

**FIYS106 MEDICAL MYSTERIES: Neuroscience in Chicago**  
**Fall Semester 2006-2007**  
**Shubhik K. DebBurman**

**BASIC INFORMATION**

**Class Hours:**

Lecture: 8:00 am – 9:20 am	Tues & Thurs	Johnson 272
Laboratory: 12:30 pm- 2:20 pm	Tues	Johnson 215 or CA102

**Instructor Office Hours:**

9 am-11 am	MWF	Johnson 201
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*Dropping in:* If I am in the office and free of other duties, I'll be happy to meet with you. If I am busy in office or in lab, respect my non-availability and schedule an appointment.  
*Phone:* 735-6040 (office), 615-2647 (home); avoid calling after 9 pm unless its an emergency.  
*email:* [debburman@lfc.edu](mailto:debburman@lfc.edu). Email is better than phone.

**Peer Instruction** (see [yellow handout](#) on Out-Of-Classroom Support for more details on peer instruction)

**Peer Teachers:** Alexandra Ayala'09 ([ayalaa5@lfc.edu](mailto:ayalaa5@lfc.edu))

**Peer Writing Consultant:** Lisa Jeziorny ([jeziolm@lfc.edu](mailto:jeziolm@lfc.edu)) & Michael Zorniak ([zornim@lfc.edu](mailto:zornim@lfc.edu))

**Peer Mentors:** BIO346 Molecular Neuroscience Students

**Library Research Guide:** <http://www.lib.lfc.edu/resource/bio.html>

**COURSE GOALS**

1. To learn beginning neuroscience material from lectures, introductory texts, and basic brain anatomy.
2. To appreciate that research is integral to solving medical mysteries and to understand the research process.
3. To recognize and understand ethical dilemmas in biomedical research.
4. To improve your skills in written and oral communication and use it to educate peers.
5. To learn to collaborate with peers and develop skills in collective responsibility.

**DESCRIPTION**

*Welcome to Medical Mysteries!* This first year studies (FIYS) course is designed to excite beginning students about how the study of the human brain (“neuroscience”) connects with biomedical issues in human society. Neuroscience is one of the best funded, actively growing areas of medical research. Uncovering how our brains work is one of the final frontiers for scientific exploration. Unfortunately, neurological diseases are fast becoming the major 21<sup>st</sup> century health concern of the United States. As you mentioned to me in phone conversations this summer, you likely chose this course because you are interested about how your brain helps you think, feel emotions, hear, see, smell, taste, move, talk, read, write, eat, sleep, dream, learn and form memories. Many of you have serious interest in the biomedical/health professions, natural sciences, or psychology; several simply have a strong natural curiosity for the biology of the mind and were drawn to the topic.

Through summer readings, you have already become acquainted with two tragic incurable illnesses by reading Deadly Feasts (prion diseases) and Piecing Alzheimer's Together. You will further explore Alzheimer's by meeting with scientists and medical experts during your Chicago Experience on August 22 and by watching Oscar-winning movie *Iris*. You will explore the human condition by reading the book A Beautiful Mind and seeing its Oscar-winning movie adaptation. Through lecture and classroom discussions, you will not only explore the basic biology of the human nervous system, but also investigate how its dysfunction causes devastating, mysterious medical illnesses. By watching several highly acclaimed documentaries and cinema, you will discover the complex symptoms and biology of Williams Syndrome, Autism, Usher's syndrome, and Schizophrenia. Leading neuroscience researchers from the Chicago area universities will present seminars on the cutting edge of discovery through special visits to LFC. I am confident you will realize that despite astonishing advances, major mysteries remain to be solved. You will debate ethical dilemmas that face society by discussing case studies and reading the book The Ethical Brain as scientists race towards solving these mysteries and experiment with potential new treatments. You will also dissect real human brains to make connections between its complex structures and human behavior. Lastly, you will collaborate with peer mentors from BIO346 Molecular Neuroscience

(the advanced neurobiology course that I also teach) to organize a campus-wide “brain awareness” week, as part of demonstrating your learning and connecting it to society’s concerns.

