"Mental health ultimately means that an individual, through rich emotion affirming encounters with living, has integrated his or her life in such a way that the emergent self-structures, deeply affective, can steer a satisfying, cognitive course through future emotional jungles of lived lives."

- Jaak Panksepp (2009, pp.6-7)
multiple disciplines. Students will acquire a basic understanding of study design, instrument selection, and ethics.

**Course Requirements & Activities**

### READINGS/RESOURCES

Assigned readings will be available via Blackboard and ARES. They will be organized as required vs. recommended. In addition to readings, resources such as websites, videos, and interactive works will be made available. Such works are not considered optional or supplemental, but are extremely critical for experiential design processes. A sample reading list is included in the Readings Appendix.

| % of Grade |  
|-------------|---
| 4 written assignments (I=5%, II=10%, III=10% IV=10%) | 35 |
| 1 take-home exam | 30 |
| 2 group projects (I=10%, II=10%) | 20 |
| Final digital portfolio | 5 |
| Participation | 10 |
| TOTAL | 100 |

### WRITTEN ASSIGNMENTS

Students will be asked to complete 4 key writing assignments (see COURSE SCHEDULE) that will exercise existing knowledge and skills, as well as provided readings and experiences. These assignments are meant to sharpen their critical, analytical, integrative and empathic skills. The types of written assignments assigned represent common types of written documents students will need to be ready to prepare for team science, such as sections in grant proposals, internal communications, results report preparation, scholarly publications, and essential documents for research that involves human subjects. Such documents involve basic science writing, technical writing, or translation to lay audience language. Students are required to submit these documents on time in Microsoft Word format in order to be eligible for full credit. Students will be provided with constructive criticism and comments toward final revisions of the documents for assignments I-III and will receive a preliminary grade, which may be improved with a final re-write. All re-writes will be due by the last day of class to be included in the Final Digital Portfolio (see below) for grading.

Proper authorship and attribution of creative works is required, including students’ own original work. Students are strongly encouraged to use reference management software, such as Endnote, RefWorks, Mendeley or Zotero and to adhere to a recognized style, such as APA, IEEE or AMA.

### Point Allocation for Individual Written Assignments

- 50% for intellectual merit
- 40% for clarity, style, and organization
- 10% of points for submitting on time

### TAKE-HOME EXAM

Students will be assigned questions and short essay topics, in the form of challenges, which will be announced three weeks before the exam is due. In order to respond to the exam, students will have to have reviewed all required and some recommended readings, and are expected do some additional research on their own. The exam requires a written narrative with links to supplemental materials to illustrate their response to the challenge, such as video, games, art and any other media. Students will be able to choose between multiple challenges and can work together to review works, but each one must make, and document, their unique contribution in their own exam. The exam is expected to stimulate a deeper review and reflection of the chosen challenge area, with an opportunity for the student to exercise
their creative, critical, analytical and synthetic skills on-demand. Students will not be judged on their mastery of concepts, as much as their ability to pull things together and guide the reader to see something in a completely new way. The reader must be persuaded on what is interesting, what is valuable, and/or what is worth knowing using both evidence and opinion. Students who receive at least a B- grade on their exam may be provided comments toward a re-write of their exam. Students who receive less than a B- on their can choose another challenge topic and submit it with their Digital Portfolio, with a 10% deduction on the exam grade.

Sample challenge topics:
- Describe/critique the shortcomings of obesity interventions using games in children and/or adolescents.
- Critique popular design strategies for sound-based feedback in movement disorders.
- Choose a popular off-the-shelf game and explain how its design promotes, enables, discourages or encourages prosocial behavior.
- Describe various parameters of intersubjectivity in a given scenario? Where do the core interactions lie? Who has agency/when? How do the subjects enter, exit and navigate the relationship?

Proper authorship and attribution of creative works is required, including students’ own original work. Students are strongly encouraged to use reference management software, such as Endnote, RefWorks, Mendeley or Zotero and to adhere to a recognized style, such as APA, IEEE or AMA.

**Point Allocation for Take-Home Exam**
- 70% for intellectual merit
- 20% for clarity, style and organization
- 10% of points for submitting on time

**GROUP PROJECTS**

I. Values-at-Play Project
(Values at play (n.d). [see http://valuesatplay.org/grow-a-game-overview], which are commonly used as a design method for integrating social values into an interactive experience, such as a boardgame or a prototype for a digital game, or other type of interactive entertainment experience. Based on their assigned card combination, students will be asked to prepare a simple paper, playable prototype of an experience that has a beginning, middle, and end, or that is comprised of one round of play that may introduce a larger, more complex topic. This exercise will be completed in randomly assigned teams and students must provide written instructions on how to play the game. The experience should take participants no more than 10 minutes to complete. Teams will be expected to test each others’ prototypes and provide feedback throughout the semester and present the prototype to the instructor by appointment. Final playables will be included in the Digital Portfolio (see below) and be available to the public on the final day of the semester. Students will be given a brief survey to rate their team members on their team contribution.

