

**THE BRAIN IN BOOKS AND FILM , PSYCH 461, NEUR 461, FALL 2022  
DR. JANE FLINN**

OVERVIEW OF THE COURSE.

The films in this course are ones that I have enjoyed watching and frequently have not had time to show, or only to show in part, in classes. A theme running through many of the films is that both genetics and the environment can affect our brains and our behavior, and that the environment can change the brain for good or ill.

There are three required books: My Brain on Fire deals with an unusual and probably under-diagnosed brain illness that can masquerade as schizophrenia, Still Alice is about a woman suffering from Alzheimer's disease, a disease which now impacts many families. The third book is Healthy Brain; Happy Life, which emphasizes how important exercise is in our lives. Students should lead a discussion on a sub set of chapters from one of the required books, and on one of the films. I will review the relevant background for each film beforehand.

Films will be generally be shown on Thursdays, they can often, although not always, be watched at home. Each film will be introduced by me in the previous class, and discussed in the following class, along with one of the books. Three papers, each discussing the implications of one of the required texts are required. In addition students should write an overall review paper (4 papers in all). A quiz on each of the films will be available before the film is shown.

This schedule is subject to change if discussion of a topic moves faster or more slowly than anticipated. Video links may change.

AUG 23/25 TUE; Structure of the brain, forms of memory. The epigenetic revolution; the brain and behavior can be influenced by the environment. Music can have positive influences on the brain.

TH; in class The Musical Brain. (Film) in class.

AUG 30/SEP 1 TUE; Discussion of a) The Musical Brain, b) My Brain on Fire (book pt 1).

TH; Power of Music in the brain, Dementia and Parkinson's disease, (You tube). Video selection from Alive Inside, in class.

**AUG 29 IS THE FINAL DAY TO ADD**

SEP 6/8 TUE; Discussion of a) My Brain on Fire (book pt 2 ), b) music videos.

Parkinson's is a motor disease; drug abuse led to PD in young people (JMF).

TH; The Frozen Addict. (Film, possibly available on internet.)

**SEP 6 IS THE FINAL DROP DATE FOR 100% REIMBURSEMENT**

SEP 13/15 TUE; Discussion of a) The Frozen Addict. b) My Brain on Fire (book pt 3)

Motor memory is spared in Clive Wearing (JMF).

TH, in class,). My Brain on Fire, video. Living without Memory, (Clive Wearing, Mike Forte, You

tube. in class.

**SEP13 IS THE FINAL DROP DATE FOR 50% REIMBURSEMENT**

SEP 20/22 TUE; Discussion of a) Clive Wearing, b) Summary of My Brain on Fire book and video. Brain changes seen during sleep, (JMF).

TH; What are Dreams? (Film) in class.

SEP 27/29; TUE; a) Discussion of a) What are Dreams? b) Healthy Brain, Happy Life (book, pt1)

TH; Healthy Brain (Film) will be shown in class, may be on internet.

OCT 4/6; TUE; Discussion of a) Healthy Brain, Happy life, (book pt 2.) and film b) Role of the cortex (JMF) .

TH; Stroke of Insight. Role of the cortex (films), Secrets of the Brain, in class

OCT 11/13 **TUE NO CLASS, MONDAY CLASSES INSTEAD.**

TH; Stress, Portrait of a Killer, will be shown in class, available on internet.

OCT 18/20, TUE, Discussion on a) Healthy Brain (book pt 3) and video, b) Stroke of Insight and the cortex. c) Consequences of traumatic brain injury; head injuries incurred while playing football can have serious consequences. (JMF).

League of Denial (Film) Can watch at home.

OCT 26/28 TUE; Discussion, a) League of Denial, b)Healthy Brain book summary, c) Stress Portrait of a Killer, Stress can have negative effects on health and performance in both animals and people. Environmental effects on stress, how it may be made worse or relieved. Stigma. (JMF).

TH; Front of the class, Tourette's syndrome, Film (long)

NOV 1/3 TU; Discussion; a) Front of the Class b) Still Alice (book, pt 1), c) Brain and behavioral changes seen in Alzheimer's disease (JMF).

TH; Still Alice (movie), can watch at home.

NOV 9/11 TUE; Discussion; a) Still Alice, (book pt 2) and movie.

TH; A Murder of Crows. (Film)

NOV 15/17 Dr Flinn will be away at SFN as will Alison.

TU; Can Alzheimer's be Stopped (Film) on You Tube

TH; Sybil's story, Film. Alex, the Smart Parrot (11:50)

NOV 22/24; Discussion, a) Still Alice (book pt 3), b) A Murder of Crows, c) Sybil,

NOV 29/DEC 1

TU; Discussion a) Still Alice, summary, b) Alex

a) TH; **THANKSGIVING**

TH; Overall discussion.

## **REQUIRED BOOKS**

My Brain on Fire, Cahalan.