## READINGS

**Introduction to Brain & Behavior**, by Bryan Kolb and Ian Wishaw.

**Deadly Feasts**, by Richard Rhodes

**The Ethical Brain**, by Michael S. Gazzinaga

**A Beautiful Mind**, by Sylvia Nazar

## EXPECTATIONS

### Academic Honesty:

I have zero tolerance for abuses. Please consult your student handbook regarding academic honesty and the honor system by which you should conduct yourself.

**URL:** <http://www.lakeforest.edu/academics/writing/plag.asp>

### Attendance:

**Philosophy:** I will work hard to present to you with relevant information in neurobiology in a lucid and interesting manner. In return, I expect that you will regularly attend my lectures and actively participate in the classroom, lab, and assignments. I will assume that you have read your assignments prior to class so that you can best engage in an informed classroom discussion and gain maximum benefit from my lectures. If you skip class, you will miss out both on valuable new information and possibly an interactive dialog. As a first year student, missing classes is a not a habit you want to cultivate in college. For every class or lab that you miss without a valid (and verifiable) excuse, you will lose 5 points towards your overall grade.

**Punctuality:** My pet peeve is when students arrive late to class. Apart from being disruptive to my teaching efforts, it is also disrespectful of the class.

**Absences:** Unexcused absences from quizzes, exams, and labs will result in an appropriate loss in points. Health-related absences must be confirmed by student health services. Absences due to religious observations must also be made far in advance. Family or other personal emergencies will require confirmation by the Dean of Student Affairs office. I will make every effort to reschedule a missed quiz or a deadline, as a result of such excused absences.

**Unexcused Late Assignments:** I strongly discourage assignments being handed in late without a valid excuse. AVOID THIS INDULGENCE. Each late day is a 25% deduction in points. No assignment will be accepted three days after it is due.

### Lastly, But Not In The Least:

I am a professor in the Biology Department and I am the Chair of the Health Professions Advisory Committee. I teach several science courses in cell & molecular biology, neurobiology, and human diseases. I conduct biomedical research to understand how neurological diseases, like Parkinson’s disease and Huntington disease, occur. Several talented and motivated LFC students (many planning to attend graduate school or medical school) work in my lab and conduct individualized research projects and senior theses. As a teacher, I find few things more satisfying than working with academically motivated, hardworking collaborative students like you. I enjoy giving you diverse opportunities for personal and professional growth and I work closely with you to help you achieve academic success. I am always experimenting with new ways of teaching science to beginning and advanced undergraduates. I expect you will push me hard to do my best job! If you encounter problems understanding the material, please do not hesitate to talk with me. My job here is *to help you learn*. Your feedback and participation in class is very important. Remember also that I am here to learn from you. I have often found my students to be my most important teachers. I hope this course will be a rewarding experience for all.

## GRADING

<b>A. Your Skills at Learning Beginning Neuroscience Material</b>	<b>300</b>	
1. Deadly Feasts Discussion	25	already done!
2. Integrating Alzheimer's: Summer Reading & The Chicago Experience	25	nearly done!
3. Quizzes: 50 points each (best of five)	250	
Quiz I: Chapter 1-2		
Quiz II: Chapter 3-4		
Quiz III: Chapter 5-6		
Quiz IV: Chapter 7-9		
Quiz V: Chapter 10-12		
Final Quiz: Chapter 13-15		
<b>B. Your Skills at Connecting Your Brain Structure To Function</b>	<b>125</b>	
1. Functional Anatomy in the Lab	75	
2. Brain Anatomy 101 (for Brain Awareness Week)	50	
<b>C. Your Skills at Engaging &amp; Educating Peers</b>	<b>275</b>	
1. Medical Ethics Project (Learning To Evaluate Scientific Practices)	75	
2. Brain Awareness Project (Learning To Teach Neuroscience To the Public)		
<b>D. Your Skills at Communicating By Writing</b>	<b>200</b>	
Response Papers (Best 5 of 6): 40 points each		
1. On <i>Iris</i> and <i>Awakenings</i>		
2. On <i>Ferocious Beauty: GENOME</i>		
3. On <i>The Ethical Mind</i>		
4. On the PBS <i>The Secret Life of the Brain</i> Video Series		
5. On the BBC <i>The Mind Traveler: Oliver Saks</i> Video Series		
6. On <i>A Beautiful Mind</i>		
<b>E. Four Simple Ways to Earn the Last 100 points</b>	<b>100</b>	
1. Demonstrate Resource Use, Creativity, Collaboration	30	
2. Attend at least four public seminars in Neuroscience & Write Summaries	40	
3. Attend all non-class time Brain Awareness Week activities	20	
4. Course Reflection & Survey	10	
<b>TOTAL</b>	<b>1000</b>	

