

BUSINESS APPLICATIONS & PROBLEM SOLVING

Prof M. E. Kabay, PhD, CISSP-ISSMP

Office: Dewey 209 <mailto:mkabay@norwich.edu> Skype: [mekabay](#)

Phone: 802-479-7937 at any time of day (or night to leave messages)
(cannot disturb anyone – rings only during daytime)

Office Hours: posted at http://www.mekabay.com/current_schedule.jpg & on door.
Walk in if the office door is open. You are always welcome.

Website: <http://www.mekabay.com> – see [Courses](#) and [Methods](#) in particular

1 Course Description

CS 120 Business Applications & Problem Solving
Techniques 3 Credits

An introductory course in management information processing. The course explores the most important aspects of information systems with specific emphasis on business applications, practical usage, and current information. The student will obtain skills in word processing, spreadsheet analysis, and presentation tools using professional software packages. Structured problem-solving techniques will be emphasized throughout the course. Practical implementation projects and case studies will be used to reinforce topics such as computer, academic, and professional ethics for an information-based society. Not open to CS or CSIA majors.

2 Schedule & Resources

Class meets Thursdays from 13:00:03 to 15:49:57 in Dewey Computer Lab (basement of Dewey Hall). In addition to those three hours per week, students should expect to spend three to six additional hours in completing their weekly quizzes, homework, projects and exams. See the Syllabus (separate document) for details. Course assignments and resource links are all available via NUoodle, and students are required to use that platform for assignments and submissions. See section 5 of this document for further details.

3 Goals & Outcomes

The goal of the course is to provide a foundation for practical work and further study in applied business and economic communications.

By the end of the course, students will be able to

- Organize and safeguard their own resources on computer disks
 - Name files helpfully
 - Create and use folders and directory hierarchies to support easy access to information
 - Create versions of projects in progress
 - Use backup techniques (physical media, cloud storage) to safeguard files against damage, destruction or loss
 - Apply passwords to prevent unauthorized access to their personal digital information
 - Enable anti-malware programs to prevent damage from viruses, worms, remote-access Trojans, and mobile code from email and from the Web
- Use email at a professional level regardless of email client
 - Create effective subject lines
 - Restrict actionable email messages to a single topic
 - Define appropriate TO:, CC: and BCC: distribution lists
 - Choose when to REPLY ALL vs REPLY
 - Apply spell- and grammar-checking when available
 - Judge what kind of information to send via email and what not to send
 - Reject spam and resist email-mediated fraud such as phishing
- Use social media (e.g., Facebook) and the Web wisely
 - Avoid posting or sending compromising information that could be use for damage to reputation or blackmail
 - Pay attention to employer and school regulations about appropriate and inappropriate use of computers and networks

- Resist Web-mediated fraud such as phishing
- Apply standards of ethical decision-making to reject defamation, cyber-bullying, spamming, trolling, virus-writing, copyright infringements and unauthorized use of computers and networks
- Use MS-Word to
 - Create professional-level letters, memoranda, reports and fliers
 - Check spelling, grammar and writing style
 - Organize reference material for automatic citations and lists of works cited
 - Use automated headings and create automatic Tables of Contents
 - Create automated indexes of keywords
 - Create simple tables and charts in a variety of styles
 - Incorporate images and tables from other sources
 - Print all or selected pages to selected printers
 - Generate PDF files
- Use MS-Excel to
 - Solve numerical problems
 - Create easy-to-read tables
 - Select appropriate functions for specific tasks
 - Calculate and use descriptive statistics to report findings appropriately
 - Create professional-standard graphs and charts
 - Apply Computer-Aided Thematic Analysis to research projects
 - Apply Computer-Aided Consensus to support focus groups
- Use MS-PowerPoint to
 - Create professional-level presentation materials
 - Create detailed pages of notes in several styles
 - Incorporate internal links to jump to specific places in the PPTX file
 - Include external links to Web resources
 - Deliver professional-level presentations

4 Required Texts

All required readings are available free using links to the instructor's own published materials and to other free resources on the Web.

If students insist on using pigment deposited on compressed plant fibers, they may print these documents as they see fit.

Students are expected to read the assigned materials BEFORE CLASS BEGINS to make the best possible use of their time with the instructor.

5 Use of NUoodle Platform & Norwich University Email

- Students are expected to consult NUoodle at least weekly to monitor changes and corrections in the course.
- Course announcements are posted on NUoodle and sent to students via Norwich email
- **Weekly homework is downloaded from and uploaded to NUoodle.**
- Students must not send homework by email.
- Students must send their course-related email with a **prefix of CS120 in the subject line** and only to the instructor's NU email address < mkabay@norwich.edu >
- Weekly quizzes, mid-term exams, and final exams are taken via NUoodle.

6 Methods of Assessment

6.1 Weekly Homework: 90% of Final Grade

- Students must complete homework assignments throughout the course using the NUoodle system.
- The deadline for submission of answers via NUoodle is documented for each assignment or exam.
- Completed assignments must be uploaded via NUoodle by the deadline shown in the NUoodle description.
- Students are encouraged to rely on the professor's help in class, via Skype or by phone at any time. Email is not recommended as a method for getting help because it has no guarantee of timely receipt.

