

Integrated Studies II

HCCS MSc Course Outline

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Objectives

The aim of this course is to introduce theoretical and practical concerns involving group working and interdisciplinarity. It will aim to integrate topics covered in the other courses of the HCCS MSc.

Specific aims are to:

- Understand and reflect on theories and practices of group processes, especially team working, communication and collaboration
- To carry out a range of group projects, so as to put theory into practice

| Week | Topic |
|------|--|
| 1 | Introductory Session (1 hour) |
| 2 | Interdisciplinarity 1 |
| 3 | Interdisciplinarity 2 |
| 4 | Group Project Introduction |
| 5 | Group Processes |
| 6 | Project Management |
| 7 | Interdisciplinary Communication and Representation 1 |
| 8 | Interdisciplinary Communication and Representation 2 |
| 9 | Project Update |
| 10 | Project Presentations |

Course Organisation

There will be an introductory one-hour followed by nine two-hour seminars starting in week 1 on Thursdays 09.00 until 10.50 in RB-23 (Russell Building)

Assignments

The course assignment is a portfolio consisting of three pieces of work. Two of these will be based on group project work.

The pieces of coursework are:

1. A 1000 word written report due week 7 (30% assessed marks):
 - “What is Interdisciplinarity?”

Due: Thursday 4pm on 23rd February 2006
2. A group presentation in class in week 10 (30% assessed marks)
 - Based on the development of an alternative website for the HCCS course. The project involves all students taking part in designing Web Pages for the site, including mini-student profiles for each person. Each student will need to present an overview of their contribution to the project and state how they collaborated with the others. The presentations should include a demonstration of the website in action, and last about 5 minutes per student.

Due: Thursday 9am on 16th March.
3. A **2000 word** critical personal document (40% assessed marks):
 - Detailing the experience and lessons learned in working in collaboration with others on the alternative HCCS website project. It should be referenced and address such issues as working with others in a group, leadership and group decision making processes, significant influences on group processes, sub-groups formed for sub-tasks, time-management, how the web and different resources were utilised for research, how the different team-member skills helped to produce the finished project, and the various modes of in-group communication that were employed. You should draw on information recorded in your personal project diaries and from other sources, such as Smartgroups contributions by team-members. Each student will draw on their own experiences in order to write an overview of their contribution to the project and how they collaborated with others.

Due: Wednesday 12pm (midday) on 19th April 2006.

Seminar Organisation

Seminar 1 – Introductory Session

This introductory session will last approximately one hour and will involve a discussion of the course aims and topics as well as introducing the assigned reading material. In-seminar presentations on the reading material will also be assigned.

Seminar 2 and 3 – Interdisciplinarity

What is interdisciplinarity? Why is it desirable and why is it difficult to achieve? In particular the focus will be on the problem of working together in interdisciplinary software design teams where there are differences of (i) preferred method, (ii) terminology and (iii) expertise in doing design work. The focus will be on these problems in practice and how they can be overcome. The first seminar will address theoretical issues together with a case study from the video game industry. The second week will involve a role-playing session, where students will act out various roles in a hypothetical

team project. Both seminars will also incorporate summary presentations of the course reading.

Reading Material:

- 1) Crosby, O. (2004). Working So Others Can Play: Jobs in Video Game Development. *Occupation Outlook Quarterly*, January 2004.
- 2) Kim, S. (1990). Interdisciplinary Cooperation. In B. Laurel (ed.), *The art of human-computer interface design*, p31-45.
- 3) Scaife, M., Curtis, E. & Hill, C. (1994). Inter-disciplinary collaboration: a case study of software development for fashion designers. *Interacting with Computers*, 6(4), 395-410.
- 4) de Young, L. (1996) Organisational support for software design. In T. Winograd (ed.). *Bringing Design to Software*, p253-273.
- 5) Burns, C. & Vincente, K.J. (1995). A framework for describing and understanding interactions in design. *DIS'95, ACM*, p97-103.

