



香港大學

THE UNIVERSITY OF HONG KONG

The semester and year that the course is expected to be offered as a CI-Badged Course

Communication-intensive Course (CI Course) Certification Form

Course Code	Course Title	Course Coordinator	Expected Offering Year & Semester	Badging Type	
CCST9009	Living with Stem Cells	Prof. Danny Chan	Sem 1 2023-24	☒	New Course
				☐	Renewal

Communication 'Literacies' - In which literacy areas do students on the course develop and demonstrate communication-related *knowledge* (understanding of communication as it relates to human interaction), *skills* (skills in communicating effectively with others, using language and/or other means) and *attributes* (the attributes of effective communicators)? Please select at least two and put a tick (✓) in the boxes.

✓	Oral literacy: The ability to communicate through spoken texts that are constructed with the appropriate content, structure and language features, fit for their intended academic, social or professional purpose and audience.
	Written literacy: The ability to communicate through written texts that are constructed with the appropriate content, structure and language features, fit for their intended academic, social or professional purpose and audience.
✓	Visual literacy: The ability to communicate in appropriate visual modes (e.g., diagrams, graphs, charts) and/or visual media (e.g., posters, 3-D printed objects, stage performances).
	Digital literacy: The ability to use appropriate information and communication technologies to find, evaluate, create, and communicate information in speech and writing (e.g., wikis, websites, virtual reality projects).

Ensure that each selected literacy is explicitly taught and assessed in the course.

Course Learning Outcomes – Please list the course learning outcome(s) that relate explicitly to students' learning of communication-related knowledge, skills and attributes. The following are examples from four different courses:

Students will be able to...

Oral literacy: Apply the basic principle of solution-focused interviewing and counselling and demonstrate interviewing and counselling skills in authentic cases.

Written/visual literacy: Conduct an in-depth scientific literature review on a key regional geological issue and present the findings through visuals (e.g., graphs/charts) and an engaging, comprehensive online written format.

Oral/written literacy: Generate and refine designs into detailed engineering specifications and be able to effectively communicate and defend the project status and technical material in both oral and written forms.

Oral/written/digital literacy: Create design documents and present these through a variety of media, including but not limited to 'bibles' and other pertinent technical documents and present these through a variety of media.

Copy and paste from your course outline and modifying to clearly show communication literacies.

By the end of the course, students will be able to.

Oral/Visual literacy [CLO1]: Express the implications of stem cell technologies on individuals, families, societies and humankind through oral and visual formats.

Assessment component – Please list the communication-rich assessment task(s) that measure the communication-related course learning outcomes on the course. Please indicate what proportion of the course grade is allocated to performance on the assessment(s).

Cartoon Assignment (20%)

Students will form groups of 4 and collaborate to select a theme about "Living with Stem Cells" to produce a four-panel cartoon. This exercise allows students to learn teamwork, creativity, visual communication and presentation skills, research skills, and critical thinking.

Please only include the CIC related assessments. Indicate the percentage in brackets and include a brief description of each CIC related assessment.

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Podcast Assignment (30%)

Students will form groups of 6-8 and produce an audio recording of a role-play panel discussion on "Bone Marrow Stem Cell Transplantation in Hong Kong", integrating their knowledge obtained from lectures, mock press conference, and literature searches. They will communicate their understanding of the topic to the general public, creating a background for their role (e.g., patients in need of stem cell transplantation or stem cell research experts) to facilitate an 8–10-minute discussion. Students can learn to work collaboratively in a group, integrate knowledge from various sources, develop critical thinking and communicate effectively through this exercise.

Please refer to sample *CiC Syllabus Statements* to complete this section. After badging approval, this section will appear in your course syllabus and read by students.

What communication knowledge and skills will students learn in this course?

Throughout the course, students will learn how to deliver effective presentations using both oral and visual communication. They will understand how to use visual aids such as graphics, drawing, and video to convey ideas effectively. Additionally, through the cartoon assignment, students will learn to convey a storyline and communicate information creatively. The panel discussion will help students interact with their peers in a professional and respectful manner, helping to enhance their ability to articulate their ideas and opinions persuasively.

The answers to these questions will appear in the CiC Badge. The CiC Badge must be included in the course outline to inform students that they are taking a CiC Course.

How will students learn these? Describe (1) the teaching and learning activities in your course that teach the communication knowledge and skills, (2) practice activities in your course and (3) opportunities for formative feedback

The course will provide workshops on cartoon and podcast creation, enabling students to develop their visual and oral communication skills. Students will receive feedback from peers and teachers through an online platform, while CiC peer consultation sessions will be available in and out of class. These resources will give students the support they need to improve their work and succeed in their assignments, while enhancing their communication skills.