### Attendance & Grade:

For every class or lab that you miss without a valid (and verifiable) excuse, you will lose 5 points from this total of 1000.

## SCALE

A	900 and above
B	800-899
C	700-799
D	600-699
F	<600

I rarely curve. If I do, you will only benefit and your grade will not be lower than the scale above. If you are on the borderline between two grades, I may reward improved performances over the semester and may look favorably on your overall use of resources, collaborative ness, and positive intellectual attitude during the semester (see [Green Handout](#)).

## ASSIGNMENTS IN DETAIL

### A. Your Skills at Learning Beginning Neuroscience Material 250 points

#### 1. Deadly Feasts; Summer Reading#1, 25 points

This summer you should have read this fascinating very-easy-to-read gripping account of one of the most enigmatic medical illnesses known, written by the Pulitzer Prize winning author, Richard Rhodes. As you read this book, you should have filled out in reasonable detail the Deadly Feasts Book Discussion Sheet. To be fully prepared for the Deadly Feasts Book Discussion, answer all questions in the sheet. Make a photocopy of this completed discussion sheet and bring both copies to your First Day of Class (Sunday, August 21). Bring the photocopy on the day of class discussion, take down additional notes, and hand in photocopy to me. You are expected to actively participate in class to receive full credit.

#### 2. Integrating Alzheimer's: Summer Reading #2 & Chicago Experience, 25 points

This summer you should have also read *Piecing Alzheimer's Together*, by Peter St. George-Hyslop, one of the world's leading Alzheimer's scientists. Only answer Questions 1,2 & 3 for the First Day of Class meeting (Sunday, August 24) and hand in your answers to me. On Tuesday (August 23), the entire freshman class will visit a Chicago institution relevant to their FIYS course. As a student in FIYS106 Medical Mysteries, you will accompany me to downtown Chicago's Northwestern University Medical School. There, we will visit with world-renowned scientists and doctors engaged in cutting-edge scientific research on Alzheimer's Disease and talk with these scientists about the importance of biomedical research in medicine and to society. After this experience, complete Question 4 and submit to me at the next class meeting (August 29).

#### 3. Quizzes, 250 points 50 points each, Best 5 of 6

The Five quizzes (during lecture time; see Schedule) and the Final quiz (during final exam time) will be based on classroom discussions (supported by chapters assigned from your textbook). Quizzes will be mostly objective questions. I will give the first 25 minutes of class-time for each quiz. For each chapter, I will provide a list of concepts that will form the basis of quiz questions. You are allowed to drop one quiz score, since I will use only the best 5 scores towards your course grade. Final Quiz is mandatory.

### B. Your Skills at Connecting Your Brain Structure To Function 125 points

Most students have to wait till medical or graduate school before they can handle human brains. You get to study them first-hand your first semester in college! The brain is simply one of the most fascinating organs of your body. You will get to handle, dissect and learn the basic anatomy of human brains in this class and compare it to sheep and calf brains. After exposing to various aspects of brain function in class, I expect you to learn anatomy by correlating it with brain function. You will be given six weeks (weeks 5-11) to gain this familiarity. During this time, we will spend one hour of Tuesday lab time to focus on certain aspects of brain structure and function.