Seminar 4 – Introduction to Group Projects

In this seminar the students will be introduced to their group assignment to develop an alternative website for new students to find out more about the HCCS course. The students need to decide how to distribute the workload, as well as coordinate and collate the material.

Seminar 5 – Group Processes

In this seminar students will be introduced to issues concerned with group processes, team working, human-relationships, group dynamics and people management. The focus will be on the processes involved, e.g. brainstorming, problem-solving, and communication. This seminar will also incorporate summary presentations of the course reading.

The session will also include time for students to collaborate and coordinate their work on the group project.

Reading Material:

- 6) Fallows, J. (2000). Inside the Leviathan: A short and stimulating brush with Microsoft's corporate culture. *The Atlantic Monthly*, February 2000, p34-38.
- 7) Kraut, R.E., Fish, R., Root, R.W., & Chalfonte, B. (1990). Informal communication in organisations: Form, function and technology. In Oskamp, S. and Spacaman, S. (eds.), *People's reactions to technologies in factories, offices and aerospace*, Sage Publications, p145-199.
- 8) Gabarro, J.J. (1987). The development of working relationships. In Lorsch (ed), *Handbook of Organisational Behaviour*, p172-189.

Seminar 6 – Project Management

In this seminar students will be introduced to methods of managing projects and time. The use of GANTT charts, flow charts, etc. will be covered. Other topics include: how to run a meeting and take notes, how to carry out different phases of a projects and how to cope with projects over-running. This seminar will also incorporate summary presentations of the course reading.

The session will also include time for students to collaborate and coordinate their work on the group project.

Reading Material:

- 9) Jay, A. (1976). How to run a meeting. *Harvard Business Review*, 54(2), 43-57.
- 10) Ancona, D. & Caldwell, D.F. (1990). Information technology and work groups: the case of new product teams. In J. Galeger, R.E. Kraut, & C. Egidio (eds.), *Intellectual Teamwork*, p173-190.

Seminars 7 and 8 – Interdisciplinary Communication and Representation

In these seminars students will be introduced to the issues concerning communication within a design team in which the members are from different disciplines such as software engineering, sound design, graphic design and marketing. How do new professionals become enculturated into their profession and learn to 'talk the talk' like their more experienced colleagues? To what extent do disciplines and professions exclude others through the use of slang, jargon, techspeak and other forms of discipline specific linguistic register? How can communication within teams and organisations break down?

Students will also be introduced to technology/knowledge transfer. How do different members of the design team communicate their ideas to each other and how is this recorded? What kinds of representations are used and how effective are these (systems specifications, technical reports, etc.)? What gets missed out and is vulnerable to misinterpretation? What works best and why? The seminars will also incorporate summary presentations of the course reading.

The sessions will also include time for students to collaborate and coordinate their work on the group project.

Reading Material:

- 11) Langewiesche, W. (2003). Columbia's Last Flight. *The Atlantic Monthly*, November 2003, p58-87.
- 12) Eraut, M. (2003). Learning During the First Three Years of Postgraduate Employment – The LiNEA Project. Symposium 'Supporting Learning at the Workplace', 10th Annual Conference of the European Association for Learning and Instruction (EARLI), Padua, August 2003. Obtainable from <http://www.sussex.ac.uk/usie/linea/timetable.html>.
- 13) Lemke, J.L. (1982). Talking Physics. *Physics Education*, 17, p263-267.
- 14) Orr, J. (1996). *Talking about machines: an ethnography of a modern job*. Cornell University Press, Ithaca NY. P125-143.
- 15) The Jargon File (<http://www.catb.org/~esr/jargon/>)
- 16) See also examples of Hacker Folklore (<http://www.vuylsteker.net/Formation/Doc/folklore.html>)

Seminar 9 – Project Work Update

In this session the students will discuss how to present their group work and how they plan to 'write up' their third assignment together (the reflexive document).

Seminar 10 – Project Presentations

Each group will be expected to give a presentation of their final website, with each group member contributing at least five minutes of discussion on their contribution to the group project. This presentation will be formally assessed.