MATH 216
STUDIES IN THE LITERATURE OF MATHEMATICS

SYLLABUS
SPRING 2009

Time: MW 1:40 - 2:55 PM
Place: Wilson 405
Instructors: Professor Hotchkiss
Offices: Wilson 411L
Office Phones: 572-5575
E-mail: photchkiss@wsc.ma.edu
Office Hours:
  Monday, Wednesday, Friday  9:15 - 10:15 am
  and by appointment
  Although I do not have office hours scheduled for Tuesday and Thursday, I often will be
  around on those days.

Texts: Proof: A Play by Auburn
   The Curious Incident of the Dog in the Night-Time by Haddon
   Factoring Humanity by Robert Sawyer
   The End of Mr. Y by Scarlett Thomas
   A Certain Ambiguity by Gaurav Suri and Hartosh Singh Bal
   Reality Conditions: Short Mathematical Fiction by Alex Kasman

COURSE DESCRIPTION: A study of mathematical literature devoted to selected topics from
fundamental scientific, philosophical, artistic, cultural, and technological questions, debates, and
revolutions. Source material will be taken from the widely varied genres of mathematical
literature: fiction, drama, essays, surveys, memoirs, exposition for lay audiences, history, and
philosophy. Class discussions, regular writing assignments, poster projects, and research papers
will actively involve students in creating literature which reflects both their
role in and their understanding of the mathematical experience. Prerequisites: ENGL0101 and at least one 100-level mathematics course.

CORE STATUS: This course satisfies the Literary and Philosophical Analysis Core Requirement
and you will receive core credit for this course.

THE COURSE: This is not a numbers, formulas, and algorithm course. These topics have their
place, but they have displaced the important roles mathematics has served in philosophy, the arts,
culture, and humanistic experience. These issues (among others) are, and have historically been,
both the life blood of mathematics and the driving forces responsible for its continued development.
Mathematics is a living, dynamic field which has played a fundamental role in many of the great
scientific, philosophical, artistic, cultural, and technological questions, debates, and revolutions.
The goal of this course is to illuminate the critical progress mathematics and mathematicians
have had in our understanding of these fundamental issues. We will explore several genres of
mathematical literature via texts, movies, plays etc., in the hope of expanding our understanding
of the nature of the mathematical and human experience.
GOALS:
• To deepen your understanding of how mathematics and the mathematical experience has played a role in the investigation of the human situation.
• To explore how mathematics has been used as a metaphor to discuss important philosophical issues.
• To learn about different genres of mathematical literature.
• To improve your analytical abilities such as reading, writing and reasoning.

STRUCTURE: In this course we will be exploring, through various genres of literature, mathematics and mathematicians, how mathematics is created or discovered, how it is perceived by society and its role in understanding the human condition. In addition we will explore in more detail some of the mathematics depicted in the literature. During class we will be discussing the assignment for that day and then engaging in cooperative group work on questions raised in class discussions.

ATTENDANCE: You are expected to attend class each day and are responsible for keeping your work up to date. I will take attendance every day and you are allowed only four absences (both excused and unexcused so use these wisely).

ASSESSMENT: Your work will be assessed in several ways:

Internet Submissions: Readings will be assigned for most class meetings. You must complete this reading prior to class. Additionally, every time you complete a reading assignment you will be required to electronically submit a reading log. This reading log will vary depending on the type of literature we are considering. Your reading log must clearly demonstrate that you have completed the reading and tried to analyze it critically. Typical components of the reading log can include:
- Questions you have about the reading.
- Connections between the reading and others.
- Importance of the reading to philosophical or literary questions, problems, or ideas.
- Speculations/Foreshadowing about what might happen in the remainder of the reading.
- Your initial impression of the reading; sort of a miniature review.

Your reading logs must be posted on the Class Discussion Page which can be accessed through the Portal (http://mywestfield.wsc.ma.edu) by 7 a.m. on the day we will consider the assigned reading. Your reading logs will be graded via the following rubric:

3 pts. Log clearly demonstrates that you have read the material and thought deeply about its relevance.
2 pts. Log clearly demonstrates that you have read the material, but you could think more deeply about its relevance and/or formulate clearer contributions for your log.
1 pt. Unclear whether you have made a real effort to read and analyze the material.
0 pts. Reading log either completely unacceptable or not completed.

I will try to regularly return your reading logs to you in class.

Essays and Projects: There will be several essays assigned during the semester. Since this a literature course, you should approach these writing assignments like you would for any other literature course. In particular, you should create several drafts of each assignment, making revisions and corrections are you write them. Your final draft should be typed and be free of spelling and grammatical errors. Please use the following resources to help with your writing assignments:
- The Reading and Writing Center in Parenzo 218, 572-5569. Appointments can be made online at the URL: http://www.rich17.com/wsc/
- Westfield State College Writers Guide at http://biology.wsc.ma.edu/wscwg

Class Participation: You will be expected to actively participate in class discussions.
Original Literature: As this is a literature course, it is perfectly appropriate for some of you to create your own mathematical literature. Some of us are not creative enough to do this effectively. If you would like to create your own mathematical literature in lieu of one of the assigned essays you should speak with me so we can make arrangements.

Poster: There will be one required poster project. It will be described in detail in the beginning part of the course. Posters will be due prior to spring break.

Final Exam: The final exam will be a final reflective essay discussing some common theme or themes in several of the texts we have read. The essay will be due during the exam period which is Friday, May 8 from 10:10 am - 12:10 pm.

ACADEMIC HONESTY: Learning is more than receiving a good grade. To truly learn you must struggle with the ideas, do the research and write up the assignment on your own. Handing in somebody else’s work as your own does not benefit you and wastes both your time and mine. It can also result in a failing grade on the assignment or for the course. See the College plagiarism policy (p. 42) in the Westfield State College Bulletin for more details.

GRADES: Course grades will be determined using the following percentages:

- Essays 30%
- Reading Logs 30%
- Posters 10%
- Class Participation 10%
- Final Essay 20%

SCALE: The minimum scale on all graded material will be the following straight scale.

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<td>A</td>
<td>95-100</td>
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<td>A-</td>
<td>90-94</td>
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<td>B+</td>
<td>87-89</td>
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<td>B</td>
<td>84-86</td>
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<td>B-</td>
<td>80-83</td>
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<td>C+</td>
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<td>C</td>
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Curves are generally not considered until the course grades are being assigned.

ADDENDUM:
- Cell phones are to be turned off during this class. If I catch you using a cell phone during class I reserve the right to confiscate it for the remainder of the period.
  - If someone needs to reach you in an emergency, they can call the department secretary at 572-5349 or public safety at 572-5262.
- This syllabus is subject to change with prior notification.
- There is a copy of this syllabus on the course page at http://www.wsc.ma.edu/math/faculty/hotchkiss/MA216/MA216.asp