

1. Course number and name

CptS 485: Gerontechnology I

2. Credits and contact hours

3 credits, 3 lecture hours

3. Instructor's or course coordinator's name

Diane Cook

4. Textbook, title, author, and year

S. Kwon (Ed.). 2017. *Gerontechnology: Research, Practice and Principles in the Field of Technology and Aging*. Springer. (Optional)

5. Specific course information

- a. *Catalog description*: Introduction to the field of Gerontechnology.
- b. *Prerequisites or corequisites*: Certified major in CptS, CptE, or EE.

6. Specific goals for the course

Following completion of this course, students will

- Identify professional, ethical, legal, security, and social dimensions of a decision or action and its potential impacts on the individual, company/organization, and public (4a).
- Effectively communicate in oral presentations (3a, 3b, 3c, 3d, 3e, 3f).
- Effectively communicate reasoning and rationale in written documents (3a, 3b, 3c, 3d, 3e, 3f).
- Carefully listen to others and provide others with constructive feedback (5g).
- Function effectively as part of a team (5b, 5c, 5d, 5e, 5f).
- Effectively manage team projects (5a, 5c, 5d).

7. Brief list of topics to be covered

- Research methodology in aging
- Smart environments
- Ambient sensors and sensor networks
- Technology use and acceptance
- Machine learning
- Institutional review board applications
- Impact of aging on mobility, falls, cognition, everyday function, memory, thinking, and senses