Still Alice, Genova.

Healthy Brain; Happy Life, Suzuki

**DEC 6 TAKEHOME PAPER DUE.**

### Grading Policy:

10% Book chapters discussion leader

10% Film discussion leader

10% General discussion on books

10% General discussion on films

40% Papers on the three required books, and a general review paper at the end on the books and films "What did you learn from the books and films in this class?" (4 papers, 10% each)

20% film quizzes

Quizzes will be posted on Blackboard the Sunday before the scheduled film date. They will be due back Sunday following the film.

Office Hours: Tu/ TH 4:30 -5:30 DKH 2022

Call 993-4107 for an appointment at other times.

E-MAIL [jlflinn@gmu.edu](mailto:jlflinn@gmu.edu)

Cell phones may not be used in class; I have the right to ask for copies of your notes if you use a computer in class.

Students with disabilities should present documentation to me and appropriate arrangements will be made.

The George Mason Honor code will be followed.

Class cancellation policy: Since the class is in the afternoon, Mason will probably have made an announcement, however, I will also e mail the class the class to give the status. Films can be made up at home. If a discussion group has to be cancelled, I will rearrange the schedule.

Official Communications via GMU E-mail: Mason uses electronic mail to provide official

information to students. Examples include communications from course instructors, notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback. Students are responsible for the content of university communication sent to their Mason e-mail account and are required to activate that account and check it regularly.

### DESCRIPTION OF FILMS

THE MUSICAL BRAIN. Music can have positive influences on the brain. On reserve in Library. Not on You Tube. Will be shown in class time.

THE FROZEN ADDICT. Designer drugs led to Parkinson's Disease (PD) in young people. The current synthetic marijuana epidemic is causing similar unpredictable and dangerous consequences.

Video Link:[http://openvault.wgbh.org/catalog/V\\_474CF2C8A20B4173988486AC4C605A3C](http://openvault.wgbh.org/catalog/V_474CF2C8A20B4173988486AC4C605A3C)

MY BRAIN ON FIRE, Rare Disease mistaken for Mental Illness

MY BRAIN ON FIRE -Encephalitis, on BBC's Women's Hour. 12.47 mins

(Susanah Cahalan, Brain on Fire ~ 1 hr)This form of newly discovered encephalitis attacking the NMDA receptor produces symptoms similar to those of schizophrenia. People may have been misdiagnosed. Both of these show Susanah herself. Netflix has the movie.

Video Link:<https://www.youtube.com/watch?v=yAQs2pmN3Sg&feature=youtu.be&t=3m5s>

WHAT ARE DREAMS. What benefits does sleep have? Sleep may help learning, due to replay of the day's events. Sleep disorders. Will be shown in class.

HEALTHY BRAIN, HAPPY LIFE , Exercise can improve our mood, our memory, and our health. <http://www.apa.org/convention/2017/default.aspx>. Choose Neuroscience and the Brain.

SECRETS OF THE BRAIN, Ramachandran, (Film selections).

STROKE OF INSIGHT -<https://youtu.be/UyyjU8fzEYU>

STRESS, PORTRAIT OF A KILLER , Stress can have negative effects on health and performance in both animals and people. It can be induced by social factors, but a positive environment can reduce stress. (Sapolsky)

Video Link: <https://www.youtube.com/watch?v=eYG0ZuTv5rs>

LEAGUE OF DENIAL: THE NFL's CONCUSSION CRISIS (LOD). Head injuries incurred while playing football can have serious consequences. The NFL was long unwilling to recognize this. First part will be shown in class time.

Video Link: <http://www.pbs.org/video/2365093675/>

FRONT OF THE CLASS. The story of a young boy/man with Tourette's syndrome. After a lot of difficulties as a young boy, Brad Cohen becomes a very successful teacher. Available on you tube, also on DVD (long) <https://www.dailymotion.com/video/x3oeb2f>

STILL ALICE. (Rent, e.g. on Netflix, or purchase.) Also available in the library on reserve. Alzheimer's disease is a growing problem, leading to memory loss, in some cases personality changes, and increased difficulties in living independently. Not on You Tube.

A MURDER OF CROWS (National Geographic) Crows show sophisticated learning and memory abilities. Will be shown in class time. <https://youtu.be/i4Sc0zIAHtI>

CAN ALZHEIMER'S DISEASE BE STOPPED? <https://www.pbs.org/wgbh/nova/video/can-alzheimers-be-stopped/>

SYBIL'S STORY. Deep brain stimulation can control PD. (Deep brain stimulation is now being used for depression and Alzheimer's disease.)

Video Link: <https://www.youtube.com/watch?v=xejclvwbwsk> (Part 1)

<https://www.youtube.com/watch?v=IOHtUzW02cg> (Part 2)

Alex the Smart Parrot (11:50)

Video Link: <https://www.youtube.com/watch?v=o7wdAiq0bk8>