

Instructor: Larry Katz
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Office Hours: Monday-Friday, By appointment

Room: KNB 152A
Days: Monday, Wednesday
Time: 2:00 – 3:50
Course Website: Blackboard

Instructor: Bill Richardson
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Office: KNB 251
Office Hours: Monday – Friday, 8:30 – 4:30

**Course
Description:**

An introduction to the use of the computer in kinesiology which involves hands-on experiences with selected software packages.

**Course
Objectives:**

- Attain a basic level of computer awareness – how computers work, how computers are controlled, the impact of computers in kinesiology and education.
- Gain an awareness of the information storage and retrieval capabilities of the computer.
- Be introduced to different types of computer equipment, such as interactive boards, touch screens, memory sticks, scanners, video digitization.
- Receive hands-on experience with general applications such as spreadsheets, databases, and presentation software.
- Receive hands-on experience with a number of kinesiology applications – physical fitness assessment, diet analysis, game statistics, game simulation, computer assisted learning, scheduling, motion analysis, video report cards, and virtual reality.
- Be introduced to techniques of instructional design in kinesiology using computers and multimedia.
- Be introduced to the development and evaluation of computer software.
- Be introduced to the area of telecommunications and networking.
- Gain an awareness of what to consider when buying computer hardware and software.
- Discuss the potential for innovation and computer technology in Sport and Kinesiology.

**Required
Reading
Materials:**

- KNES 381 Lab Guide (available on Blackboard for each assignment)
 - The lab guide is designed to provide an introduction to some of the applications used in the course. Information is provided in class that is needed for successful completion of assignments.
- KNES 381 Blackboard site – blackboard.ucalgary.ca

**Contacting
the
Instructor:**

Students requiring assistance are encouraged to speak with their instructor during class or office hours. Should you wish to meet with the instructor outside of office hours, please phone or email the instructor to make an appointment.

Email, while commonly used, does limit the effectiveness of communications and may not be the best way for instructors to answer student questions. Therefore, the instructor may request a telephone call or personal meeting. Your instructor will inform you as to his/her expectations about emails.

Grading Scale:

Grade	Percent	Grade Point Value	Description
A+	98-100	4.00	Outstanding
A	95-97	4.00	Excellent - superior performance, showing comprehensive understanding of subject matter.
A-	90-94	3.70	
B+	85-89	3.30	
B	80-84	3.00	Good-clearly above average performance with knowledge of subject matter generally complete.
B-	75-79	2.70	
C+	70-74	2.30	
C	65-69	2.00	Satisfactory – basic understanding of the subject matter. Grade point average below 2.00 is not sufficient for promotion.
C-	60-64	1.70	Minimum grade required if needed as a prerequisite course.
D+	55-59	1.30	
D	50-54	1.00	Minimal pass – marginal performance; generally insufficient preparation for subsequent courses in the same subject.
F	49 & below	0	Fail – unsatisfactory performance or failure to meet course requirements.

Evaluation of Course Content:

Major Paper	25%
Laboratory Assignments	43%
Computer Tools	15%
Podcast Quizzes	2%
Final Exam	15%
Total	100%

Major Paper (25%)

Discuss the current and future applications of computer technology to kinesiology in one of the topics listed below. The review should look at current applications of technology in the field, identify existing software, and discuss the future of technology in the field. Include a table of contents, references, and a software list as an appendix. A sample student paper is on the KNES 381 Blackboard site. Choose a topic as soon as possible and start planning and collecting information immediately. A maximum of three students will be allowed to do each topic. A web page on the course Blackboard site is available to select your three topic choices. Please submit your choices by September 17th. Topics will be assigned as received.

Note: All references should be done using APA format. See the course Blackboard site for information on APA formatting.

The Appendix Excel template will be submitted on Blackboard October 12, 2012.

The completed paper will be submitted on Blackboard and printed copy on November 9, 2012.

Topics:

- Biomechanics and Motion Analysis in ...
- Computer-Aided Learning in the Physical Education Classroom/Gymnasium
- Fitness, Exercise, and Lifestyle Assessment and Instruction
- Game Statistics and Game Simulations
- Modeling and Simulation in Sport
- Multimedia in Sport and Physical Education
- Recreation Facility Management, Inventory Control, and Facility and Sport Scheduling
- Robotics and Sports
- Sport Medicine, Sport Nutrition or Sport Psychology
- Sport Skills Analysis and Evaluation
- Virtual Reality and Rehabilitation
- Virtual Reality and Sports
- Other approved topics

Evaluation Guide:**Overview and Current Applications – 35%**

This should be a discussion of how computers and electronic technologies are currently being used in your subject area. Include a table of contents with page numbers and an introduction that gives an overview of the purpose of your paper. References should be used to support your content. There should be both print and electronic references. All applications included in the appendix should be mentioned in this section.