What does a good communicator look like in this course? – Please list the expected communication-related attributes you want your students to have after taking your course (e.g. confidence, openness to diverse perspectives and ways of learning, ability to respond to constructive criticism from peers and the teacher, developing interpersonal skills to collaborate with others to achieve a common goal, collaboration with peers, providing constructive feedback to peers, following the conventions of a genre, and having personal and academic integrity).

A good communicator in this course should effectively and accurately convey their ideas and information through oral and visual communication. They will be able to create compelling cartoons and podcasts that engage their audience and communicate complex information in an accessible way. Additionally, a good communicator will be a collaborative team player, able to work effectively with others and communicate clearly and respectfully within a team. Finally, they will be able to articulate their ideas persuasively and professionally in public speaking situations, such as during the panel discussion assignment. Overall, a good communicator in this course will possess a range of oral and visual communication skills, as well as interpersonal communication skills.

Please attach the following documents with this certification form (tick included items):

	Please tick below
Course Syllabus (track changes version)	✓
Course Schedule (please highlight the CIC components i.e. where and when in the course the students will acquire the specific knowledge, and develop the specific skills required of a good communicator)	✓
Assessment Tasks/Instructions and Rubrics	✓

Submit all documents to the CIC committee (cics@hku.hk).

1. **Academic Year:** 2023/24
2. **Course Code:** CCST9009
3. **Course Title:** Living with Stem Cells

4. **Course Description:**

Discoveries in biological and medical sciences in recent decades have transformed our life and society. The potential of stem cells to replace ‘new cells for old’ offers great hope for the treatment of many diseases, yet it is uncertain whether these cells will live up to the expectations of doctors and society at large. Some bioethicists have expressed concerns that society’s drive to find cures is obscuring our judgment and forcing some of us to step over moral boundaries.

This course will guide you through the scientific discoveries to allow you to appreciate how stem cells can be a therapeutic tool, both now and in the future. It will give you the opportunity to explore the relevant moral issues and bioethical framework for evaluating the benefits and dilemmas of stem cell-based regenerative medicine. It will also allow you to examine Hong Kong’s current stem cell policies and regulations in relation to other countries, providing you with both the scientific and ethical perspectives necessary to inform future stem cell policy making.

The topics will be addressed through scientific, literary and popular media in a combination of lectures, laboratory classes, tutorials and case studies. There will be many opportunities for interactive group work and sharing of ideas during the classes.

5. **Assessment Ratio:** 100% coursework

6. **Offer Semester:** First Semester

Day of Teaching: Wednesdays

7. **Offering Department(s):**

School of Biomedical Sciences - 100%

8. **Course Co-ordinator:**

Professor D. Chan (Staff Number: 32370)

School of Biomedical Sciences, Li Ka Shing Faculty of Medicine

Tel: 3917 9482 Email: chand@hku.hk

9. **Teacher(s):**

Professor D. Chan (Staff Number: 32370)

School of Biomedical Sciences, Li Ka Shing Faculty of Medicine

Tel: 3917 9482 Email: chand@hku.hk

(Teaching Load: 30%)

Dr W.C.W. Chan (Staff Number: 38012)

School of Biomedical Sciences, Li Ka Shing Faculty of Medicine

Tel: 3917 2818 Email: cwilson@hku.hk

(Teaching Load: 50%)

Dr M.C.H. Cheung (Staff Number: 57701)

School of Biomedical Sciences, Li Ka Shing Faculty of Medicine

Tel: 3917 6867 Email: mcheung9@hku.hk

(Teaching Load: 20%)

10. **Study Load**

Activities	Number of hours
Lectures	24
Tutorials	4
Laboratory	6
Reading / Self-study / Movie viewing	40
Assessment: Group tasks	20
Assessment: Individual tasks	25
Total:	121

11. **Course Learning Outcomes and Alignment with Common Core Programme Learning Outcomes**

12.

