

AGNG 110: Growing Older in a Technological World

Instructor: Dr. Peng Chu Time/Day: 100% Online: Asynchronous Office Hours: Phone/Blackboard virtual meetings Appointments available if requested by email E-mail: Pengchu1@umbc.edu

Email is the best way to contact me (I return messages within 1 business day).

Course Description

Technology increasingly impacts our world. Technology enhances our lives throughout our life course, including how we experience aging and later life. Various technologies are increasingly implemented to support the health, well-being, and independence of older adults. Business and entrepreneurial opportunities are opened up for individuals and industries.

This course will introduce students to a life course perspective on aging in a technological world. Supporting technology, as a social, cultural and economic phenomenon, shapes our lives including the lives of those entering their later years. Technology in many shapes and forms functions as a force to support adaptation and resilience and to improve and enhance quality of life for aging individuals and communities. Real-world devices and applications are utilized to cover topics such as social media and community building, smart home, wearable devices, telehealth, gaming, assistive technology, robots, and technology support for drivers.

Course objectives

Upon completion of the course the learner will be able to:

- 1. Describe technologies that are widely used and critical to aging and older adults health, well-being, and independence
- 2. Evaluate various real-world products and applications in the context of an aging population
- 3. Identify the opportunities for and the barriers to the use of technology in an aging population
- 4. Engage in discussion about hands-on experiences in technologies and encourage design ideas for older adults aging in community

Course Format

This course is 100% online and is asynchronous.

Required Texts

Please note: This book will be available on Course Reserves within the course Mann, W.C. (2005). Smart Technology for Aging, Disability, and Independence: The State of the Science. John Wiley & Sons, Inc.

Print ISBN:9780471696940 |Online ISBN:9780471743941 |DOI:10.1002/0471743941

All additional required readings and learning resources will be posted on Blackboard under each week's Module or via Library Reserves.

Course Expectations

Below is a list of things expected from students:

1. Regularly log into the course in Blackboard. I would recommend that you log in several times a week. Assignments will open each week and will be due by the next week. Please check carefully for due dates/times as late submissions will not be accepted.

2. There will be materials and assignments that students are expected to review and complete every single week.

3. Expect to spend at least **9 hours** each week completing the modules and assignments for our class. This is equivalent to what is expected in a spring/fall semester face to face class (i.e., 3 hours in class per week + 6 hours outside of class per week = 9 hours per week total).

4. You should review ALL of the resources for a given week. These resources inform both your assignments and your exams.

5. You should take notes as you review the resources for a given week, just as you would take notes during a lecture. While the exams are open note/book they are timed. This means you will not have time to look up the answer to every single test question.

6. Complete all of the assignments each week. Make sure your assignments are submitted by 11:55 p.m. E.D.T. on the day that they are due. Please see the late work policy outlined below. No late assignments will be accepted for grading without a documented excused absence.

7. All assignments are designed to reflect comprehension and application of the assigned learning activities. All responses should demonstrate a clear knowledge of the main concepts presented in the week's assigned materials and an ability to analyze and apply these concepts to the prompt.

Things you can expect from me:

- 1. I will open units at least 3 days before any graded work is due (all modules will open on a weekly basis).
- 2. I will have weekly assignments graded within 7 business days and exams/final projects within a maximum of 14 business days.
- 3. I will respond to emails and forum questions within 1 business day.

- 4. Regular and consistent feedback which will include:
 - Response to questions about the course or assignments in the Course Questions Forum, or by email. Please see anticipated response time above.
 - Feedback on assignments utilizing assignment rubrics, specific comments, or detailed explanation.

What to do if you have questions about the course

There are two ways to contact me if you have questions concerning this course.

- If you have a general question (one that does not involve sharing personal information about yourself) that other students may also be asking, you should post your question to the course questions forum. I will answer via this forum, and you can also answer each other's questions as appropriate. Your question and our answer will be sent to everyone in the class. Some examples of the types of question you might post here are questions about assignments, letting us know an assignment or resource is not available, due dates, etc.
- If you have a personal question that involves sharing personal information you should email your instructor directly at pengchu1@umbc.edu I will respond to your question via email.
- 3. If your problem is related to Blackboard, you must <u>submit an RT ticket</u>, which will be addressed by the Technology Support Center (TSC) or instructional technology staff with Blackboard experience. You can access the RT request directly via <u>https://doit.umbc.edu/request-tracker-rt/doit-myumbc-blackboard/</u> or via the link available in the eLearning Resource section of the Start Here module or via the Request Help (RT) content area on our course homepage. Please be as detailed and descriptive as possible. Include your CourseID, screen captures or any error messages you receive.

