 credited students took Neuroscience Nursing courses on an elective basis, and 2 students enrolled as research students to enter the doctoral program in Neuroscience Nursing in the future, for a total of 35 students enrolled in the Neuroscience Nursing field at the university.

Concerning this, as of March 2024, 20 (95.2%) students had completed the master's program, 2 (20.0%) had completed the doctoral program, and 2 students withdrew during their studies (1 from the master's program and 1 from the doctoral program). Two students received awards for the highest grades at the time of completion (both in the master's program), and one student received an award for outstanding social activities (in the doctoral program).

4. Number of Successful Candidates and Success Rates for Professional Nurse Certification

From 2016 to 2024, the program has produced 13 graduates of the advanced practice course and one student who took Neuroscience Nursing courses at the university to qualify for the professional nursing examination. Of these, 9 have taken the Japan Nursing Association's Specialty Nursing Examination (Chronic Nursing), and all have passed (100% pass rate). Notably, 7 of the 9 passed on their first attempt (77.77%), and 2 of the 9 passed on their second attempt

(100%).

5. Increased Faculty Staff

The Neuroscience Nursing Department of the University has added a nursing faculty position effective April 2021. This is to increase the number of graduate students in Neuroscience Nursing and to guarantee the nursing education system for graduate students. We believe the increase in faculty members has made it possible to train successors in Neuroscience Nursing.

VI. Discussion

Neuroscience Nursing has seen a steady increase in student enrollment in the master's and doctoral programs and has produced graduates since the program's inception in 2016. Almost all students completed their studies on time, and all of the graduates of the advanced practice course successfully passed the professional nursing examinations and are active in their careers. Several of them have received awards for their outstanding academic performance, and we believe that the educational content of the Neuroscience Nursing program has been appropriate. Notably, upon assessing student evaluations of each subject, most subjects were highly rated without any problems. Nonetheless, there were some opinions that the scope of study was too broad and did not allow students to deepen their learning. It may be necessary to review the scope and quantity of learning from the syllabus content of each subject and modify it in light of the learning objectives and goals. Furthermore, unclear study methods in the subjects, including a lack of knowledge about the preparation of presentation materials, study methods, and delivery of presentations,

	-							-		
	Year of Enrollment									
Types of Neuroscience Nursing Course	2016	2017	2018	2019	2020	2021	2022	2023	2024	lotal
Master Course Research Course			1	1	1	2		1		6
APN Cours	e 1	2	2	3	1	2	2	2		15
Subtota	1	2	3	4	2	4	2	3	0	21
Doctor Course PhD Course				1	1	1	1	3	1	8
DNP Crouse						1			1	2
Subtota				1	1	2	1	3	2	10
non-degree studen	t							1	1	2
post graduate student for researc	n							1	1	2
Tota	1	2	3	5	3	6	3	8	4	35

Table 10: Changes in the number of students enrolled in Neuroscience Nursing

were highlighted. It is imperative to clearly articulate the objectives and goals of the courses before classes begin, to explain in detail how to study, and to provide an orientation to the courses according to the basic academic abilities of each graduate student while monitoring their readiness. In addition, the broad scope of study may be influenced by the dual nature of the content of the professional nursing education program established by the Japan Association of Nursing Programs and the content taught at the graduate school. This point requires reconsideration.

With the exception of the coronavirus pandemic, most Neuroscience Nursing courses have been held in face-to-face classes. Graduate nursing schools in Japan have adopted remote online classes or on-demand delivery and are actively encouraging nurses from distant locations and working adults to enroll.³⁾ Neuroscience Nursing also needs to secure graduate students even in a declining population due to the declining birth rate by introducing online classes. It is also necessary to promote the acceptance of diverse graduate students, such as international students in addition to working adults, to secure graduate students, expand opportunities for exchange among graduate students, and encourage the acceptance of diverse values and the strengthening of second language skills.

The limitations of this report are the limited data available for evaluating Neuroscience Nursing and the possibility of analyzing distinctive data from 2020–2022 owing to the coronavirus pandemic.

WII. Conclusion

Neuroscience Nursing at the University introduced a

master's program in 2016 and a doctoral program in 2019. As 2025 marks the 10th anniversary of the program's introduction, we reflect on the courses and their content to date and identify future challenges. Enrollment in the master's and doctoral programs has steadily increased, and all students have passed the professional nursing examinations. The evaluation of courses by graduate students also indicates a high level of satisfaction and a high evaluation score. However, there were some comments that an orientation on educational methods and course management was necessary, and these should be taken into account. To secure more graduate students, it is essential to initiate the development of online classes and accept international students, which will facilitate opportunities for exchange among graduate students and enhance second language skills.

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