

# CMSC/MATH 350: Ethical Issues in Mathematics and Computer Science (3 credits) Fall 2017

**Instructor:** Robert Marmorstein, 395-2185, marmorsteinrm@longwood.edu

**Lecture:** 4:00pm-5:15pm MW, Ruffner 354

**Office Hours:** 2:00pm-3:00pm MTWRF or by appointment, Ruffner 329

**Course Web Site:** <http://marmorstein.org/~robert/Fall2017/cs350.html>

*For an appointment outside regular office hours, contact me by e-mail twenty-four hours in advance.*

## Course Description:

Consideration of ethical implications of mathematics and computer science in society. Overview of ethical theory; case studies of situations illustrating ethical dilemmas. A knowledge of calculus and algorithms will be assumed.

This course is **writing** and **speaking** intensive and satisfies Goal 12 (Ethics and Philosophy).

## Course Objectives:

The student will:

1. Explain the differences between major ethical theories.
2. Use ethical principals to analyze technological decisions and policies.
3. Demonstrate an ability to write and speak about the ethical consequences of policy decisions.

## Textbook:

"Ethics for the Information Age", Michael J. Quinn, Sixth edition, Pearson,  
ISBN: 9780133741629

## Grading Policy:

**Late work will not be accepted** unless you have a medical condition or family emergency which prevents you from completing the assignment on time. In such circumstances, you do not need a doctor's note, but you must contact me by e-mail at least 12 hours before the assignment is due to explain the circumstances and arrange to make up the work.

## Cell Phones and Laptops:

Cell phones, music players, and laptops must be turned off and put away during lecture and class discussions. Violations of this policy will be considered an unexcused absence and may also affect your homework or participation grades.

## Food and Drink:

Please do not eat in class (it distracts me and the other students). You may bring water or other non-alcoholic beverages to class. I occasionally make exceptions to this rule for students who would otherwise miss lunch or have medical needs that require them to eat in class. If you feel that you need such an exception, you **MUST** make arrangements with me before you bring food to class. Violations of this policy will be considered an unexcused absence and may also affect your homework or participation grades.

**Attendance:**

This class is heavily discussion-driven and will require your regular attendance. I expect you to attend class unless you are sick or engaged in a school sponsored sports event or extra-curricular activity.

In accordance with Longwood policy, missing more than 10% of scheduled class time will result in loss of one letter grade. Absences for school events or illness may be excused if you make arrangements with me within 12 hours of the missed class. Students who miss more than 25% of classes, for any reason, may at my discretion receive an F for the course in accordance with Longwood policy.

**Course Requirements:**

Your grade will be determined by your performance on the course presentations(30%), the two assigned papers (45%), the final exam (10%), participation (5%), and homework exercises(10%). There will be no midterm exam in this course.

**Papers:**

You will write two papers for this class. Both papers will be position papers arguing for or against a particular policy issue using the ethical theories discussed in the class. Each paper will consist of at least 1500 words (not including bibliography and front matter) and will be submitted in OpenDocument form (that is, as a .odt file) following a standard format and layout. Each paper assignment will be submitted in three stages: an outline, a draft, and final paper. Each stage of the first paper will be worth 5% of your course grade. Each stage of the second paper will be worth 10% of your course grade. Papers will be graded for grammar, spelling, and syntax as well as for content.

Drafts and Final Papers will be evaluated using the rubric posted on my web site at <http://marmorstein.org/~robert/Fall2017/cs350/PaperRubric.odt>

**Presentations:**

The presentations in this class will take the form of in-class debates between pairs of students. They will be 30 minute debates using a modified Lincoln-Douglas debate structure. I will use the rubric located at

<http://marmorstein.org/~robert/Spring2017/cs350/DebateRubric.odt>

to evaluate them. This rubric combines elements of the department's speaking intensive rubric and common Lincoln-Douglas debate guidelines.

**Grading Scale:**

Letter grades will be assigned using the following scale. Note that there is no grade of D- in this class.

	A: 91-100	A-: 90	B+: 89	B: 81-88	B-: 80
C+: 79	C: 71-78	C-: 70	D+: 69	D: 64-68	F: Below 64

## Honor Code:

I take the honor code very seriously. Honor code offenses in this class will be dealt with harshly under the Longwood Honor Code. In addition to any penalties imposed by the Honor board, a student convicted of an Honor Code offense involving this class will receive a grade of **F** for the course. *You should consider all work in this class to be pledged work.*

There are two forms of cheating which you should be particularly careful about in this class:

### 1. Plagiarism

Plagiarism means taking credit for work which is not your own (see <http://www.lib.usm.edu/legacy/plag/whatisplag.php>). Most forms of plagiarism involve using sources without properly citing them. Since a very significant component of your grade comes from papers and presentations, it is especially important to be careful about plagiarism in this course. Keep in mind that it is important not only that you tell me what your sources are, but also that you make it clear where and how you used them in your work. Footnotes or in-text citations are the best way to do this.