Course Learning Outcomes – On completing the course, students will be able to:		Alignment with Common Core Programme Learning Outcome(s)
1.	Express the implications of stem cell technologies on individuals, families, societies and humankind through oral and visual formats	CC PLO(s): 1, 2, 3, 4
2.	State the principles of biomedical ethics and apply ethical and moral understanding to evaluate the benefits and dilemmas of stem cell technologies.	CiC related CLOs, these must match with CiC Certification form P.1
3.	Analyze and evaluate case scenarios for informed decision making and recommend strategies for stem cell research policy making.	
4.	Explain the positions taken by different individuals, organizations and cultures with respect to stem cell technologies.	CC PLO(s): 1, 2, 3, 4
5.	Define the basic characteristics of different types of stem cells and discuss their applications in medicine.	CC PLO(s): 1, 3, 4

13. **Assessment Tasks**

Assessment Ratio: 100 % Coursework and 0 % Examination
(Group assessment 50% Individual assessment 50%)

Assessment Method	Details of Assignment	Weighting	Alignment with Course Learning Outcome(s)
Individual continuous assessment	Performance in tutorial group activities (discussions, debates, presentations) and in-class case analysis	30	CLOs: 1, 2, 3, 4, 5
Practical sessions	Performance in laboratory sessions and write-ups*	20	CLOs: 1, 5
Group projects	Stem Cell Cartoon*	20	CLOs: 1, 2, 5
	Stem Cell Podcast*	30	CLOs: 1, 2, 5

*Individual performance will be assessed in these group tasks – 10 (out of 20) in practical; 5 (out of 20) in cartoon assignment; 5 (out of 30) in podcast assignment.

14. **Course Content and Topics**

The biology of stem cells and regenerative medicine.

Biomedical Ethics

Philosophical, Religious and Legal aspects of Stem Cell Technology

Medicine, Society & Politics

Stem Cells & the Media

15. **Required Reading**

- Mummery, C. L., van de Stolpe, A., Roelen, B., & Clevers, H. (2021). *What are stem cells?* In C. L. Mummery, A. van de Stolpe, B. Roelen, & H. Clevers (Eds.), *Stem Cells* (Third Edition) (pp. 51-65). Academic Press. ISBN 9780128203378. <https://doi.org/10.1016/B978-0-12-820337-8.00003-4>
- Mummery, C. L., van de Stolpe, A., Roelen, B., & Clevers, H. (2021). *Of mice and men: the history of embryonic stem cells.* In C. L. Mummery, A. van de Stolpe, B. Roelen, & H. Clevers (Eds.), *Stem Cells* (Third Edition) (pp. 67-94). Academic Press. ISBN 9780128203378. <https://doi.org/10.1016/B978-0-12-820337-8.00004-6>
- Mummery, C. L., van de Stolpe, A., Roelen, B., & Clevers, H. (2021). *Cloning: history and current applications.* In C. L. Mummery, A. van de Stolpe, B. Roelen, & H. Clevers (Eds.), *Stem Cells* (Third Edition) (pp. 131-158). Academic Press. ISBN 9780128203378. <https://doi.org/10.1016/B978-0-12-820337-8.00006-X>
- International Society for Stem Cell Research (ISSCR). (2021). ISSCR Guidelines for Stem Cell Research and Clinical Translation: The 2021 update. *Stem Cell Reports*, 16(6), 1390-1403. <https://doi.org/10.1016/j.stemcr.2021.05.012>

16. **Additional Course Information**

(e.g. course policy, penalty for late assignments, e.t.c.)

Nil

17. **Course Level Grade Descriptors**

A – Excellent achievement

Comprehensive and deep understanding of stem cell biology and its applications in medicine, as well as the ethical implications of the technology in society. Excellent ability to identify and suggest informed solutions to various controversial issues in stem cell research. Clear evidence of ability to articulate viewpoints of different stakeholders both locally and globally. Excellent planning, organization and presentation of course work.

B – High achievement

Comprehensive understanding of stem cell biology and its applications in medicine, as well as the ethical implications of the technology in society. Able to identify and suggest solutions to various controversial issues in stem cell research. Evidence of ability to articulate the viewpoints of different stakeholders locally and globally. Proficient at planning, organizing and presenting course work.

C – Satisfactory achievement

Basic understanding of stem cell biology, its applications and the implications to society. Sometimes able to identify and suggest some solutions relating to a few key controversial issues in stem cell research. Some ability to articulate the viewpoints of a few different stakeholders locally and globally. Satisfactory planning, organization and presentation of course work.

D – Limited achievement

Limited understanding of stem cell biology, its applications and the implications to society. Limited ability to identify and suggest solutions related to a few controversial issues in stem cell research. Some awareness of the viewpoints of a few stakeholders locally or globally. Poor planning, organization and presentation of course work.

E – Failed to achieve learning outcomes

Superficial understanding of stem cell biology, its applications and the implications to society. Unable to identify and suggest solutions related to a controversial issue in stem cell research. Unable to articulate the different viewpoints of stakeholders either locally or globally. Insufficient effort in planning, organization and presentation of course work.