6.2 Weekly Quizzes & Pretests: 5% of Final Grade

- NUoodle for the course occasionally includes weekly online pretests usually due by **23:55 on the DAY BEFORE CLASS** in the week assigned for the particular topics.
- Some weeks have a theory quiz at the end of the week.
- These quizzes are intended to encourage (force, bully, intimidate, harass, push) students into reading the assigned information before arriving in class, freeing up the time for practical work on their assignments and projects instead of listening to an old professor droning on (possibly using different

accents) about the information they should have begun learning themselves.

- The online are simple multiple-choice questions about the concepts and terminology of the systems being used.
- Every quiz has a corresponding list of possible review questions (but not answers) provided as a review document. No question is asked without being included in the review questions.
- Typically, each quiz has 10-20 randomly selected questions from an extensive question bank; students are allowed up to two minutes per question times the number of questions for the quiz (e.g., 20 question in 40 minutes).
- All quizzes are open book. Any textbook or Website may be used for reference. Other students' quiz reports or advice may not be used for reference. Any student asking for unauthorized help from another student for a quiz or exam may be reported for violation of the Academic Integrity Policy discussed in section 8 of this Course Description.

6.3 Optional (Extra Points)

Extra written assignments – up to 10 points maximum added to total 100-point score for course for up to 5,000 words total across all submissions

- In Weeks 1 through 10, students may submit extra assignments such as analyses of real-world data or discussions of interesting articles using the tools they are studying; good ones may be posted for other students to read.
- No extra-credit assignments are accepted in Weeks 11 and following because students need to focus on increasingly difficult material and should also be completing any replacement work they deem necessary.
- These contribute points to the final-grade score and can compensate for less-than-perfect grades on required assignments, quizzes and exams.
- No more than one extra-credit essay assignment per week is permitted but there is no limit to the word-count.
- The point-score is calculated using a ratio of up to 1 extra final-grade point per 500 words (not counting tables and figures) on essays. Students may write less than 500 words in a submission, receiving partial credit (e.g., 100 words could net up to 0.2 points on the final score) – which could, for instance, make the difference between an A- and an A grade).

- The **maximum** number of extra homework points achievable in this way is 10 per semester.

6.4 Corrections & Suggestions for Improvement

Corrections and suggestions for course improvement are to be posted in the appropriate facility for *Continuous Process Improvement* online in NUoodle. Each accepted correction and constructive suggestion earns **0.1% extra on the total score** for the final grade of each contributing student. Such increments could make the difference between grade categories (e.g., **A- → A**)

7 Timeliness

- This course does not make allowance for late delivery of required results unless the student discusses the prospective delay with the professor and obtains written approval for late delivery.
- Examples of acceptable reasons for accommodations include scheduled absences for military, sports, and family requirements; medical conditions; legal obligations.
- Unacceptable reasons for late delivery include oversleeping, forgetfulness, disorganization, hypomyelination of the prefrontal cortex, and drug-induced mental fog.
- If students do miss a deadline, they can use extra credits and also discuss additional options with the instructor for accumulating points to replace their zeroes.

8 Cheating & Plagiarism

- Students are reminded of the University's Policy against cheating and plagiarism (Chapter 2, Section V of the Student Rules):
< <http://www.norwich.edu/about/policy/StudentRulesRegs.pdf> >.
- Students are graded on an individual basis and must therefore complete their own work. Students may NOT submit another student's work as if it were their own.
- Plagiarism consists of using someone else's text or ideas without using quotation marks to indicate exact duplication of the original and/or failing to indicate the source of reference materials and quotations.
- If in doubt as to what constitutes plagiarism, ask the instructor for a review of your work before submitting an assignment.

- All instances of cheating and of plagiarism must be reported to the Academic Integrity Committee by the instructor or by students who have observed the dishonesty.
- Penalties include expulsion from the University.
- Ignorance of the University's Rules is not a valid defense against accusations of academic dishonesty.

9 Intellectual Property Restrictions

All of the teaching materials for this course are copyright by Prof Kabay. None of the homework, review questions, exams from this course or any other materials copyrighted by Prof Kabay may be reposted or redistributed by any means whatever without the express written permission of the Professor.

In particular, uploading Prof Kabay's materials to sites supporting cheating and fraud such as CourseHero is expressly forbidden.

Violation of these restrictions may result not only in charges before the Norwich University Academic Integrity Committee but also in civil lawsuits for copyright infringement and possible criminal prosecution for violation of federal copyright laws.

