Mathematics Special Topics B (2 units)

MATH6007 (S1 or S2 start)

Course Coordinator: Dr Yao-Zhong Zhang
MATH6007
Mathematics Special Topics B (2 units)
Semester 1/2 2005

Brief description of course content (e.g. handbook description)

Advanced mathematics topics, not covered in other courses and available under special circumstances. Endorsement of Head of School is required for enrolment.

Course Coordinator

Name: Dr Yao-Zhong Zhang
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Email: yzz@maths.uq.edu.au
Consultation hours or Office hours: By appointment

Web page: The course profile and course material can be found on the web at the following address: http://www.maths.uq.edu.au This also contains up-to-date news about the course material and announcements for students. Please check this regularly during the semester.

Class contact hours: as required/specified by Lecturer who gives the course.

Assumed background/Entry Requirement:

Permission by Head, School of Physical Sciences.

Application Procedure: Students who wish to do the special topics must get permission from the Head of School. Once approved, students can enrol the course after filling a form available from the School of Physical Sciences.
Course goals/rationale:
On completing this course students will:

- Obtain a sound knowledge of the specific topic area.
- Develop special skills useful for research project and be able to locate and use information sources.

Graduate Attributes:
The following graduate attributes will be developed in the course –

1. In-Depth Knowledge of the Field of Study

- A comprehensive and well-founded knowledge of the topic of study.
- An understanding of the topic in a broad scientific context and its relation to other scientific disciplines.
- An international perspective on the field of study.

2. Effective Communication

- The ability to collect, analyse, and organise information, ideas, and experimental data and to convey those ideas clearly and fluently, in both written and spoken forms.
- The ability to interact effectively with associates and peers in order to work towards a common outcome.
- The ability to select and use the appropriate level, style and means of communication.

3. Independence and Creativity

- The ability to work and learn independently.
- The ability to generate ideas and think creatively for solution to problems posed within the topic.
- The ability to identify problems, create solutions, innovate and improve current practices.

4. Critical Judgement

- The ability to define and analyse problems.
- The ability to apply critical reasoning to issues through independent thought, and informed judgement.
- The ability to evaluate opinions, make decisions and to reflect critically on the justifications for decisions.

5. Ethical And Social Understanding

- An appreciation of the philosophical and social contexts of the discipline.
- A knowledge and respect of ethics and ethical standards in relation to the topic study.
For more information on the University policy on development of graduate attributes in courses, refer to the web 

**Teaching and Learning Methods**

As set out by special topics lecturers.

**ASSESSMENT**

**Required assessment tasks:**

Exam and/or assignments

**Mathematics Discipline Policy on special topics**

Students should take special topics course only under special circumstances. In this case the supervisor usually advise the student as to which special topics might be helpful in relation to research project.

**Summary of Assessment Dates**

As set out by special topics lecturers.

**Criteria for the award of grades**

Your grade for this course will be determined by which of the following levels of achievement that you consistently display in the items of summative assessment.

Grade of 7 (86-100%): the student demonstrates an excellent understanding of the thesis topic with an outstanding report on the research. Excellent critical analysis and an ability to synthesise information from a variety of sources. The report is free of errors and factual inaccuracies.

Grade of 6 (75-85%): the student demonstrates a comprehensive understanding of the thesis topic and has presented a competently written report on the outcomes of the research. Very good critical analysis including references from a variety of sources. The report has very few errors and factual inaccuracies.

Grade of 5 (65-74%): the student demonstrates a good understanding of the thesis topic and has presented an entirely satisfactory written report on the outcomes of the research. Competent critical analysis and referencing. The report has few errors or factual inaccuracies.

Grade of 4 (50-64%): the student demonstrates a satisfactory understanding of the thesis topic and has presented a satisfactory written report on the outcomes of the research. Adequate analysis and referencing. The report has some errors and factual inaccuracies.
Grade of 3 (46-49%): the student demonstrates some understanding of the thesis topic but has presented an inadequate written report on the outcomes of the research. Some attempt at analysis of material and referencing. Some of the information included is inaccurate or irrelevant.

Grade of 2 (26-45%): the student does not demonstrate a satisfactory understanding of the thesis topic. The written report on the outcomes of the research is limited, with inadequate analysis and referencing.