Tentative schedule and outline CCST9009 Living with Stem Cells (2023-24 Sem 1)

11 Lectures (all Face-2-Face):

Time: Wed 14:30 - 16:20

Venue: Pending

Clear discription on
how CiC
Components will be
taught

Lecture (WED)				Group Assignment	CiC component	Tutorials (A3a)		Practical and Press Conference (SAT)	
Date		Topic				Date	Tutorials	Date	Practical/Press Conference
06/09/2023	1	What the 'cell' is the difference?	DC, WC						
13/09/2023	2	Looking back at what we know now	DC	Briefing - Cartoon (A1)	Workshop on Cartoon Creation				
20/09/2023	3	What will I be when I grow up?	WC			TBC	A - Stem cell in the media	25/9 (TBC)	Lab Practical (A4)
27/09/2023	4	The Cloning Revolution: Science Fiction or Reality?	WC		Cartoon draft submission and peer feedback (online)				
04/10/2023	5	Induce the new you	MC	A1 due on 3Oct		TBC	B – Current stem cells techniques	7/10 (TBC)	Lab Practical (A4)
11/10/2023	6	Inside the blood factory	MC	Briefing - Podcast (A2)					
18/10/2023	Reading week								
25/10/2023	7	Edit, Copy, paste a new you	BY		Podcast workshop before Press conf.?(30min)	TBC	C - Debate on genome editing	28/10 (TBC, 4/11 or 11/11)	Press Conference (for A2): HSC Transplantation
01/11/2023	8	Stem cell: hype, hope and reality	BY						
08/11/2023		Podcast consultation session?	WC, CiC	A2 Proposal submission	Podcast draft submission and peer feedback (online)			Teachers: DC – Danny Chan (SBMS), MC – Martin Cheung (SBMS), WC – Wilson Chan (SBMS), BY – Bonny Yuen (SBMS), VL – Victor Leung (O&T), CH – Calvin Ho (Law)	
15/11/2023	9	Discovering the Truth: Bioethics and Stem Cell Research	DC, CH			TBC	D - Ethics Committee		
22/11/2023	10	How to mend a broken heart?	VL						
29/11/2023	11	Stem cells in 2050/ Case study (A3b)	WC	A2 due on 28Nov					

Students learn and practice visual literacy in class

Students given opportunity to submit draft.

Students receive feedback on visual literacy in class



	SUN	MON	TUE	WED	THUR	FRI	SAT
SEP-23						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	[30]
OCT-23	1	[2]	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	[23]	24	25	26	27	28
	29	30	31				
NOV-23				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30		
DEC-23						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23

Holidays during teaching period (1Sep to 30Nov):

- 30/09/2023 (Sat): The day following Mid-Aut Festival
- 2/10/2023 (Mon): The day following National Day
- 23/10/2023 (Tue): Double Nine Festival
- 16-21/10/2023 (Mon-Sat): Reading Week

Common Core Course Add-Drop Period:

- ~~1/09/2022 – 15/09/2022 (16:00)~~

A1. Stem Cell Cartoon

- Cartoon assignment assessment rubrics (20%)**

Clear descriptions of expectations of performance.

	0	1	2	3	4	5
Stem Cell Topic Knowledge [4 marks]	No understanding or completely inaccurate information about stem cells, showing a lack of research or comprehension.	Limited understanding, with a few correct facts but several inaccuracies in the information presented, indicating minimal research or comprehension.	Basic understanding, with mostly accurate information but some minor inaccuracies or omissions, demonstrating a fair level of research and comprehension.	Good understanding, with accurate and relevant information, reflecting a solid grasp of the subject matter and thorough research.	Excellent understanding, demonstrating deep knowledge and insight into the stem cell topic, showcasing extensive research and a comprehensive understanding of the subject.	
Creativity and Visual Communication [4 marks]	No creativity or visual elements present in the cartoon, resulting in a lack of engagement or communication of ideas.	Limited creativity, with minimal use of visual elements, resulting in a somewhat dull or uninteresting presentation.	Moderate creativity, with some effective use of visual elements, demonstrating a reasonable attempt at engaging the audience and communicating ideas.	Good creativity, with visually appealing and engaging elements, showcasing a thoughtful and imaginative approach to visual communication.	Excellent creativity, with highly effective and innovative visual communication, resulting in a captivating and memorable presentation.	
Presentation and Storytelling [4 marks]	No clear presentation or storyline, making it difficult for the audience to follow or understand the message.	Limited presentation, with a weak or unclear storyline, resulting in a partially coherent message that may be difficult to follow.	Moderate presentation, with a somewhat engaging storyline, demonstrating an adequate attempt at conveying the message and maintaining audience interest.	Good presentation, with a clear and engaging storyline, effectively conveying the message and keeping the audience engaged throughout.	Excellent presentation, with a highly engaging and well-developed storyline, seamlessly communicating the message and maintaining audience interest from beginning to end.	
Teamwork and Collaboration [3 marks]	No evidence of teamwork or collaboration, indicating a lack of communication or cooperation among group members.	Limited teamwork, with some evidence of collaboration among group members, but with uneven contributions or occasional conflicts.	Good teamwork, with clear evidence of collaboration and shared responsibilities, resulting in a cohesive and balanced group effort.	Excellent teamwork, with strong collaboration and effective communication among group members, showcasing a harmonious and highly productive group dynamic.		
Individual Reflection on the Selected Topic [5 marks]	No reflection or irrelevant comments on the topic, indicating a lack of engagement or understanding of the subject matter.	Limited reflection, with minimal insight into the topic, demonstrating a shallow understanding of the topic's significance or relevance.	Moderate reflection, with some understanding of the topic's significance, showing a reasonable attempt to connect with the subject matter.	Good reflection, with a thoughtful understanding of the topic's relevance and implications, demonstrating a genuine interest in and engagement with the subject matter.	Very good reflection, with a deep understanding of the topic's importance and potential impact, showcasing a thorough analysis of the subject and its broader context.	Excellent reflection, showing deep analysis and critical thinking on the topic, indicating a strong understanding and ability to make meaningful connections and evaluations.