Relevant Course Policies

Absences

While this is an asynchronous, online class it is important that you are 'present' i.e. participate regularly in our class and complete the assignments/activities each week of this semester. As with face to face classes, circumstances may occur that cause a student to be absent (i.e. unable to complete the assignments/activities) from class. For individual or very short-term absences, students should contact their instructors as soon as possible to determine a plan of action. In the event of an extended absence, the student should consult with their course instructor and academic advisor to explore options such as an incomplete grade or a course/term withdrawal. Students may refer to

<u>https://registrar.umbc.edu/services/registration/information-about-withdrawal-and-absence/</u> for further information

Incomplete Grade

Students with extended absences near the end of a semester may consider requesting an incomplete grade from the course instructor under exceptional circumstances for course work that is qualitatively satisfactory but, for reasons beyond the student's control, cannot be completed by the end of the semester.

<u>Students may refer to https://registrar.umbc.edu/services/registration/information-about-withdrawal-and-absence/</u> for further information

Student Disability Services (SDS)

UMBC is committed to eliminating discriminatory obstacles that may disadvantage students based on disability. Services for students with disabilities are provided for all students qualified under the Americans with Disabilities Act (ADA) of 1990, the ADAAA of 2009, and Section 504 of the Rehabilitation Act who request and are eligible for accommodations. The Office of Student Disability Services (SDS) is the UMBC department designated to coordinate accommodations that would allow students to have equal access and inclusion in all courses, programs, and activities at the University.

If you have a documented disability and need to request academic accommodations for access to your courses, please refer to the SDS website at <u>sds.umbc.edu</u> for registration information and to begin the process, or alternatively you may visit the SDS office in the Math/Psychology Building, Room 212. For questions or concerns, you may contact us through email at <u>disAbility@umbc.edu</u> or phone (410) 455-2459.

If you require accommodations for this class, make an appointment to meet with me to discuss your SDS-approved accommodations.

Academic Integrity

Academic integrity is an important value at UMBC. By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal.

- Plagiarism is intentionally or knowingly presenting the work of another as one's own (i.e., without proper acknowledgement of the source). The sole exception to the requirement of acknowledging sources is when the ideas, information, etc., are common knowledge.
- Typical Examples: Submitting as one's own work of a "ghost writer" or commercial writing service; directly quoting from a source without citation; cutting and pasting information directly from websites; paraphrasing or summarizing another's work without acknowledging the source; using facts, figures, graphs, charts or information without acknowledgement of the source. Plagiarism may occur orally and in writing. It may involve computer programs and files, research designs, distinctive figures of speech, ideas and images, or generally any "information" which belongs to another.

Title IX Statement: Disclosures of Sexual Misconduct and Child Abuse or Neglect

Any student who has experienced sexual harassment or assault, relationship violence, and/or stalking is encouraged to seek support and resources. There are a number of resources available to you.

With that said, as an instructor, I am considered a Responsible Employee, as per UMBC's Interim Policy on Prohibited Sexual Misconduct, Interpersonal Violence, and Other Related Misconduct. This means that while I am here to listen and support you, I am required to report disclosures of sexual assault, domestic violence, relationship violence, stalking, and/or gender-based harassment to the University's Title IX Coordinator. The purpose of these requirements is for the University to inform you of options, supports, and resources.

You can utilize support and resources even if you do not want to take any further action. You will not be forced to file a police report, but please be aware, depending on the nature of the offense, the University may take action.

If you need to speak with someone in confidence about an incident, UMBC has the following Confidential Resources available to support you:

The Counseling Center: 410-455-2742 (M-F 8:30 a.m. — 5 p.m.)

University Health Services: 410-455-2542 (M-F 8:30 a.m. — 5 p.m.)

For after-hours emergency consultation, call the police at 410-455-5555

Other on-campus supports and resources:

The Women's Center (available to students of all genders): 410-455-2714 (M-Th 9:30 a.m. — 6 p.m., F 9:30 a.m. — 4 p.m.)

Title IX Coordinator: 410-455-1606 (9 a.m. — 5 p.m.)

Child Abuse and Neglect

Please note that Maryland law requires that I report all disclosures or suspicions of child abuse or neglect to the Department of Social Service and/or the police.

