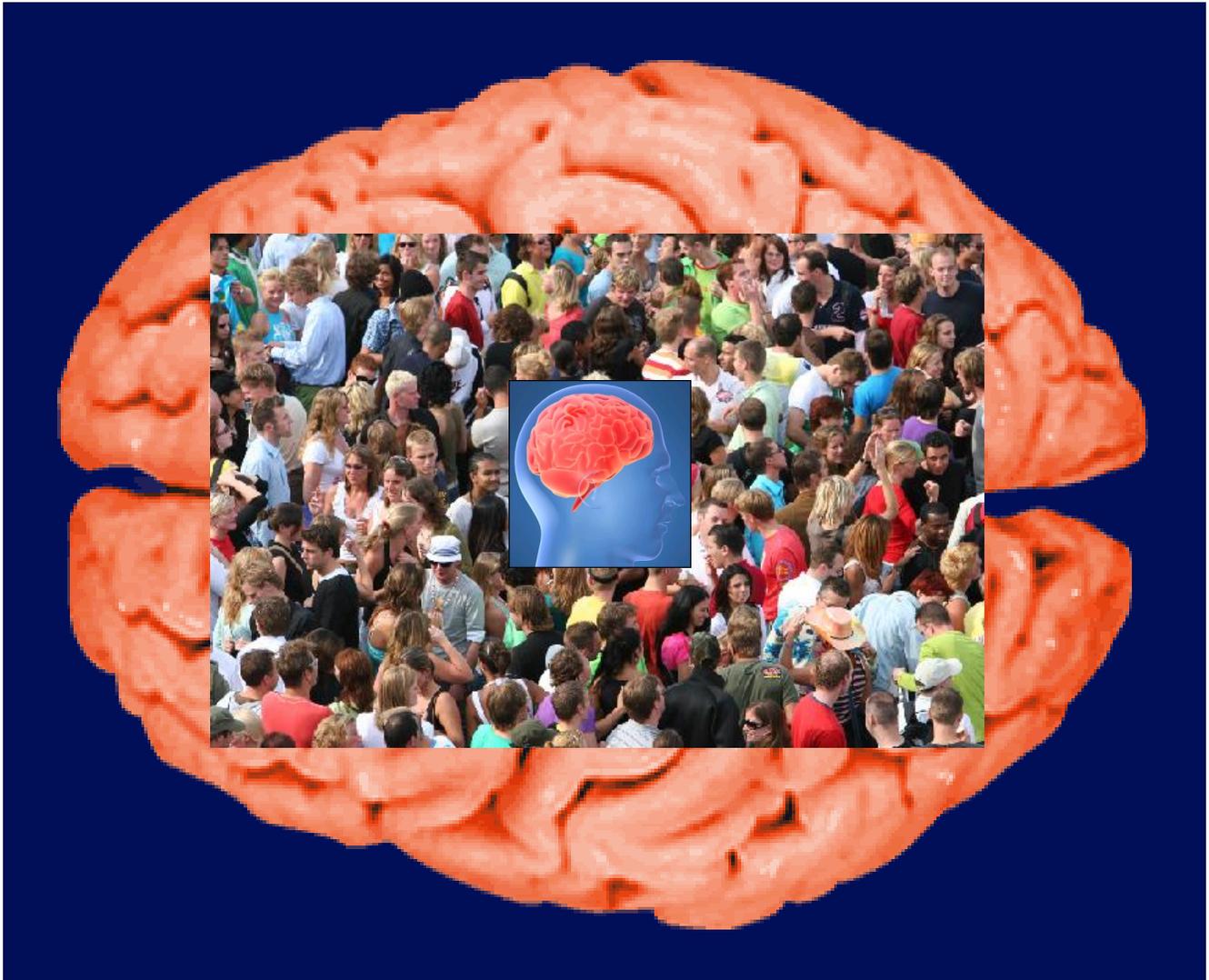


The human brain has evolved to be part of human society.

See how your brain is “wired for society”!

Enroll in MCB 170: Society and the Brain



big brain from morphonics; society from heathhelen; little brain from sciseek

The goal of this course, taught by Thomas J. Anastasio, is to introduce students to a broad range of neurobiological facts and place them in the exciting context of brain-society interactions. Along the way, students will see that they are, literally, by the biology of their own brains, part of something larger than themselves.

MCB 170: Society and the Brain

Fulfills GedEd requirement. Offered every fall semester.

Topics by week

1. Wired for Society

The human brain has evolved to participate in social interactions.

2. Its Nice to be Nice

Evolution may have changed our brain chemistry to make us more social.