10 Coordination with AAC

- The instructor routinely and willingly provides reasonable accommodations for students with documented disabilities on an individualized and flexible basis.
- For any student with a documented disability, the University's *Academic Achievement Center* (AAC) determines appropriate accommodations through consultation with each student.
- To receive accommodations in this or any other class, affected students need to make an appointment with the AAC, located on the 4th Floor of the Kreitzberg Library (phone ext. 2130).
- AAC will work with students to determine eligibility for services and, if appropriate, will provide an Educational Profile for each student to bring to their instructors.
- After making arrangements with the AAC, students should arrange a meeting with the instructor to discuss accommodations in this course.
- In keeping with the University's policy of providing equal access for students with disabilities, any student with a disability who needs academic accommodations is welcome to meet with the instructor privately. All conversations will be kept

confidential (for example, the instructor's office door may be closed at the student's request).

- The instructor will review the Profile with the student and discuss accommodations in relation to this course.

11 Additional Notes

- There is *no grading on a curve*. There are no predetermined numbers of final letter grades. Students do not compete with each other for grades; if everyone gets A, wonderful! If everyone fails, tough. Students are not competing with their peers – they are encouraged to be helpful to each other.
- Students are encouraged to study together but may not copy each other's work or collaborate during quizzes or exams. Students are individually responsible for all assigned essays and online discussion material, unless otherwise noted.

12 Office Hours & Contact Information

- Students are welcome to call the instructor at (802) 479-7937 at any time (that number rings if he is available but cannot disturb him at home because he shuts it off); leave a voice-mail message with a return number if necessary.
- Students may also use Instant Messaging at any time using Skype (ID is mekabay) or Facebook Messenger; neither of these methods is guaranteed a speedy response.
- Email should be addressed only to the NU address < mkabay@norwich.edu > to respect FERPA.
- Students should put the string *CS120* in the subject line of email and in the first Skype message of a conversation for easier identification so the instructor (whose memory is getting worse every year) doesn't have to look up what class they are referring to.

13 About Your Instructor: M. E. Kabay, PhD, CISSP-ISSMP

(You don't have to read this stuff.)

M. E. Kabay began teaching his high school classmates how to use the slide rule in 1963 and began programming IBM 1401 computers in assembly language in 1965. In 1976, he completed his PhD from Dartmouth College in applied statistics and invertebrate zoology and then taught statistics, programming and biology as a university professor in Canada and overseas.

He began teaching applied statistics at Dartmouth College in 1975 in a course for Biology graduate students and served as adjunct faculty in the University of Ottawa *Institute for Government Informatics Professionals*, the John Abbot College *Programmers' Course* and their *Technical Support Program*, and the McGill University *Management Institute* before joining Norwich University.

In 1979, he joined a compiler team for a new 4GL and RDBMS in the U.S. and then joined Hewlett-Packard Canada in 1980 as an operating systems and database performance specialist, winning the *Systems Engineer of the Year Award* in 1982 and teaching MPE operating system, IMAGE/3000 database and VPLUS/3000 GUI-design courses as well as serving as support engineer to HP's hospital and university customers and managing HP's bilingual call center (*Phone-In Consulting Service*) for Québec and the Maritime provinces.

He taught database and technical support courses for a decade at John Abbott College in Ste Anne de Bellevue on the West end of Montreal Island in the 1980s through the mid 1990s.

He served as Director of Education for the National Computer Security Association (NCSA, later ICSA and then TruSecure) from 1991 to 1999 and then worked with Adario/AtomicTangerine where he supported the *International Institute for Information Integrity® (I-4®)*. He collaborated in the committees defining the *Common Body of Knowledge* for the *Certified Information Systems Security*

Professional (CISSP) designation in the mid-1990s and earned his CISSP in 1997.

Since 1986 (and as of early 2016), he has published over 2,000 articles in operations management and security, written a college textbook on enterprise security (McGraw-Hill, 1996), and served as Technical Editor of the 4th (2002), 5th (2009) and 6th (2014) editions of the *Computer Security Handbook* (Wiley). He wrote two security-management columns a week distributed by *Network World* < <http://www.mekabay.com/nwss/> > from February 2000 to September 2011 and one per week for *InfoSec Perception* < <http://www.mekabay.com/perception/> > from October 2011 to the end of 2013. His Website has a total of over 2,000 PDF files and over 250 PowerPoint files freely available to anyone.

He has been an invited lecturer at the United States War College, the Pentagon, NATO HQ in Brussels, and at NATO Counterintelligence training in Germany. He was inducted into the Information Systems Security Association (ISSA) *Hall of Fame* in December 2004 and earned his *Information Systems Security Management Professional* (ISSMP) designation in November 2005.

From 2002 to 2009, he was the creator and Director of the *Master's Program in Information Assurance* (MSIA) in the College of Graduate and Continuing Studies (CGCS) at Norwich University, Northfield, Vermont where he was also the Chief Technical Officer of the CGCS from 2007 to 2009. Returning to the School of Business & Management in 2009, he was promoted to Professor of Computer Information Systems in May 2011 and was appointed Associate Director of the Norwich University Center for Advanced Computing and Digital Forensics in July 2011.

He is looking forward to retiring on 30 June 2020 so he can write novels, give concerts as a bass-baritone soloist, read stories and poems at public libraries, and teach applied-statistics courses for fun(!).