#### 1. Brain Anatomy 101, 50 points

**On Week 12**, your group will present a hands-on demonstration and exhibit on brain neuroanatomy for the campus public during the brain awareness week on the same topic as your brain awareness week project.

#### 2. Functional Neuroanatomy, 75 points

**On Week 14**, you will take an anatomy exam during lab time. Your peer teacher will be happy to conduct a mock anatomy exam on week 13 to help you become used to the exam format.

Form four groups of 3 members each. This group should study anatomy together and conduct the two projects in the next session.

Anatomy is best learned as a group and by repeated exposure to the brains. You should plan on returning to lab during non-lab times to practice your anatomy between weeks 5-12.

## C. Your Skills at Engaging & Educating Peers 275 points

The same neuroanatomy study group should conduct both the following projects. Do not form new groups. Everyone must participate equally within a group.

### 1. Medical Ethics Project (*Learning To Evaluate Scientific Practices*), 75 points

Two of the above four groups join forces to carry out each ethics project. Each combined group picks two topics.

Neuroscientists are constantly faced with their own ethical dilemmas. Part of being a good scientist is being aware of such issues and knowing how to work with them. You will work with your assigned BIO346 peer mentors to pick an ethical case study from the list below. Your peer mentor will advise this group to prepare a one-hour class presentation during assigned lab hours that discusses the many issues that underlie your assigned case, the choices a scientist faces, and steps to overcome the ethical dilemma. Part of the group's presentation will also be to research real ethical problems that have been highlighted in science journals and the popular media in the last five years that resemble the problem you are discussing. The entire FIYS class should be involved in a broader discussion of the same problem during or after the group's presentation. The peer mentor should not play an active role during the presentation. Instead, he/she should mentor behind the scenes and prepare you for discussion.

#### Ethics Topics:

Promotional Pressures  
To be a Consultant . . . or Not  
A Political Power Keg  
Concerning Confidentiality  
Sound Practices  
Cotter's Quandary  
A Subject for Discussion

#### Ethics Dates

Week 5 (FIYS106 Lab Time) BIO346 Student will peer lead  
Week 6 (FIYS106 Lab Time) BIO346 Student will peer lead

Consult handout on Ethics Case Studies.

I will reserve 15 points for your group to provide me a written summary of your discussion and providing me all consulted materials. Your peer mentors will provide me summaries of your method of preparation and collaboration.

### 2. Brain Awareness Project (*Learning To Teach Neuroscience To the Public*), 200 points

**Week of November 6-10, 2006**

This is a highly creative and collaborative project designed to provide you with an exciting opportunity to educate the LFC community about a neuroscience topic and to work closely with FIYS peers and senior peers. You will work with your assigned BIO346 peer mentors to pick one topic from among the following four areas of complex brain functions: **Sex & the Brain, Drugs and the Brain, & Sleep and the Brain.** Your peer mentor will help you to design, research and conduct a Brain Awareness Campaign educating the community on the biology underlying this topic on our campus on the week of November 10 (2003). The BIO346 Peer mentor's goal is to motivate, organize, educate, counsel, help plan, and serve as both role model and academic and campus resource. The actual format of how your group decides to conduct outreach is completely open-ended. I encourage you to be highly creative and have a really enjoyable time with this project. Make it personal to you—invest in it. Remember, *I love being surprised!*

#### The bottom line for the group's outreach plan:

- educate the non-scientist about the topic in an interesting and effective way
- reach a significant proportion of the campus community (middle campus, peak time)
- combine visual with oral and written forms of communication with some hands-on exercise
- include a physical display of some kind that can later be showcased in Johnson Science Building
- reflect the liberal arts (try and combine science with fine arts, theater, humanities, or social sciences)
- use multiple resources (books, internet, research) and must connect with brain anatomy

#### Must address:

- Why is this an important human behavior to study?
- What is the basic way our brain performs this activity?
- What are the current medical mysteries for this brain activity?