Syllabus revision policy

The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes will be by announcement in class, or by written or email notice, or by changes to this syllabus posted on the course website.

Learner Support

Detailed Student Support Services are outlined in the Start Here content area of our course on the Start Here with eLearning Resources page.

Summary of Assignments

Please see Blackboard for specific due dates/times.

- All assignments will be submitted by Blackboard. Please make sure you are familiar with the correct procedures for doing this. Incorrectly formatted, corrupt, or blank documents will be considered as non-submissions and a 0 awarded for the assignment.
- You should be sure to save copies of all assignments and papers for this course, as the risk of technological issues is high in a 100% online course.
- 1. 9 weekly learning module assignments: For this course, there will be weekly short assignments (e.g. discussions and respond to/comment on others' posting). Each week, you will log onto the Blackboard system and find out what that week's materials and assignments are. The material will be posted at least 3 days before assignments are due, and for some assignments you may submit early if you wish; for other assignments those that require interacting online with your classmates the work must be done on the assigned day (e.g. respond to/comment on others' posting). All assignments are due before 11:55 p.m. EDT on their due date. Specific details about the assignment are posted each week. These assignments will be graded and the scores posted on Blackboard within 7 business days.
- 2. 3 short papers. The material and instruction will be posted at least 6 days before assignments are due, you may submit early if you wish.
- 3. A two-hour final exam consisting of two groups of short answer questions will be given.

No extra credit is offered for this course.

Grading Scheme

1. Nine weekly learning module assignments (5% each = 45% total course grade)

For each learning module there will be a corresponding weekly discussion. Discussions should pose thoughtful answers and/or insightful questions/comments that make it clear the student understands the ideas and concepts in the assigned learning module. Simply posting "I agree" or another similar comment without providing a clear, thoughtful rationale for why you may agree is not sufficient. If you reference outside information please make sure to appropriately cite, otherwise this will be flagged as plagiarism.

Please make sure to consult the discussion board with the discussion prompt, grading rubric and associated point distribution.

2. Three short papers (10% each = 30% total course grade)

Papers pertaining to the topics of aging and technology will be given throughout the semester. More information on BlackBoard.

3. Final exam (25% total course grade)

A two-hour final exam consisting of two groups of short answer questions will be given. More information on BlackBoard.

Grading Scale

Grades are determined by the weighted total of all assignments and applying the following scale:

A (90-100), B (80-89.9), C (70-79.9), D (60-69.9), F (<60)

Late Work Policy

Assignments will not be graded if submitted late – a 0 will be assigned for that assignment with the exception of a documented, excused absence. Excused, documented, verified absences: In cases of late work due to absences that would meet the criteria of absence accommodations please request Absence Verification. It is important that you notify Dr. Chu if you have a documented absence and will not be able to complete the assignments on time prior to the due date for that assignment. If you do not notify Dr. Chu as soon as possible after the missed submission, no accommodations will be made for absence i.e. a 0 will be entered for that assignment.

Discussion Board Grading Rubric

Number of Points	Explanation
10 point	 Forum posting demonstrates: 1. Close reading/viewing of the assigned material with inclusion of all important points 2. Very good critical thinking 3. Very good application of ideas in the readings to questions and/or case studies posed in the forum.
9 pt	 Forum posting demonstrates: 1. Close reading/viewing of the assigned material with inclusion of most important points 2. Very good critical thinking 3. Very good application of ideas in the readings to questions and/or case studies posed in the forum.
8.5 pt	Forum posting demonstrates: 1. Close reading/viewing of the material and includes some important points 2. Some critical thinking and some appreciation of ideas in the readings 3. Some application of ideas in the readings to questions
7.5 pt	 Forum posting demonstrates: 1. Some reading/viewing of the material but does not adequately address important points. 2. Lack of critical thinking OR 3. Lack of application of ideas in the readings to questions and/or case studies posed in the forum.
5.0 pt	 Forum posting demonstrates: 1. Lack of close reading/viewing of the material, does not adequately address important points, AND 2. Lack of critical thinking related to questions and/or case studies posed in the forum OR 3. Lack of application of ideas related to questions and/or case studies posed in the forum
2.5 pt	 Forum posting demonstrates: 1. Lack of close reading/viewing of material with significant dearth of information presented AND 2. Lack of critical thinking related to questions and/or case studies posed in the forum AND 3. Lack of application of ideas related to questions and/or case studies posed in the forum

* Students must also post a thoughtful response/comment to another student's post in order to receive points above