**Point Allocation for Values-at-Play Project** (includes rating by classmates)
- 30% for broader impact
- 30% for quality of experience design
- 30% for collaboration
- 10% for documentation process (instructions, ratings, notes)

II. Experience Observation and Analysis Project
Students will be asked to video record one of their classmates using a full-body game title or other interactive entertainment experience (e.g., mixed reality, augmented reality) and to volunteer to be taped for one of their classmates to video record them for their chosen experience. Observers will be asked to code the video using a simple qualitative method supplied by the instructor and provide a short objective and subjective summary of the observed experience. The participant will be asked to do the same for their own video. Both parties should remain blind to each other’s coding and analysis. Results will be made available to classmates for review, unless participants experience regret or embarrassment after
reviewing their session. Students are expected to treat each other with respect and dignity during this project. Students will also be given a brief survey to rate their Observer.

Point Allocation for Experience Observation and Analysis Project
(includes rating by classmates)
• 30% qualitative coding quality/attention to detail
• 60% for analytical summary insight
• 10% for ethical/professional conduct

DIGITAL PORTFOLIO
The instructor will provide you will feedback on most written and group assignments so that you can complete a personal portfolio that contains your semester’s work. The digital portfolio must include a public presence, which could be a WordPress site, Facebook Page, Tumblr site, traditional web site, or other tool/medium that contains a curated glimpse of your projects. You are not required to make the works and paper publicly available in their entirety, but a visitor must be able to quickly understand what your skills, experience, analytical and integrative capabilities are. Think of this as your collaboration portal – not a dumping ground. What would others like to know about you as a future collaborator? In addition, you will be required to provide the instructor with a digital folder of all revised assignments, neatly organized in subfolder by assignment name.

Point Allocation for Digital Portfolio
• 50% for quality of presentation
• 60% for quality of content
• (late submission loses 1% per day)

CLASS PARTICIPATION
Although your physical presence may not always be possible in the class, absenteeism will naturally result in your inability to meet course objectives. If you can’t be there for a class, but can participate virtually, we may be able to connect you via videoconference. Students are encouraged to participate virtually if they have a cold or something that can be transmitted to others. Participation in playing the Brain Architecture game is mandatory and if you cannot make it to that class, you are required to find two people who can play the game with you outside of class during a time convenient to the instructor. You are also required to participate and help organize the Open House of the last day of class, which will be open to the public, and will include community members from academia, healthcare, and industry who are invited to review, discuss and critique your work. Unexcused absences or regular tardiness will affect this portion of your grade and bring down your overall grade. If you have an unavoidable conflict, please contact me via email or phone as far in advance as possible.

Statement on Academic Conduct and Support Systems

Academic Conduct
Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Section 11, Behavior Violating University Standardshttps://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct/.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the Office of Equity and Diversity http://equity.usc.edu/ or to the Department of Public Safety http://capsnet.usc.edu/department/department-public-safety/online-forms/contact-us. This is important for the safety whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person. The Center for Women and Men http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and
the sexual assault resource center webpage sarc@usc.edu describes reporting options and other resources.

Support Systems
A number of USC’s schools provide support for students who need help with scholarly writing. Check with your advisor or program staff to find out more. Students whose primary language is not English should check with the American Language Institute http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students. The Office of Disability Services and Programs http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, USC Emergency Information http://emergency.usc.edu will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