I will reserve 20 points for practicing your presentation as a group in front of your peer teachers a week before the final presentation and for revising the presentation based on feedback. Your peer mentors will provide me summaries of your method of preparation and collaboration.

## **D. Your Skills at Communicating By Writing 200 points**

All FIYS courses at LFC are writing-intensive.

**Response Papers** (Best 5 of 6): 40 points each

### **1. On *Iris* & *Awakenings***

Textbooks are not the only sources of scientific “facts”, “theories”, and “hypotheses”, Science is conveyed via many other formats: popular magazines, essays, film, nonfiction books, biographies and autobiographies. In fact, the undeniable excitement underlying scientific discoveries is seldom appreciated in textbooks. Hollywood and the international cinema industry enjoy a long history of portraying mental and neurological conditions through Film. In this course, you will begin the course by seeing the Oscar-winning movie, *Iris*, during lab on September 5. This movie is about Iris Murdoch, one of 20<sup>th</sup> century’s great British novelists, who also died of Alzheimer’s. a week later, you will see *Awakenings*, one of Oliver Saks most acclaimed books about his own patients and his work with them. Role-play a movie critic the Chicago Tribune (for example, Michael Wilmington) or the Chicago Sun Times (for example, Roger Ebert), and write a 1000-word reflection providing a joint assessment of these two movies for its student readers. Pretend you are a book and movie critic and provide a positive/negative recommendation to read this book and see this movie and justify your recommendation. I will provide some good examples of book /movie reviews, so you can become familiar with content and style. I encourage you to support your opinions in this review using: your summer readings, Chicago trip, and your own personal experiences with neurologies like Alzheimer’s, if any. Note: Do not read published reviews of these movies already available in print or the web. Plagiarism will not be tolerated and I have copies of just about all published reviews

The two best-written reviews from this class will be submitted to EUKARYON for publication consideration, the undergraduate journal of life science scholarship at Lake Forest College.

You are required to get your draft read by Katie Hampton’06 or Katrina Brandis’06 at the Writing Center a week before it is due. I will reserve 10 points for this consultation. Make appointments ahead of time to see her.

### **2. On *The Ethical Mind***

Michael Gazzinaga wrote this compelling masterpiece on for the public to explain the emerging field of neuroethics. He defines neuroethics as “an examination of how we want to deal with the social issues of disease, normality, mortality, lifestyle, and the philosophy of living informed by our understanding of underlying brain mechanisms”. He proposes that this field should be an effort to educate and examine a brain-based philosophy of life. Your goal is to write a 1000-word reflection on whether you think your new understanding of neuroethics has influenced you in your philosophy of life. Do you find a role of wanting to understand the how the brain works to understand how you lead your life. Should neuroethics be an important consideration for any individual as part her /her liberal education in college? Feel free to agree or disagree on your level of support for neuroethics, and importantly substantiate your point of view with supportive examples from the textbook (and other sources, if applicable).

The two best-written reflections from this class will be submitted to EUKARYON for publication consideration, the undergraduate journal of life science scholarship at Lake Forest College.

You are required to get your draft read by Michael Zorniak’07 or Lisa Jeziorny’07 at the Writing Center a week before it is due. I will reserve 10 points for this consultation. Make appointments ahead of time to see one of them.

### **3. Ferocious Beauty: Genome**

You were presented with a rare opportunity to experience an artistic interpretation through dance and music of your DNA genome, its functions, and its mysteries. One again put on your shoes as a Critic, this time specialized in Theater and Dance, like Chris Jones (Chicago Tribune) or Hedy Weiss (Chicago Sun Times), and write a 1000-word review of this performance for the public. Be sure to address the quality and ability of the performance to educate the public about scientific information and ideas and to raise interest in scientific issues and the importance to know science to understand your life better. Should artists work with scientists to create more of such interdisciplinary connections? What were the strengths and the drawbacks?

The two best-written reflections from this class will be submitted to EUKARYON for publication consideration, the undergraduate journal of life science scholarship at Lake Forest College.