3. In Praise of Aggression

Aggressiveness on the part of some individuals may benefit the whole group.

4. Depression is Depressing

Social interactions are the primary determinant of mood in normal humans.

5. Ties that Bind

Certain neurohormones partly mediate bonding between humans.

6. Social Control of Sexuality

Sexual orientation may be partly determined by brain-society interactions.

7. The Developing Brain

Social environment affects brain development as much as physical environment.

8. In-groups and Out-groups

Social influence on frontal cortex activity can reduce inter-group prejudice.

9. Fairness and Cooperation

Many brain regions are active during economic decisions and exchanges.

10. The Power of Prayer

Prayer can increase social capital, which in turn can actually improve our health.

11. God and the Brain

Many brain regions are associated with religious behavior and thoughts of God.

12. The Aging Brain

Social interaction can benefit the aging brain both physiologically and psychologically.

13. Collective Recollection

Memory may be similar in collectives as in individuals, but collectives can endure.

14. Happiness and the Brain

Investing in social capital can pay you back a dividend of happiness.

Course materials

All class notes will be available online. All quizzes will be administered online. An article from the literature that relates to the lecture topic will be available each week via download.

Contact hours

Two lecture hours will be offered each week. The third hour is reserved for the weekly quiz and an online student blog session. The TA will also be available for a regular, weekly office hour.

Expected Work, Examinations, and Grading

Students are expected to attend lectures, study their class notes, and read the assigned readings. Students take a 30 minute quiz each week plus a blog session (points are given for blog entries). The last quiz is the final, but it is just the 30 minute quiz plus blog for the last week. Each quiz/blog including the final is worth 10% of the course grade. Grades are based on the best 10 of 14 quiz/blog scores. Students can skip up to four quiz/blogs with no penalty, but make-ups will not be offered.

Course Policy and Procedure

- Class meets each Monday and Wednesday from 2pm to 2:50pm
- Class is held in room 66 Library (in the basement of the main library)
- **CLASS ATTENDANCE IS REQUIRED (YOU HAVE TO COME TO CLASS!)**
- Class does NOT meet on Friday (but you do have a quiz/blog on Friday)

- An online QUIZ and an interactive BLOG are offered each Friday (quiz/blog)
- Each quiz has 14 multiple-choice questions; each correct answer is worth 1 point on the quiz
- Each blog has 2 parts: an opinion (post) and a response
- The blog post is the student's opinion on a discussion item provided by the instructor
- The blog response is the student's opinion on another student's post
- A blog post must be at least 50 words long and a blog response must be at least 50 words long
- The blog post and blog response are BOTH graded on a scale of 0 to 3 (6 points max for both)
- **A BLOG POST OR BLOG RESPONSE LESS THAN 50 WORDS IS WORTH ZERO**
- The total possible score on a quiz/blog is 20 (14 quiz + 3 blog post + 3 blog response)
- Quiz and blog each week are scored together, that means ...
- You cannot combine scores from a quiz on one week with a blog on another week
- Access to the online quiz/blog is provided each Friday from 9am until 5pm
- You have 30 minutes to complete the quiz, timed from the moment you start the quiz
- You have as much time as you want for your blog post and response between 9am and 5pm
- The online quiz/blog can be taken from any computer with UIUC Active Directory (AD) access
- **STUDENTS ARE RESPONSIBLE FOR THEIR OWN CONNECTION TO UIUC AD**
- You take your quiz/blogs on a website called LON-CAPA (see next section)

- Course materials include: PowerPoints, assigned readings, quiz questions, and blog items
- There is no required textbook
- All course materials are available online at: lon-capa.uiuc.edu
- **YOU ARE REQUIRED TO ENSURE THAT YOU HAVE ACCESS TO LON-CAPA**
- You can logon to lon-capa using your UIUC Net ID and AD password
- **YOU TAKE YOUR QUIZ/BLOGS ON LON-CAPA**
- **MAKE SURE YOU CAN LOGON TO LON-CAPA ON THE FIRST CLASS DAY**
- Contact Alejandra Stenger (astenger@illinois.edu, 217-244-7241) for ALL lon-capa problems
- **CONTACT ALEJANDRA STENGER FOR ALL LON-CAPA PROBLEMS (see above)**
- Start your quiz/blog EARLY on Friday; contact Alejandra RIGHT AWAY with any problems