Future Applications – 20%

Discuss how you feel computers and electronic technologies will be used in your subject area in the next five to ten years. Include specific examples and use references where possible to support your ideas. In addition to reporting what is likely to happen, try to envision what could happen with unlimited resources and a good imagination.

References – 15%

All references should be in APA format. There should be references from peer-reviewed publications, either electronic or print, as well as popular press publications or on-line sites.

Appendix – 30%

This section should list all applications that could be found in your subject area. This may include software, hardware, and web sites. For most subject areas, 20-40 web-site, software and hardware applications should be included. If more than this has been found, it may be necessary to refine the paper to a sub-topic within the area. Include:

- Developer - The name of the company or person who developed the title.
- Title - The name of the software or hardware.
- Pub Year - Ignore this field, it is not needed.
- Version - Which version of the software/hardware are you discussing.
- Software or Hardware - Put in either Software or Hardware.
- Operating System - What operating system(s) and what versions does the title work on?
- Equipment Required - What equipment does the title require to work. Do not include hardware that is part of the package.
- URL - The web address of the developer of the title.

Not all items may be relevant for every application.

All items in the appendix will be recorded in the Software Appendix form available on the course Blackboard site. The completed form will also be uploaded into Blackboard.

Note: Approval of an instructor must be obtained before refining or changing the topic material.

Laboratory Assignments

The laboratory portion of the course consists of seven assignments taken from the KNES 381 Laboratory Manual. Details of each assignment are in the manual.

Computer Tools

Students will be introduced to a number of applications beyond those used for the laboratory assignments. All students will do three specified in-class mastery assignments. If an assignment is incomplete or incorrect, the student will be given an opportunity to correct the work. In addition, each student will be responsible for an additional mastery assignment. Students may use applications demonstrated in class or applications of their choice (with approval). If the assignment is incomplete or incorrect the student will be given an opportunity to re-submit.

Students have the option of participating in a research project (maximum two hours). The option is worth a bonus mark of two percent.

Podcast Quizzes

There are four podcast available on Blackboard that provide background for the course and preparation for Tools assignments. Each podcast has a series of quiz questions on Blackboard.

Take Home Final

For the take home final, students will have a choice of essay type questions or an integrated teaching project.

Due date: December 12, 2012.

Assignment Summary

	Assignment	Due	Value	Lab Hand-in Format
	Major Paper Topic	September 17		Blackboard
Lab # 1	Electronic Information Retrieval	September 19	3	Blackboard
Tools # 1	Dartfish	September 19, 24	5	In-class
Lab # 2	Software Evaluation	September 26	5	Paper/Blackboard
Lab # 3	Presentation Software	September 26	5	Blackboard/Paper
	Major Paper - Appendix	October 12		Blackboard
	Completed paper	November 9	25	Paper/Blackboard
Tools # 2	Graphics	September 26 - October 1	4	In-class
Tools #3	MovieMaker / iMovie	October 22, 24	4	In-class
Lab #4	Computer Demo Program	October 29	10	Presentation/Paper/Blackboard
Lab # 5	World Wide Web Page Creation (Presentation)	November 21	10	Presentation/Blackboard (link)
Lab # 6	Spreadsheet	November 26	5	Paper/Blackboard
Lab # 7	Budget	December 3	5	Paper/Blackboard
	Podcast Quizzes		4	Blackboard
	Take Home Exam	December 12	15	Paper/Blackboard (link)

Notes:

- All paper assignments are to be placed in the KNES 381 drop box outside the faculty office in the atrium area.
- There will be a 25% penalty for labs handed in after the due date without a pre-approved deferral or medical problem.
- With approval, students may re-write one laboratory assignment without penalty. Any additional re-writes will be treated as a late hand-ins and will be given a 25% penalty, in addition to any other deductions.
- The major paper, software evaluation, and final exams will not be returned, please make a copy for your self.
- Documentation is **required** for each demonstration and must be handed in **before** each demonstration.

Late Policy:

- All assignments are due by midnight on the due date **except the demonstration labs listed below** which are due by 2:00 p.m. on the due date.
- During class time students will demonstrate the following projects to their classmates:
 - Software Evaluation Presentation (Lab #2)
 - Computer Demonstration Program (Lab #4)
 - World Wide Web (Lab #5)
- Your PowerPoint presentation review will be due one week after you have done your presentation.

