대학원생 수준별, 전공분야 맞춤형 영어논문 작성 프로그램 운영 : Nature MasterClasses-SNU프로그램

I 추진 배경

□ 4단계 BK21 사업 평가 기준에서 연구업적의 질적평가 비중 확대되면서, 우수한 저널의 논문 투고 지원 프로그램의 필요성 확대

□ 현직 Nature Research journal editors가 진행하는 과학 글쓰기와 논문 투고 절차와 리뷰 과정을 설명해 주는 프로그램을 통해 대학원생의 국제 연구 역량 강화하고 관계 형성

II 주요 추진내용

1. 세부 내용

- 강사: Jeffrey Robens(PhD from the University of Pennsylvania)
- 교육 방식: 하이브리드(대면(100명)+비대면(300명))
- 전공 영역: 공학, 자연과학, 생명과학, 사회과학, 의학 등 5영역으로 구분하고 분야별 사례를 기반으로 교육 내용 구성
- 강의 내용: 연구자들이 학술 글쓰기와 발표 능력을 향상 시키기 위해 논문 작성, 초록·제목 작성, 데이터 시각화, 전문 발표 기술 등 연구 결과를 효과적으로 전달하는 핵심 스킬을 다룹니다. 생성형 AI 활용과 그룹 활동을 통해 실습 중심으로 진행되며, 즉시 연구에 적용 가능한 실용적 방법을 제공합니다.

2. 강의 일정 및 신청

일정		주제	분야	강의실	신청 링크
11. 3.(월)	09:30-10:45	Effective Academic Writing	All subjects	61-320 (하이브리드)	https://forms.office.com/e/gaTTKWpxsu
	11:00-12:15	Maximizing Discoverability	All subjects		
11. 5.(수)	10:00-11:15	Logical Manuscript Structure	Life science / Medicine	61-320 (하이브리드)	https://forms.office.com/e/YWb39UFrEs
	11:30-12:45	Logical Manuscript Structure	Physical sciences / Engineering		https://forms.office.com/e/a0HE5Bjdut
	13:45-15:00	Logical Manuscript Structure	Social sciences		https://forms.office.com/e/YHDRuZZEPr
	15:30-17:00	Abstract Group Activity* **(30 participants only)**	Physical sciences / Engineering	61-321 (대면강의)	https://forms.office.com/e/0036URhMCu
11. 7.(금)	09:30-11:15	Harnessing Generative AI in Academic Writing	All subjects	61-320 (하이브리드)	https://forms.office.com/e/RfjB3nnwZY
	11:30-12:45	Preparing Impactful Figures	All subjects		
	14:00-15:15	Impressive Academic Presentation including Group Activity* **(50 participants only)**	All subjects	61-320 (대면강의)	https://forms.office.com/e/kHUMkXQH7m
	15:30-17:00	Abstract Group Activity* **(30 participants only)**	Life sciences / Medicine	61-321 (대면강의)	https://forms.office.com/e/W6fm0w3VFN

- 모든 강의는 선착순으로 모집
- *Group activity 강의는 대면 강의 진행(하이드리드 진행 X)
- 강의 참여시 개인 노트북 지참

Effectively Communicating Your Research: Seoul National University

Monday, November 3

Effective academic writing (09:30 – 10:45; all subjects)

This module focuses on how to clearly communicate complex scientific ideas in an article to ensure the reader understands the value of the study for the field. We first discuss important writing strategies to improve clarity: conciseness, specificity, and logical sentence structure. We then focus on strategies to improve readability, such as using balanced active and passive voice and appropriate word choice to better engage readers.

Break (10:45 – 11:00)

Maximizing discoverability (11:00 – 12:15; all subjects)

This module begins with how to write a title that will catch the reader's attention when they are looking for articles online. We then discuss the importance of keywords and strategies for choosing ones that will increase your discoverability. Finally, we discuss strategies for writing an impressive abstract to improve your impact and influence in the field.

Wednesday, November 5

Logical manuscript structure (10:00 – 11:15; life sciences and medicine)

This module highlights the importance of framing the study for the reader so that they appreciate its importance. We first discuss how to structure the Introduction to provide the appropriate context for the reader. Next, we look at how to write a transparent and thorough Methods section to validate the study design and build confidence in the results. We then review strategies to ensure that readers understand the significance of the findings in the Results. We finally discuss how to interpret the importance of these findings and synthesizing them into the broader context of the field in the Discussion.

Logical manuscript structure (11:30 – 12:45; physical sciences and engineering)

This module highlights the importance of framing the study for the reader so that they appreciate its importance. We first discuss how to structure the Introduction to provide the appropriate context for the reader. Next, we look at how to write a transparent and thorough Methods section to validate the study design and build confidence in the results. We then review strategies to ensure that readers understand the significance and implications of the findings in the Results–Discussion section. We finally discuss how to emphasize the applicability of the study in the Conclusion.