- The course is organized around 14 modules, one for each week of the semester
- A quiz/blog is offered every week (on Friday)
- Your combined quiz/blog score should be available on the Thursday following the quiz/blog
- **YOUR GRADE IS BASED ON YOUR BEST 10 OF 14 QUIZ/BLOG SCORES**
- You can decide if, for whatever reason, you want to skip a quiz/blog, however ...
- **THERE ARE NO MAKE UPS! – REPEAT – THERE ARE NO MAKE UPS!**
- You can skip 4 of 14 quiz/blogs with no penalty; skipping more than 4 will reduce your grade
- **SKIPPING MORE THAN 4 QUIZ/BLOGS WILL REDUCE YOUR GRADE**

Grading

- Your grade will be based entirely on your best 10 of 14 quiz/blog scores
- Grades are computed from the total of your scores on your best 10 of 14 quiz/blogs
- Highest possible total score is 200 (20 points per quiz/blog times 10 best quiz/blogs)
- Grades are set on a scale of 0 to 1000
- Your total score is multiplied by 5 to place it within the scale of 0 to 1000
- (note that the perfect total score of 200 equals 1000 when multiplied by 5)
- Your total score, whatever it is, will be multiplied by 5 to get your score out of 1000
- Then your letter grade will be read off from the MCB Freshman Scale as follows:

Total score out of 1000	Letter grade
966-1000	A+
933-965	A
900-932	A-
866-899	B+
833-865	B
800-832	B-
766-799	C+
733-765	C
700-732	C-
666-699	D+
633-665	D
600-632	D-
566-599	F+

Blog Post and Response Scoring Guide

The weekly Society and the Brain blog (the “blog” part of the weekly quiz/blog) provides an opportunity for students to express their opinions on the often controversial issues raised in the course. The weekly blog is therefore essential. The blog has two parts: a “post” and a “response”. Each student writes both a blog post, which is the student’s opinion on an “item” provided by the instructor, and a blog response, which is the student’s opinion on the blog post of another student. The class is divided into four discussion groups (A, B, C, and D), to make it easier for students to interact through their blogs. Both the post and the response should be thoughtful and clear expressions of a student’s opinion on the item. The blog post must be at least 50 words long, and the blog response also must be at least 50 words long. The blog post is worth a maximum of 3 points, and the blog response also is worth a maximum of 3 points. The post and the response will be scored by your TA according to the quality of your writing. The possible scores are 0, 1, 2, and 3. Examples of blog posts receiving each of the possible scores are provided below. The quality standards are the same for the blog responses. The example blog posts follow an example opinion item (also called a discussion item).

Example opinion item:

According to Redtooth and Clawford (1997, *Journal of Variable Selectivity*, 65: 1339-1375), “In baboons, reduction in positive affect of socially defeated subordinates improves group fitness by

reducing subordinate reproductive activity. While we do not wish to imply that depression in humans should go untreated, we find it hard to escape the conclusion that human depression serves the useful purpose of reducing reproduction by socially defeated, and therefore inferior, individuals.” Indicate whether or not you agree with this statement and briefly explain why.

Example of a post worth 3 points (thoughtful, relevant, and raises several interesting points):

I think that looking at it from an evolutionary standpoint, it would make sense for this to happen. However, if you think about how many people in the world have depression, this idea is extremely illogical. If the purpose of depression were to decrease the likelihood of "inferior" individuals, then why are there still so many cases of it world-wide? It would make sense for this to be true for baboons, as they are dependent on the ability to stay strong and active. Humans are not reliant on that. As we discussed in lecture, humans are "soft," so we do not need to be as aggressive in our attempts to reproduce.

Example of a post worth 2 points (this is OK but the ideas are expressed carelessly):

I think I don't agree with this statement. I don't think depression serves the useful purpose of reducing reproduction by socially inferior individuals. Human and other things might share similar genetic information, their situation cannot be aligned with that of humans. Even if we share over 90% of DNA information with Chimpanzees, we are the only species who think politically. In other words, human depression isn't something like baboon.

Example of a post worth 1 point (enough words but they express very little):

Like most of the students I also disagree with the statement as well. Even though it is pretty tough question to talk about, I do not agree with the idea that depression serves as a toll to reduce reproduction by socially inferior individuals. Even though Baboons are a type of apes, and we humans also are one type of apes, they still are different. Emotion is not what a person can deal with. It is not true that every one has same emotion.

Example of a post worth 0 points (not a bad start, but it isn't even 50 words long!):

Wow. I feel very torn about this. Evolution-wise, I do understand it. Depression may be a sign of a lack of fitness, but in the same token, depression is not an excuse to simply dismiss people.

Questions on Blog Scoring

All questions regarding blog scores should be addressed to your TA:

Eman Hamed email: emanh2@illinois.edu