You are required to get your draft read by Michael Zorniak’07 or Lisa Jeziorny’07 at the Writing Center a week before it is due. I will reserve 10 points for this consultation. Make appointments ahead of time to see one of them.

#### **4. On PBS *The Secret Life of the Brain* Video Series**

The mystery begins in the womb four weeks after gestation. 500,000 brain cells are forming very minute. Eventually, there will be billions of cells and trillions of links, with every cell finding its place and every link carefully organized. How does this happen? Renowned filmmaker David Grubin draws on neuroscience's leading researchers and latest discoveries for answers. This series explores the startling new map of the brain that has merged from the past decade of neuroscience and shares a revelatory view of this complicated organ. You will not only learn startling new truths about the brain, but also voyage inside it.

Video 1: **The Baby's Brain:** Wider Than the Sky

Video 2: **The Child's Brain:** Syllable from Sound

Video 3: **The Teenage Brain:** A World of Their Own

Video 4: **The Adult Brain:** To Think By Feeling

Video 5: **The Aging Brain:** Though Many Lives

Your fourth response paper explores your ability to narrate. Imagine you are a neuron. Pick the part of the brain where you most like to reside! Tell the story of your life (from your birth as neuron till your death) as part of a human being who lives a long productive life but dies from a neurological disease that affects the part where you live and function. Use insights from the 5-video series on brain development and function during the different stages of a human's lifetime, and from classroom discussions. This creative writing adventure should be in first person and should explain biology in a lay simple style.

The best-written review from this class will be submitted to [EUKARYON](#) for publication consideration, the undergraduate journal of life science scholarship at Lake Forest College.

You are required to get your draft read by [Katie Hampton '06](#) or [Katrina Brandis '06](#) at the Writing Center a week before it is due. I will reserve 10 points for this consultation. Make appointments ahead of time to see her.

#### **5. On the BBC *The Mind Traveler: Oliver Saks* Video Series**

**Details of Response Paper TBA later.**

#### **6. On *A Beautiful Mind***

**Details of Response Paper TBA later.**

### **E. Four Simple Ways to Earn the Last 100 points: GO FOR IT!**

#### **1. Demonstrate Resource Use, Collaboration, & Intellectual Enthusiasm, 30 points**

How you learn is just as important as what you learn. If you demonstrate positive learning habits, good collaborative ability, and use the placed resources well, I will be happy to award you up to 30 points. Consult [Green Handout](#) on how to maximize your efforts.

#### **2. Attend Medical Colloquia Talks, 20 points**

I believe that it is important to expose undergraduates to the dedicated scientists who are working at the forefront of research. This semester I will invite several well-known medical experts and researchers to visit Lake Forest College and educate us about their efforts to solve diverse medical mysteries. If you attend any four of these talks fully and submit a one-page summary the next day by 4 pm, you will receive five points per talk. If you attend more than four and submit summaries, you will receive five bonus points for each talk towards your grade.

**Fall 2006 Medical Colloquium Talks include:**

September 27, 4 pm, Meyer Audi, Richard Morimoto, Northwestern University

October 25, 4 pm, Meyer Audi, Susan Leibman, University of Illinois Chicago

Nov 6, 4 pm, Meyer Audi, Dennis Molfese, University of Louisville

Nov 8, 4 pm, Meyer Audi, Susan Goldin Meadow, University of Chicago

Nov 30, 8 am, McCormick, Lester Binder, Northwestern University

Nov 30, 4 pm, McCormick, T Celeste Napier, Loyola Stritch School of Medicine

#### **3. Attend Brain Awareness Week Activities, 20 points**

For attending The Galileo Players performance and at least one BIO346 Teach-In or public defense.

#### **4. Complete FIYS106 Course Survey, 10 points**

I never teach the same course twice the same way. I constantly strive to improve my teaching, refining things that work and changing or removing things that are not effective. You are the best source of advice I use for such revisions. I expect and respect careful, thoughtful feedback from motivated, hardworking

students like you. So, I have designed a course survey and a course reflection statement that I will ask you to complete on the last day of class. By this date, you will have all your assignments graded and returned, so you can confidently and accurately self-evaluate your learning and accomplishments.