Clear assessment criteria. These skills must be taught explicitly in the course.

A2. Stem Cell Podcast (Role play panel discussion)**(i) Podcast workplan (5%)**

0	1	2	3	4	5
No submission, no evidence of planning or consideration of consultation session elements	Minimal planning, with limited attention to the elements of a consultation session, demonstrating a lack of preparation or understanding	Adequate planning, with some attention to the elements of a consultation session, indicating a basic grasp of the requirements and a reasonable attempt at preparation	Solid planning, addressing most components of a consultation session, demonstrating a sound grasp of the requirements and conscientious preparation	Comprehensive planning, thoroughly covering all components of a consultation session, showcasing a deep understanding of the requirements and extensive groundwork	Outstanding planning, covering all consultation components, demonstrating exceptional understanding and attention to details, leading to an engaging and effective session.

(ii) Podcast assignment (20%)

	0	1	2	3	4
Accuracy and Comprehension of the Topic [4 marks]	The discussion is filled with factual errors and inconsistencies, demonstrating no understanding of the topic.	The discussion exhibits a narrow and superficial understanding of the topic, with some inaccuracies and gaps in knowledge.	The discussion exhibits a fair understanding of the topic, with minor inaccuracies and inconsistencies, but generally accurate information.	The discussion exhibits a good grasp of the topic, with accurately selected information and only minimal gaps in knowledge.	The discussion exhibits an excellent and comprehensive understanding of the topic, free from factual errors and inconsistencies.
Critical thinking and analysis [4 marks]	The discussion fails to exhibit any critical thinking or analysis of the topic.	The discussion reveals elementary critical thinking, but the analysis remains shallow or limited.	The discussion conveys adequate critical thinking, with some analysis of the topic, but there's room for improvement.	The discussion presents proficient critical thinking, accompanied by a thoughtful analysis of the topic.	The discussion showcases exceptional critical thinking, with profound and insightful analysis of the topic.
Discussion structure and organization [4 marks]	The discussion is chaotic, lacking any discernible structure or flow.	The discussion exhibits a semblance of organization, but coherence and flow of ideas are lacking.	The discussion is relatively well-organized, with a discernible structure and mostly coherent flow of ideas.	The discussion is neatly organized, featuring a logical structure and coherent flow of ideas.	The discussion is impeccably organized, boasting an exceptional structure and fluid flow of ideas.
Collaboration and Communication [4 marks]	The group displays no cohesion, and communication among members is virtually nonexistent.	The group attempts to work together, but communication is minimal and largely ineffective.	The group collaborates at a satisfactory level, with generally effective communication, but with room for improvement.	The group demonstrates strong teamwork, effectively communicating and collaborating among members.	The group excels in collaboration and communication, functioning seamlessly as a highly cohesive team.
Presentation clarity and quality [4 marks]	The presentation is indecipherable, marred by poor audio quality and unclear speech.	The presentation is somewhat intelligible, but issues with audio quality or clarity of speech persist.	The presentation is reasonably clear, featuring decent audio quality and largely comprehensible speech.	The presentation is distinctly clear, marked by high-quality audio and effortlessly understandable speech.	The presentation is outstandingly clear, with superb audio quality and highly effective communication.

(iii) Peer evaluation (5%)

Clear assessment criteria. These skills must be taught explicitly in the course.

Clear descriptions of expectations of performance.