Logical manuscript structure (13:45 – 15:00; social sciences)

This module highlights the importance of framing the study for the reader so that they appreciate its importance. We first discuss how to structure the Introduction and Literature Review to provide the appropriate context for the reader. Next, we look at how to write a transparent and thorough Methods section to validate the study design and build confidence in the results. We

then review strategies to ensure that readers understand the significance of both quantitative and qualitative findings in the Results. We finally discuss how to interpret the importance of these findings and synthesizing them into the broader context of the field in the Discussion.

Title and abstract activity (15:30 – 17:00, physical sciences & engineering)

In small groups of 5, participants will first write an abstract for their research based on the presented content on Monday and provided template in the workbook. They will then share with their groups to get feedback. The participants will then write a title for their research and also share with their groups for input. The trainer will be walking around to answer questions and give advice during the activity as well.

Friday, November 7

Harnessing generative AI in academic writing (09:30 – 11:15; all subjects)

Generative AI is widespread in the academic community, but it is essential to use it responsibly and effectively to maximize its benefits. This module begins with an overview of recent developments in generative AI models along with limitations and biases we should be aware of. Finally, we share how researchers can use AI within academic writing along with advanced prompt engineering techniques to produce desired academic content outputs.

Break (11:15 – 11:30)

Preparing impactful figures (11:30 – 12:45; all subjects)

This module discusses the challenges in presenting complex data to readers and the importance of figures and tables to overcome this. We first review the various graphs that researchers can use to present trends amongst numerical data, and when each type of graph should be used. We then discuss how to prepare a table that can be efficiently read to understand the researcher's key message. Finally, we highlight guidelines that should be used when preparing images for publication that improve clarity and align with editorial policies.

Professional presentation skills (14:00 – 15:15; all subjects)

This module introduces strategies to give compelling oral presentations with confidence to establish trust. We first review the importance of practice and ways to do so more effectively. We then highlight non-verbal strategies to establish confidence before reviewing verbal strategies to improve the clarity in the information being delivered. We will then invite volunteers to present their research to the group in 3 minutes, followed by feedback from the trainer on their strengths and areas for improvement.

Title and abstract activity (15:30 – 17:00, life sciences & medicine)

In small groups of 5, participants will first write an abstract for their research based on the presented content on Monday and provided template in the workbook. They will then share with their groups to get feedback. The participants will then write a title for their research and also share with their groups for input. The trainer will be walking around to answer questions and give advice during the activity as well.

nature masterclasses

Guide for Participants at our Expert Trainer-led Nature Masterclasses Workshop

Thank you for registering to attend our Nature Masterclasses workshop at Seoul National University with our expert trainer, Dr Jeffrey Robens. We hope that you will enjoy the experience.

Below are a few housekeeping points which will help you to get the most out of your experience.

1. The sessions for **all participants** will run from 09:30 – 12:15 on Monday (Nov 3) and 09:30 – 15:15 on Friday (Nov 7). The sessions specifically for **life sciences and medicine** will run from 10:00 – 11:15 on Wednesday (Nov 5) and 15:30 – 17:00 on Friday (Nov 7). The sessions specifically for **physical sciences and engineering** will run from 11:30 – 12:45 and 15:30 – 17:00 on Wednesday (Nov 5). The sessions specifically for **social sciences** will run from 13:45 – 15:00 on Wednesday (Nov 5). The 15:30 – 17:00 sessions on Wednesday and Friday will be **group activities** allowing participants to write their abstracts and titles for their papers.
2. There will be 15-minute breaks in the mornings of Monday and Friday. We encourage you to use the breaks as a chance to talk to the trainer on an informal one-to-one basis.
3. To ensure that the trainer has time to cover the course material in the larger sessions for all participants, we will not be able to take questions during the modules. However, there will be plenty of opportunity to ask the trainer questions in the Q&A sessions following each module as well as during the breaks. The group activity sessions, however, will be more interactive with chances to ask questions throughout the session.
4. You do not need to take photos of the training slides as copies will be available immediately after the workshop via an online link and QR code.
5. We will provide a Nature Masterclasses workbook that contains the trainer's biography and contact information, key points from the workshop, interactive activities, free online resources, and several empty pages for note taking.
6. For the group activity sessions, we recommend bringing your laptop so that you can work on the activities with your groups.
7. The Nature Masterclasses materials are solely for the use of each participant's personal training. Please do not post the slides in a public place or online. Nature Masterclasses materials may not be used by any other person other than the participant.

We look forward to meeting you at the Nature Masterclasses workshop!
The Nature Masterclasses team