Course Content and Tentative Outline:

- **Week One:**
Orientation, basic computer terms, memory devices, Dropbox, Blackboard, what to consider when buying a computer. Introduction to computer assisted learning (CAL), Use of research databases.
- **Week Two:**
Information storage and retrieval. Presentation programs, evaluation of computer applications. Dartfish workshop.
- **Week Three:**
Dartfish workshop. Conversion of visual information to digital format. Considerations involved in creating digital media. Computer graphics workshops.
- **Week Four:**
Computer graphics workshops. Introduction to telecommunications – networks (Internet). Introduction to computer languages (BASIC), computer bugs, memory boxes, BASIC programming.
- **Week Five:**
BASIC programming.
- **Week Six:**
Interface design in programming. CAL, simulation and virtual reality
- **Week Seven:**
Digital video creation workshop.
- **Week Eight:**
BASIC program demonstrations. World Wide Web introduction, Web-page creation, Web authoring tools.
- **Week Nine:**
Web site development and interface design.
- **Week Ten:**
Introduction to spreadsheet software.
- **Week Eleven:**
Spreadsheet charting. Web project demonstrations.
- **Week Twelve:**
Budgeting using spreadsheets, advanced spreadsheet operations. Tour of research labs.
- **Week Thirteen:**
Introduction to databases. Legal, ethical and security considerations in using databases. Physical Education and computers, exergaming, future developments in information technology and their affects in kinesiology.

Supplementary Course Information

In accordance with the University of Calgary Calendar

Instructor Responsibilities

This should be read and deleted before you submit it for review.

Each instructor responsible for a course is required to make a course outline available to each student no later than first meeting date for the course. It is expected that the outline will be available as a Web based document or through the learning management system (i.e. Blackboard). If it is not, a paper version of the outline will be handed out to every student at the first meeting of the class, and made available for those unable to attend the first class. Printing of course outlines can be obtained through Laura Styler, Assistant Administrator lstyler@ucalgary.ca.

Academic Accommodation Awareness Information:

It is the student's responsibility to request academic accommodation. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 220-8237. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the commencement of this course. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation.

Plagiarism/Cheating/Other Academic Misconduct: (see Calendar)

A single offence of cheating, plagiarism, or other academic misconduct is a serious act that will not be tolerated in the Faculty of Kinesiology. Penalties for such acts will be determined by the Dean and may result in a failing grade, probation, suspension, or expulsion. Any student who is uncertain if an action falls into this category should consult the instructor and/or the Calendar.

Midterm Exam Policy:

The Faculty of Kinesiology policy is that all students are expected to write midterm exams on the dates listed on the course outline. Special accommodation may be granted by the instructor in exceptional circumstances only which include illness, participation in athletic events (varsity, national or international), domestic affliction, and religious conviction. It is the student's responsibility to supply proper documentation and/or notification prior to the originally scheduled midterm to support their circumstance. Personal travel plans and arrangements are not valid reasons for requesting a special accommodation for a midterm exam. Failure to comply with this policy will result in a grade of zero for the midterm and possible failure in the course.

FOIP Policy:

Please note that the University is under the jurisdiction of the provincial Freedom of Information and Protection of Privacy (FOIP) Act. Please refer to the website for details: <http://www.ucalgary.ca/secretariat/privacy>

Internet and Electronic Communication Device Information:

Any surfing of the Internet during lectures that is not directly related to the class discussion is distracting and strictly forbidden. Additionally, the use of any electronic devices (e.g., cellular phones, Blackberrys) for e-mailing, texting, etc. is strictly prohibited. Please turn OFF your phone before the beginning of each lecture.

Instructors have the authority, at the discretion of the dean of their faculty, to require that specific course assignments, term papers and academic exercises be submitted in an electronic format. Instructors cannot require that multiple copies of an assignment be submitted.

Emergency Evacuation/Assembly Points:

For classes in the Kinesiology buildings Primary assembly point is the MacEwan Student Centre - North Courtyard and the Alternate assembly point is University Theatres Lobby

Safewalk Information:

Safewalk volunteers walk people safely to their destination on campus (including Health Sciences, Children's Hospital, McMahon Stadium, and University LRT station). This service is free and available to students, staff and campus visitors. Call 403-220-5333 (24 hours a day/7 days a week/365 days a year).

Student's Union:

The Kinesiology Representative is Calindy Ramsden - E-mail: kinesrep@su.ucalgary.ca.