



Faculty of Science

CSCI 2160U Digital Media
Course outline for Winter, 2014

1. Course Details & Important Dates*

Term	Section	Location	Course Type	Day	Time
W	A	J123-A	Lecture	Monday	5:10–6:30 pm
W	A	J123-A	Lecture	Thursday	9:40–11:00 am
W	A	J123-A	Laboratory	Tuesday	1:10–3:00 pm

* for other important dates go to: www.uoit.ca > Current Students > Important Dates

2. Instructor Contact Information

Instructor Name	Office	Phone	Email
John Daniel	UAB 440	N/A	john.daniel@uoit.ca
Office Hours: 3pm–5pm Monday, 11am–12pm Thursday, or by appointment			

Laboratory/Teaching Assistant Name	Office	Phone	Email
Mohammed Helala			
Office Hours: TBA			

3. Course Description

This course is an introduction to the representation and processing of media in a digital form. The media covered includes sound, image, video, text, and graphics. Topics covered in this course include sampling, storage and file structures, reproduction, and the processing of different forms of media. Standard software packages for the handling of digital media are also covered. Pre-requisites: CSCI 2010U Principles of Computer Science, CSCI 2050U Computer Architecture I

4. Learning Outcomes

On the successful completion of the course, students will be able to:

1. Understand text in a modern, multilingual context.
2. Understand and perform basic text, image, audio, and video processing operations.
3. Understand the relative advantages and trade-offs of various types of media file formats.
4. Understand XML metadata and perform basic XPath and XSLT operations.
5. Understand and implement modern web content and presentation systems using HTML and CSS.
6. Understand and deliver digital media on a mobile device using REST, JSON, and XML.
7. Understand the modern social, legal, and economic issues in digital media.

5. Course Design

There will be ~3 hour of lectures and ~2 hours of labs per week. The format of the lectures will be adjusted over the course of the semester.

6. Outline of Topics in the Course

- Basic sampling theory
- Representation and storage of sound, image and video data
- Basic image processing operations
- Sound, image and video editing
- Generation and manipulation of graphical information
- Text fonts and text rendering
- Internet and streaming media
- Software tools for manipulation of digital media
- Digital Media production process
- Internet-based content delivery to web sites and mobile devices

7. Required Texts/Readings

No textbook is required for this course

Additional readings may be assigned or recommended during the course.

8. Evaluation Method

All assignments will be submitted electronically via UOIT blackboard system.

All tests are in written format.

Final course grades may be adjusted to conform to program or Faculty grade distribution profiles. Further information on grading can be found in Section 5 of the UOIT Academic Calendar.

9. Assignments and Tests

Assignments: [50%]

1. Digital text
2. Imagery, audio, video, 3D
3. XML and other potpourri
4. Content and presentation on the Internet
5. Delivering media on mobile devices

Tests: [40%]

1. Test 1
2. Test 2

Final: [10%]

Missed tests or assignments are to be handled by the policies outlined by the Faculty of Science: <http://uoit.ca/main/current-students/academics-and-programs/programs-and-resources/academic-integrity/process-forms/UOIT%20Regulations%20on%20Academic%20Conduct/index.php>

10. Accessibility

Students with disabilities may request to be considered for formal academic accommodation in accordance with the Ontario Human Rights Code. Students seeking accommodation must make their requests through the disability services department in a timely manner, and provide relevant and recent documentation to verify the effect of their disability and to allow the University to determine appropriate accommodations.

Accommodation decisions will be made in accordance with the Ontario Human Rights Code. Accommodations will be consistent with and supportive of the essential requirements of courses and programs, and provided in a way that respects the dignity of students with disabilities and encourages integration and equality of opportunity. Reasonable academic accommodation may require instructors to exercise creativity and flexibility in responding to the needs of students with disabilities while maintaining academic integrity.

11. Professional Conduct

Students must comply with all license agreements for any source code, media, or other content submitted as part of an assignment.

12. Academic Integrity

Students and faculty at UOIT share an important responsibility to maintain the integrity of the teaching and learning relationship. This relationship is characterized by honesty, fairness and mutual respect for the aim and principles of the pursuit of education. Academic misconduct impedes the activities of the university community and is punishable by appropriate disciplinary action.

Students are expected to be familiar with UOIT's regulations on Academic Conduct (Section 5.15 of the Academic Calendar) which sets out the kinds of actions that constitute academic misconduct, including plagiarism, copying or allowing one's own work to be copied, use of unauthorized aids in examinations and tests, submitting work prepared in collaboration with another student when such collaboration has not been authorized, and other academic offences. The regulations also describe the procedures for dealing with allegations, and the sanctions for any finding of academic misconduct, which can range from a written reprimand to permanent expulsion from the university. A lack of familiarity with UOIT's regulations on academic conduct does not constitute a defense against its application.

Further information about academic misconduct can be found in the Academic Integrity link on your laptop.

13. Turnitin (if applicable)

UOIT and faculty members reserve the right to use electronic means to detect and help prevent plagiarism. Students agree that by taking this course all assignments are subject to submission for textual similarity review by Turnitin.com. Assignments submitted to Turnitin.com will be included as source documents in Turnitin.com's restricted access database solely for the purpose of detecting plagiarism in such documents for five academic years. The instructor may require students to submit their assignments electronically to Turnitin.com or the instructor may submit questionable text on behalf of a student. The terms that apply to UOIT's use of the Turnitin.com service are described on the Turnitin.com website.

Students who do not wish to have their work submitted to Turnitin.com must inform their instructor at the time the work is assigned and provide with their assignment a signed Turnitin.com Assignment Cover sheet: <http://www.uoit.ca/assets/Academic~Integrity~Site/Forms/Assignment%20Cover%20sheet.pdf>

Further information about Turnitin can be found on the Academic Integrity link on your laptop.

14. Final Examinations

Final examinations are held during the final examination period at the end of the semester and may take place in a different room and on a different day from the regularly scheduled class. Check the published Examination Schedule for a complete list of days and times.

Students are advised to obtain their Student ID Card well in advance of the examination period as they will not be able to write their examinations without it. Student ID cards can be obtained at the Campus ID Services, in G1004 in the Campus Recreation and Wellness Centre.

Students who are unable to write a final examination when scheduled due to religious publications may make arrangements to write a deferred examination. These students are required to submit a Request for Accommodation for Religious Obligations to the Faculty concerned as soon as possible and no later than three weeks prior to the first day of the final examination period.

Further information on final examinations can be found in Section 5.24 of the Academic Calendar.

15. Course Evaluations

Student evaluation of teaching is a highly valued and helpful mechanism for monitoring the quality of UOIT's programs and instructional effectiveness. To that end, course evaluations are administered by an external company in an online, anonymous process during the last few weeks of classes. Students are encouraged to participate actively in this process and will be notified of the dates. Notifications about course evaluations will be sent via e-mail, and posted on Blackboard, Weekly News and signage around the campus.