Short Paper Rubric

	Excellent	Good	Satisfactory	Poor
Length	Two pages	Exceeds or does not meet criteria by 1/2 page or less.	Exceeds or does not meet criteria by 1 page or less.	Exceeds or does not meet criteria by more than 1 page.
Format	Single spaced, 12pt appropriate font. Font, spacing, and APA format are correct.	Font and spacing, font and APA, or spacing and APA are correct.	Font, spacing, or APA format is correct.	Font, spacing, and APA format are incorrect.
Grammar	There are 3 or less grammatical errors.	There are 3-6 grammatical errors.	There are 6-9 grammatical errors.	There are 10 or more grammatical errors.
References	Information is cited correctly in APA format.	Information is cited but has some errors.	Information is cited, but has many errors.	Information is not cited or is cited incorrectly.
Introduction	The topic is introduced, and groundwork is laid as to the direction of the article.	Readers are aware of the overall problem, challenge, or topic of the article	Readers are unclear as to the overall problem, challenge, or topic of the article	Neither implicit nor explicit reference is made to the topic or purpose of the article.
Theme	Well organized, demonstrates logical sequencing and structure.	Well organized but demonstrates illogical sequencing or structure.	Weakly organized with no logical sequencing or structure.	No organization, sequencing, or structure.
	The summary goes from general ideas to specific conclusions. Transitions tie	The summary goes from general ideas to specific conclusions. Transitions tie	There is a basic flow from one section to the next, but not all sections or	The summary appears to have no direction, with subtopics appearing disjointed.
Body: Flow of the review	sections together, as well as adjacent paragraphs. Sources are well-integrated and not simply described in succession.	sections together, as well as adjacent paragraphs. Sources are fairly-integrated and not simply described in succession.	paragraphs follow in a natural or logical order. Sources are not integrated and simply described in succession.	Sources are not integrated and simply described in succession.
Conclusions	Detailed conclusions are reached from the evidence offered. The author was able to make succinct and precise conclusions based on the review. Insights into the problem are appropriate.	Conclusions are reached from the evidence offered.	There is some indication of conclusions from the evidence offered. The author provides concluding remarks that show an analysis and synthesis of ideas occurred.	There is no indication the author tried to synthesize the information or make a conclusion based on the literature under review. No conclusions are made from the evidence offered.

Module	Activity
Course Introductions	Course introduction
Week 1	
Module 1_Social	Weekly learning module assignment 1
Media and Aging Communities	Reading list:
Week 1 and 2	1. Social Media vs Social Networking (Cohn, M. https://www.compukol.com/social- media-vs-social-networking/)
	2. Older Adults and Social Media (Madden, M. HTTPS://WWW.PEWRESEARCH.ORG/INTERNET/2010/08/27/OLDER-ADULTS-AND- SOCIAL-MEDIA/)
	3. Videoconferencing and social engagement for older adults (Beringer R., Sixsmith A. (2013) Videoconferencing and Social Engagement for Older Adults. In: Sixsmith A., Gutman G. (eds) Technologies for Active Aging. International Perspectives on Aging, vol 9. Chapter 11. Springer, Boston, MA. https://doi.org/10.1007/978-1-4419-8348-0_11)
Module 2_Smart	Weekly learning module assignment 2
Home and Home Automation	Reading list:
Week 3	1. Home Automation and Smart Homes to Support Independence (Mann, W. (2005). Smart Technology for Aging, Disability, and Independence. Chapter 2)
	 Smart Home or Building (Rouse, M. https://internetofthingsagenda.techtarget.com/definition/smart-home-or-building)
	3. Smart Homes For The Elderly (Ahmed, A. https://www.smarthome.com/blogs/tips-tricks/smart-homes-for-the-elderly)
Module 3_Wearable	Weekly learning module assignment 3
Technology	Reading list:
Week 4	1. What is wearable tech (Smith, C. https://www.wareable.com/wearable- tech/what-is-wearable-tech-753)
	2. 6 Forms of Wearable Technology (42Gears Team. https://www.42gears.com/blog/6-wearable-technologies-you-must-know-right- now/)
	3. How Wearable Technology is Improving The Life of Senior Citizens (Holder, M. https://thetouchpointsolution.com/blogs/touchpoints-blog/how-wearable-technology-is-improving-the-life-of-senior-citizens)
	4. Two interesting reading about the use of wearable activity trackers among older adults (Eysenbach, G. (2019). The Use of Wearable Activity Trackers Among Older