Grade of 1 (0-25%): the student demonstrates very limited understanding of the theory of the thesis topic with a very limited written report. Very limited understanding of key concepts.

**Assessment policy**

*Nonconformity with assessment requirements set by special topics lecturers is unacceptable.* Students should be familiar with the rules which relate to assessment in their degrees as well as general university policy such as found in the General Award Rules. These are set out on myAdvisor on the UQ website at http://www.uq.edu.au/student/GeneralRules2005/2005GARs.htm

**Plagiarism:**

The thesis project is expected to be the student’s own work. Students are encouraged to study together and to discuss ideas, but this should not result in students handing in the same or similar assessment work. Where it is necessary to include the work of others in the report their contributions should be acknowledged. This includes diagrams copied from books or papers.

The University has adopted the following definition of plagiarism:

“Plagiarism is the action or practice of taking and using as one’s own the thoughts or writings of another, without acknowledgment. The following practices constitute acts of plagiarism and are a major infringement of the University's academic values:

- Where paragraphs, sentences, a single sentence or significant parts of a sentence are copied directly, and are not enclosed in quotation marks and appropriately footnoted;
- Where direct quotations are not used, but are paraphrased or summarised, and the source of the material is not acknowledged either by footnoting or other simple reference within the text of the paper; and
- Where an idea which appears elsewhere in printed, electronic or audio-visual material is used or developed without reference being made to the author or the source of that material.”

When a student knowingly plagiarises someone’s work, there is intent to gain an advantage and this may constitute misconduct in the University of Queensland Statute No 4 (Student Discipline and Misconduct) 1999.
Supplementary examinations

There are no supplementary examinations in this course.

Special examinations

If a student is unable to sit a scheduled examination for medical or other adverse reasons, she/he can and should apply for a special examination. Applications made on medical grounds should be accompanied by a medical certificate; those on other grounds must be supported by a personal declaration stating the facts on which the application relies.

Applications for special examinations for central and end-of-semester exams must be made through the Student Centre. Applications for special examinations in school exams are made to the course coordinator.

More information on the University’s assessment policy may be found at http://www.uq.edu.au/hupp/index.html?page=25113&pid=25075

EPSA Faculty policy on the award of special exams may be found via the Faculty Guidelines on Examinations from the EPSA student page http://www.epsa.uq.edu.au/index.html?page=7640&pid=7563

Feedback on assessment:

You may request feedback on assessment in this course progressively throughout the year from your project supervisor. Feedback on assessment may include discussion, written comments on work, model answers, lists of common mistakes and the like.

Information on the University’s policy on access to feedback on assessment may be found at http://www.uq.edu.au/hupp/index.html?page=25114&pid=25075

EPSA Faculty policy on assessment feedback and re-marking may be found at http://www.epsa.uq.edu.au/index.html?page=7674&pid=7564

Textbook and references

As specified by special topics lecturers.
Library contact:
The liaison librarian for Physical Sciences is located in the Dorothy Hill Physical Sciences and Engineering Library in the Hawken Building and may be consulted for assistance in the course:

Leith Woodall
Email: L.woodall@library.uq.edu.au
Extension: 52367

Students with disabilities:
Any student with a disability who may require alternative academic arrangements in the course is encouraged to seek advice at the commencement of the semester from a Disability Adviser at Student Support Services.

Assistance for Students:
Students with English language difficulties should contact the course coordinator or tutors for the course.

Students with English language difficulties who require development of their English skills should contact the Institute for Continuing and TESOL Education on extension 56565.

The Learning Assistance Unit located in the Relaxation Block in Student Support Services. You may consult learning advisers in the unit to provide assistance with study skills, writing assignments and the like. Individual sessions are available. Student Support Services also offers workshops to assist students. For more information, phone 51704 or on the web http://www.sss.uq.edu.au/index.html.

Student Liaison Officer:
The School of Physical Sciences has a Student Liaison Officer as an independent source of advice to assist students with resolving academic difficulties. The Student Liaison officer during 2005 is Assoc. Prof. Peter Adams, Room 547 Priestley building, (email pa@maths.uq.edu.au)

Program of work for the semester:
As set out by special topics lecturers.