# YELLOW HANDOUT

## FIYS106: OUT-OF-CLASSROOM RESOURCES

### Peer Teachers

Alexandra Ayala'09 (For Lecture, Lab, Projects)      email: [beluks@lfc.edu](mailto:beluks@lfc.edu)    phone: 312-479-7167

Alexandra is your official peer teacher and is expected to participate in all aspects of this course. She is a biology major and pre-med student. She took this course last year and excelled in all aspects of it. She will attend all lectures and labs. She will hold weekly tutorials in the evenings that I encourage you to attend so that you can review your lecture and classroom discussions and be best prepared for your quizzes. She will also oversee all projects.

### Peer Writing Consultant (Writing Center):

Lisa Jeziorny'07

email: [jeziolm@lfc.edu](mailto:jeziolm@lfc.edu)    phone:

Michael Zorniak'07

email: [zornim@lfc.edu](mailto:zornim@lfc.edu)    phone:

Both are writing consultants at the LFC Writing Center. Both are senior biology majors, have very good understanding of my expectations, and are conducting senior theses in the Biology department this year. Both students have taken this course and other courses with me and done very well in them. For each response paper, you are expected to show your draft to Katrina or Katie a week before the paper is due and revise it to accommodate her criticisms before you hand in your final draft for grading.

### BIO346 Peer Mentors

Ryne Debo'08

Andrew Ferriar'08

Josh Haas'08

Lokesh Kukreja'08

Krista Kusinski'08

Solmaz Shadman'08

Lital Silverman'08

Mithaq Vahedi'08

Sina Vahedi'08

Stephanie Valtierra'08

This class will divide into three groups of five members for each for the two collaborative projects: Medical Ethics and Brain Awareness Week. To each of these groups, 2 or 3 BIO346 students will be placed as senior peer mentors. They are responsible for successful implementation of your projects and to aid your scientific understanding of the neuroscience subject matter. You are expected to involve them in all aspects of your group projects. In addition to helping you, they will engage in similar ethics and outreach projects in BIO346, the advanced neurobiology course. In fact, their outreach project for BIO346 is closely linked to your project (their research will simply be more in-depth).

### Reference Librarian

Nancy Bohm, reference librarian in Donnelley library, is specialized in sciences. She has been invaluable to my students in other courses. I encourage you to seek her advice on your search for relevant books, papers, web sources for your projects.

Email: [bohnm@lfc.edu](mailto:bohnm@lfc.edu)

Phone: 847-735-5057

**Library Research Guide:** <http://library.lakeforest.edu/resource/biology/biofy106.html>

This is handy course guide will help you find resources via the library and the internet for your research projects in this course. I expect you to make an appointment with Nancy to learn how to use the library and the course web page. We will discuss this page and library resources during a Week 2 library session.

# **GREEN HANDOUT**

## **FIYS106: *Tips on Resource Use, Collaboration, & Intellectual Enthusiasm***

### **You have used resources effectively if you**

Did not miss appointments with me and did not wait till the last minute to work on assignments  
Consulted regularly with peer teachers when you needed advice or help and attended peer teacher sessions  
Incorporated Writing Consultant's feedback on Response papers  
Took mock practical exam in preparing for anatomy exam  
Practiced your talks in front of peer teachers/peer mentors

### **You have collaborated well if you**

Contributed equally to developing each group project and participated equally in presenting each talk.  
Involved BIO346 peer mentor and accorded respect to senior peer.  
Provided support for your group members if they needed it.  
Did not complain about each other and tried to solve conflicts by talking to each other.  
Maintained healthy collegiality and supported other groups by enthusiastic participation in their efforts

### **You have demonstrated positive intellectual attitude if you**

Were attentive and participated actively in class and lab and pushed me to be even more effective  
Were prepared ahead in readings and were not absent or late for class, labs, or meetings  
Demonstrated curiosity and creativity in your assignments  
Showed personal initiative and leadership (plenty of scope to do so in this class)