Schedule of Assignments

Module	Activity
	Adults: Focus Group Study of Tracker Perceptions, Motivators, and Barriers in the Maintenance Stage of Behavior Change. Excerpt.
	Lin Li, Wei Peng, Anastasia Kononova, Marie Bowen, Shelia R. Cotten. (2019). Factors Associated with Older Adults' Long-Term Use of Wearable Activity Trackers. Excerpt.)
Short paper	Short paper 1
1_Technology and Discussion	Reading list:
Week 5	 Smart Technology for Aging, Disability, and Independence. Aging Disability and Independence (Mann, Chapter 1)
Module 4_Social	Weekly learning module assignment 4
Connection Week 6	Reading list:
Week o	 The Future of Social Connection, Loneliness, and Technology (Gloria, K. https://www.aspeninstitute.org/blog-posts/future-of-loneliness-social- connection-technology/)
	 How Cloud Technology Unites People Separated by COVID-19 (Guttman, C. https://www.nutanix.com/theforecastbynutanix/technology/how-technology- helps-connect-people-reduce-social-isolation)
	 What Are the Effects of Technology on Human Interaction (Wardynski, D.J. https://www.brainspire.com/blog/what-are-the-effects-of-technology-on- human-interaction)
	 Elderly Shopping Habits Are Older Adults Online Shopping (Griswold Homecare. https://www.griswoldhomecare.com/blog/2020/may/elderly-shopping-habits- are-older-adults-online-/)
Module 5_Telehealth	Weekly learning module assignment 5
and Remote Care Technologies	Reading list:
Week 7	 TeleMedicine (Wootton, R. (1996). Telemedicine: a cautious welcome. Information In Practice. BMJ Volume 313: 1375-7)
	 What Is Telehealth_What Is Remote Patient Monitoring_How Are They Different (Care Innovations. https://news.careinnovations.com/blog/what-is-telehealth- what-is-remote-patient-monitoring-how-are-they-different)
	3. TeleHealth (Mann, Chapter 5)
Short paper 2_ATs Interview	Short paper 2
Week 8	

Module	Activity
Module 6_Gaming in	Weekly learning module assignment 6
Aging Communities	Reading list:
Week 9	 Seniors and Video Games_Gaming Isn't Just for Millenials (Stringfellow, A. https://www.seniorlink.com/blog/seniors-and-video-games-gaming-isnt-just-for- millenials)
	 Technology for Seniors_The Benefits of Video Games & VR (The Goodman Group. https://blog.thegoodmangroup.com/best-video-games-for-seniors)
	3. 10 best video games for people over 55 (Schuck, N. https://www.komando.com/tech-tips/best-games-for-people-over-55/565893/)
	 Exploring the Pros and Cons of Video Gaming (Bernstein, R. https://online.concordia.edu/computer-science/pros-and-cons-of-video-gaming/)
Module 7_Assistive	Weekly learning module assignment 7
Technology	Reading list:
Week 10	1. Other Devices and High-Technology Solutions (Mann, W. Chapter 4)
	2. Basic Assistive Technology (Mann, W. Chapter 6)
Module 8_Robots and	Weekly learning module assignment 8
Care	Reading list:
Week 11	1. Robotics (Mann, W. Chapter 3)
	2. Does Our Future Depend on Elder Care Robots (Walker, J. https://waypointrobotics.com/blog/elder-care-robots/)
	3. Stop Me if You've Heard This One_A Robot and a Team of Irish Scientists Walk Into a Senior Living Home (Purtill, C. https://time.com/longform/senior-care-robot/)
Short paper	Short paper 3
3_Adaptation and Accommodation	
Week 12	
Module	Weekly learning module assignment 9
9_Technologies Support Senior	Reading list:
Drivers	1. Elder Drivers and Technology (Mann, W. Chapter 7)
Week 13	 New technology helps older drivers keep the keys longer (Miller, M. https://www.reuters.com/article/us-column-miller-cars-idUSBRE98G05I20130917)
	3. Car Safety Technologies that Help Senior Drivers (Jefferson, A. http://www.proctorcars.com/car-safety-technologies-help-senior-drivers/)

Module	Activity
	4. Unbelievable Benefits And Drawbacks Of The Self-Driving Car (Prince, A. https://www.lifehack.org/articles/technology/unbelievable-benefits-and-drawbacks-the-self-driving-car.html)
Final Exam	Final exam
Week 14 and 15	