Course Schedule & Readings List - subject to change.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics/Daily Activities</th>
<th>Deliverable/Due Dates</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 13</td>
<td><strong>LECTURE</strong>: From Epicurus to Panksepp: course introduction, philosophical and historical perspective of the field&lt;br&gt;<strong>IN-CLASS</strong>: Take brief survey (not for grade) on class core concepts</td>
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<td>2</td>
<td>Jan 20</td>
<td><strong>SCREENING</strong>: Brain Hero&lt;br&gt;<strong>IN-CLASS</strong>: Brain Architecture Game (in teams of 3-4 people) (1 credit toward participation)</td>
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<td>3</td>
<td>Jan 27</td>
<td><strong>LECTURE</strong>: The impact of timing and quality of early childhood experiences in brain development, toxic stress, executive function&lt;br&gt;<strong>EXTRA CREDIT</strong>: Prepare a 1-2 page reflective blog post of one’s personal environment of relationships at critical periods (submit via Blackboard)</td>
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<td>4</td>
<td>Feb 3</td>
<td><strong>LECTURE</strong>: Resilience and lifelong health outcomes, sensitive periods, neuroplasticity, what lies ahead, unanswered questions vs. hard evidence, junk science, brain training games&lt;br&gt;<strong>DEMO</strong>: Lumosity, Nevermind, Mindlight, Sparx&lt;br&gt;<strong>TAKE-HOME EXAM</strong>: topics announced by email</td>
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<td>5</td>
<td>Feb 10</td>
<td><strong>LECTURE</strong>: Affect regulation, emotional systems, trauma, anxiety, depression, science of psychotherapy, challenges of measuring emotion&lt;br&gt;<strong>IN-CLASS</strong>: Form groups for GROUP PROJECT</td>
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<tr>
<td>Week</td>
<td>Date</td>
<td>Lecture</td>
<td>Demo</td>
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<td>Week 6</td>
<td>Feb 17</td>
<td>Theory of mind, mentalization, mindfulness, presence, empathy assessments and interventions</td>
<td><em>Pluff, Blowing Blues, A Game for Two, Night Journey</em></td>
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<td>Week 7</td>
<td>Feb 24</td>
<td>Sensorimotor control, action perception, biological motion perception, mirroring, synchrony, affinity, motion sensing technology</td>
<td><em>Watergait, Adventurous Dreaming Highflying Dragon</em></td>
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<td>Week 8</td>
<td>Mar 3</td>
<td>Self and identity, gender, LGBTQ issues, bullying, personality, activist games, school-based training, social dynamics of play, modeling</td>
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<td>Week 9</td>
<td>Mar 10</td>
<td>Orphan &amp; emerging challenges in public health, neuroscience and medicine; the legacy of mind/body dualism, reframing mental health, redefining the user/patient/client/human experience</td>
<td><em>Next Week’s Game, Code Black excerpt</em></td>
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<tr>
<td>Week 10</td>
<td>Mar 17</td>
<td>Aging, chronic illness, quality of life, isolation, intergenerational issues, gerotechnology, interactive neurotherapeutics</td>
<td><em>Skyfarer, The Voice in the Garden</em></td>
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<td>Week 11</td>
<td>Mar 24</td>
<td>Death, grief and bereavement, suicide, survivor guilt, epigenetic impact, social media, virtual archiving</td>
<td><em>The Green Ward, Inner Vision, Journey</em></td>
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<td>Week 12</td>
<td>Mar 31</td>
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<td>Week 13</td>
<td>LECTURE: Using a transtheoretical heuristic to design theory-informed interventions I: cognitive challenge, affect regulation, dialectical engagement, somatic gratification, socioecological validity, semiotic integrity</td>
<td>WRITTEN ASSIGNMENT II DUE: 2-3 page literature review on special topic related to aging with critical look at implementation of existing interventions</td>
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<td>Apr 7</td>
<td>SCREENING: [ experiment excerpts ]</td>
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<td>Week 14</td>
<td>LECTURE: Using a transtheoretical heuristic to evaluate theory-informed interventions: cognitive challenge, affect regulation, dialectical engagement, somatic gratification, socioecological validity, semiotic integrity</td>
<td>GROUP PROJECT II DUE</td>
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<td>Apr 14</td>
<td>SCREENING: [ experiment excerpts ]</td>
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<td>Week 15</td>
<td>IN-CLASS INTERACTIVE EXERCISE: Match the intervention design to the desired outcomes and vice-versa</td>
<td>WRITTEN ASSIGNMENT III DUE: Use the transtheoretical heuristic to refine your previous paper to propose an intervention and study design that can help answer a research question or provide data for testing a hypothesis.</td>
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<td>Apr 21</td>
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<td>Week 16</td>
<td>LECTURE: Study design as experience design, ethics, consent form design, recruitment, data collections; class exit survey</td>
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<td>Apr 28</td>
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<td><strong>FINAL</strong></td>
<td>OPEN HOUSE @ SCI 308</td>
<td>DIGITAL PORTFOLIO DUE</td>
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<td><strong>May 11</strong></td>
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<td>WRITTEN ASSIGNMENT IV DUE: Prepare a study informed consent form for your previously proposed intervention</td>
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READINGS LIST BY WEEK

WEEK 1


(optional)


WEEK 2


**WEEK 3**


(optional)


**WEEK 4**


(optional)


WEEK 5


WEEK 6


WEEK 7


**WEEK 8**


**WEEK 9**


**WEEK 10 – SPRING BREAK**
WEEK 11


WEEK 12


WEEK 13


WEEK 14


RECOMMENDED BOOKS


