

COURSE OUTLINE

FALL 2012

1. Pure Mathematics 527/627 – Computational Number Theory

<u>Lec</u>	<u>Day</u>	<u>Time</u>	<u>Instructor</u>	<u>Office</u>	<u>Phone</u>	<u>Email</u>	<u>Office Hours</u>
01	MWF	15:00-15:30	David Roe	MS 457	403-220-3952	roed.math@gmail.com roed@ucalgary.ca	TBA

Course Website or Blackboard course name:

<http://sage.ucalgary.ca>

PMAT 527 L01 - (Fall 2012) - Computational Number Theory

PMAT 627 L01 - (Fall 2012) - Computational Number Theory

2. Prerequisites: Pure Mathematics 427 or 429 or consent of the Division.

(see Section 3.5C of Faculty of Science www.ucalgary.ca/pubs/calendar/current/sc-3-5.html

and Course Descriptions: www.ucalgary.ca/pubs/calendar/current/course-desc-main.html)

3. Grading: The University policy on grading and related matters is described in sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course, the following weights will be used:

<i>Homework</i>	[7]	40 %
<i>Midterm Test</i>	[1]	20 % (October 15, 2012.)
<i>Final Project</i>		40 %

The various components above will be assigned a percentage score and will be combined with the indicated weights to produce an overall percentage in the course. The conversion table between course percentage and letter grade will be provided at least one week before the withdrawal deadline.

4. Missed Components of Term Work. The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in section 3.6: www.ucalgary.ca/pubs/calendar/current/sc-3-6.html. It is the student's responsibility to be familiar with these regulations. See also www.ucalgary.ca/pubs/calendar/current/e-3.html.

5. There are no out-of-class-time activities scheduled for this course.

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME ACTIVITY. If you have a conflict with any out of class time activity, please inform your instructor at least one week in advance of the activity so that other arrangements may be made for you.

6. Textbook: We will be using two texts for this course.

- V. Shoup. A Computational Introduction to Number Theory and Algebra. Cambridge: Cambridge UP, 2008 (free online).
- R. Crandall and C. Pomerance. Prime Numbers: A Computational Perspective. Dordrecht: Springer-Verlag, 2006. (available for download from the library).

7. Examination Policy: Calculators and computers will not be allowed, but you will be allowed one page of hand-written notes. Students should also read the Calendar, Section G, on Examinations: www.ucalgary.ca/pubs/calendar/current/g.html

8. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- (a) **ACADEMIC MISCONDUCT** (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under K. Student Misconduct (<http://www.ucalgary.ca/pubs/calendar/current/k.html>) to inform yourself of definitions, processes and penalties.
- (b) **ASSEMBLY POINTS** in case of emergency during class time. Be sure to **FAMILIARIZE YOURSELF** with the information at <http://www.ucalgary.ca/emergencyplan/assemblypoints>.

- (c) **ACADEMIC ACCOMMODATION POLICY.** Students with documentable disabilities are referred to the following links:
Calendar entry on students with disabilities: <http://www.ucalgary.ca/pubs/calendar/current/b-1.html>
Disability Resource Centre: <http://www.ucalgary.ca/drc/>
- (d) **SAFEWALK:** Campus Security will escort individuals day or night (<http://www.ucalgary.ca/security/safewalk/>). Call **220-5333** for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- (e) **FREEDOM OF INFORMATION AND PRIVACY:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, **students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page.** For more information see also <http://www.ucalgary.ca/secretariat/privacy>.
- (f) **STUDENT UNION INFORMATION:** VP Academic **Phone:** 220-3911 **Email:** suypaca@ucalgary.ca.
SU Faculty Rep. **Phone:** 220-3913 **Email:** sciencerep@su.ucalgary.ca **Website** <http://www.su.ucalgary.ca/>
Student Ombudsman: <http://www.ucalgary.ca/provost/students/ombuds>
- (g) **INTERNET and ELECTRONIC COMMUNICATION DEVICE Information.** You can assume that in all classes that you attend, **your cell phone should be turned off.** Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.