### 2. Academic Dishonesty

As an instructor, I have imposed certain rules and guidelines to ensure that everyone receives a fair and appropriate grade. Attempts to circumvent these rules by (for instance, by copying the work of other students or using resources which I have prohibited on an exam) are a form of cheating and will not be tolerated.

All work in this class, except the presentations and class discussions, should be completed entirely on your own. However:

1. On papers, presentations, and in-class discussions, you **MAY** use material from the textbook as long as you properly cite it.
2. You **MAY** receive help on papers from the campus writing center, librarians, or tutors as long as you give credit for the help you have received (a note in the margin is fine).
3. You **MAY** discuss the general nature of your paper and/or topic with other students as long as you do not show each other your work or copy from each other.
4. Any help I give you during office hours or material I share in class may be used without special citation (however, if I point you to a resource such as a web site or article, I expect you to cite it properly).

**NOTE: The Honor Code applies not only to “Final Drafts” but to all work you submit, including “Rough Drafts” (and homework problems). In all your submissions, you must provide both proper citations and proper footnotes or endnotes.**

Please feel free to ask me questions about academic honesty at any time.

**Tentative Course Schedule:** *(Please check the course web site regularly for updated versions.)*

Week1 (Aug. 21 <sup>st</sup> – Aug. 23 <sup>rd</sup> )	Introduction to Ethics, Making a Logical Argument, Evidence and Formal Writing in the Technical Disciplines (Skim Chapter 1)
Week 2 (Aug. 28 <sup>th</sup> – Aug. 30 <sup>th</sup> )	Ethical Theories: Relativism and Deontology Divine Command Theory, Egoism, Kant, The Social Contract (Read Chapter 2, sections 1 through 6) <b><i>Last Day to Drop (Aug. 28<sup>th</sup> by 5pm)</i></b>
<b>Sept. 4<sup>th</sup></b>	<b>Labor Day: No Class</b>
Week 3 (Sept. 6 <sup>th</sup> )	Rules of Good Public Speaking, Introduction to Debate <b>(First Paper Outline Due: Sept. 8<sup>th</sup>)</b>
Week 4 (Sept. 11 <sup>th</sup> – Sept. 13 <sup>th</sup> )	Ethical Theories: Consequentialism and Virtue Ethics Utilitarianism, Virtue Ethics (Read Chapter 2, sections 7 through 11)
Week 5 (Sept. 18 <sup>th</sup> – Sept. 20 <sup>th</sup> )	Spam, Censorship, Free Speech, and Obscenity (Read Chapter 3) <b>(First Paper Rough Draft Due: Sept. 22<sup>nd</sup>)</b>
Week 6 (Sept. 25 <sup>th</sup> – Sept. 27 <sup>th</sup> )	Intellectual Property, Copyright, Copyleft Abandonware, Digital Rights Management (Read Chapters 4 and 5)
Week 7 (Oct. 2 <sup>nd</sup> – Oct. 4 <sup>th</sup> )	Privacy and Security, Social Media, Wiretapping, Hacking (Read Chapters 6 and 7) <b>(First Paper Final Draft Due: Oct. 6<sup>th</sup>)</b>
Week 8 (Oct. 9 <sup>th</sup> – Oct. 11 <sup>th</sup> )	Catchup and Review
<b>Oct. 16<sup>th</sup> – Oct. 18<sup>th</sup></b>	<b>Fall Break: NO CLASS</b>
Week 9 (Oct. 23 <sup>rd</sup> – Oct. 25 <sup>th</sup> )	Presentations <b>(Second Paper Outline Due: Oct. 27<sup>th</sup>)</b>
Week 10 (Oct. 30 <sup>th</sup> – Nov. 1 <sup>st</sup> )	Presentations
Week 11 (Nov. 6 <sup>th</sup> – Nov. 8 <sup>th</sup> )	Presentations <b>(Second Paper Rough Draft Due)</b>
Week 12 (Nov. 13 <sup>th</sup> – Nov. 15 <sup>th</sup> )	Presentations
Week 13 (Nov. 20 <sup>th</sup> )	Professional Ethics (Read Chapters 8 and 9) <b>(Second Paper Final Copy Due: Nov. 21<sup>st</sup>)</b>
Week 14 (Nov. 27 <sup>th</sup> – Nov. 29 <sup>th</sup> ) Dec. 8 <sup>th</sup>	Catchup and Review <b>Final Exam (Friday, 3:00pm-5:30pm)</b>