Hondros College of Nursing is invested in your success.

This document provides many resources to help you be a successful student.

It contains a great deal of useful information, answers to questions you may have, and tips and strategies to help you in your classes.

There are many people on each campus willing and able to help you — all you need to do is ask one of them:

• Campus Director
• Director of Nursing
• Assistant Directors of Nursing
• Instructors
• Academic Support Advisors
• Student Services Representatives
• Career Services Team Members
• Technical Support Specialists
• Admissions Team Members
• Financial Aid Team Members
• or your Librarian (513-644-6020)
## Resources for Student Success

### Table of Contents

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMS Student Portal</td>
<td>Provides information on the Student Portal (CAMS) where your student information and on-ground course information is found and managed</td>
<td>3</td>
</tr>
<tr>
<td>Computer/Technical Support</td>
<td>Lists who to call if you have technology issues and provides Help Desk information</td>
<td>4</td>
</tr>
<tr>
<td>Email</td>
<td>Explains how to access your email account, disable pop-ups, log in, change a password, and what to do if you forget your password</td>
<td>5-6</td>
</tr>
<tr>
<td>Academic Support Advisors and Resources</td>
<td>Provides information about your on-ground Academic Support Advisor (ASA) and some resources to help with academic and personal needs</td>
<td>7</td>
</tr>
<tr>
<td>Computer Basics</td>
<td>Provides links to some computer basics for those uncomfortable with technology</td>
<td>8</td>
</tr>
<tr>
<td>ExamSoft Examplify (Testing Software)</td>
<td>Provides some basic information on this computer testing software that is used for taking tests and quizzes; there is also some troubleshooting help</td>
<td>9</td>
</tr>
<tr>
<td>Microsoft Office Help</td>
<td>Provides links to Microsoft Office and Office 365 help</td>
<td>10</td>
</tr>
<tr>
<td>Assistive Technology</td>
<td>Provides information about free and low cost assistive technology</td>
<td>11</td>
</tr>
<tr>
<td>Sakai—Online Course Manager</td>
<td>Provides information on your online learning management system, Sakai, where your online courses are found, including:</td>
<td>12-13</td>
</tr>
<tr>
<td>MH Connect</td>
<td>• Accessing McGraw-Hill (MH) CONNECT; using TURNITIN (a plagiarism tool) and its Originality Reports; and validating and accessing etextbooks in the online classroom</td>
<td>14-16</td>
</tr>
<tr>
<td>Turnitin online course etextbooks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PaperCut Printing and Copying</td>
<td>Discusses this system used for printing and copying while on campus; includes directions for use, creating your account, and printing help</td>
<td>17-21</td>
</tr>
<tr>
<td>Tips for Academic and Professional Success</td>
<td>Offers information on topics critical to your success, including: professionalism, interacting with peers, time management, stress, and planning</td>
<td>22-25</td>
</tr>
<tr>
<td>Study Tips</td>
<td>Provides information and tips for getting the most out of studying, reading textbooks, note taking, and lectures</td>
<td>26-29</td>
</tr>
<tr>
<td>Test-Taking Strategies/Tips</td>
<td>Provides test-taking strategies and tips</td>
<td>30-36</td>
</tr>
<tr>
<td>Test Anxiety</td>
<td>Offers tips for minimizing test anxiety</td>
<td>37</td>
</tr>
<tr>
<td>Online Course Tips and Student Expectations</td>
<td>Presents best practices for taking online courses and posting in discussion forums, provides APA formatting tips for discussion forums, and offers discussion forum netiquette tips</td>
<td>38-43</td>
</tr>
<tr>
<td>Research Paper and Essay Development and Format</td>
<td>Reviews the 3 parts of an essay, developing an outline, and the steps involved in research and writing; also discusses source evaluation and the library’s APA style resources</td>
<td>44-49</td>
</tr>
<tr>
<td>APA Help</td>
<td>Provides tips for using APA writing style and examples of in-text citations and references</td>
<td>50-53</td>
</tr>
<tr>
<td>Library Resources</td>
<td>Provides information about the library and describes the information found on each of the library’s tabs</td>
<td>54-58</td>
</tr>
<tr>
<td>Essential Rules and Guidelines to Basic Medication Dosage Calculations</td>
<td>Provides the essential rules and guidelines used in basic medication dosage calculation</td>
<td>59-70</td>
</tr>
<tr>
<td>References</td>
<td></td>
<td>71</td>
</tr>
</tbody>
</table>

### Campus Wireless Networks & Passwords

**Network:** Hondros_Nurse (all campuses)

Please see your campus director, campus manager or DON for the campus network password.

Last update — March 2019
CAMS Student Portal

You should already have your username and password for the student portal. If you don’t, you’ll need to contact your Admissions Department or campus front desk for assistance, or call 1-855-90-NURSE (1-855-906-8773). The portal provides access to many things you’ll need for your classes including:

- My Portal
  - Home Page / Student News
  - My Email
  - My Courses
    - Sakai Access
    - NCLEX-PN Test Plan
    - NCLEX-RN Test Plan
  - My Midterm/Final Grades
  - My Transcript
  - My Schedule
  - My Calendar
  - My Documents
  - My Ledger
  - My Payment Plan
  - My Financial Aid

- Student Services
  - School News
  - Student Catalog
  - Commonly Used Forms
  - Course Offering
  - Unofficial Registration
  - Financial Aid Office
  - Commencement

- Campus Services
  - PaperCut
  - My Library
  - Tutoring and Office Hours
  - Career Placement
  - New Student Scrubs & Scrub Ordering
  - Replacement Scrubs

- Help
  - PaperCut Help
  - Information Technology
  - Student Portal Help
  - Email Help
  - Registration Help

CAMS—Forgotten Username or Password

The CAMS student portal can be accessed by going to my.hondros.edu; you can also go to the nursing.hondros.edu website and click on the Student Portal Login button at the bottom of the webpage to login.

You’ll see these questions below the login boxes. Click on the links as needed or follow the directions provided.

Have you forgotten your student portal password?
1) Click the link on the screen that says:
   Click here if you’ve forgotten your student portal password.
2) Fill out the requested information.
3) An email will be sent to your student mail account that will allow you to reset your password.

Need to log into your student mail account and retrieve your password?
Click the link on the screen that says:
Click here to go to the student mail login page.

Lost your student portal username?
Please call 1-855-90-NURSE (1-855-906-8773), then press the number for the Admissions Department, campus front desk, or technical support. You can also send an email to helpdesk@hondros.edu; please include your contact information and when you are available.

Call 1-855-90-NURSE (1-855-906-8773), then press the number for tech support.
Computer/Tech Support

If you are having any technical issues, please call 855-90NURSE (855-906-8773)

Press 3 to speak to Technical Support, and dial the correct number for your issue:
- Press 1 for Sakai classroom support
- Press 2 for Mail, Portal or on-site help
- Press 3 for Emergency Support

You can also send an email to helpdesk@hondros.edu

Helpdesk Hours:
Monday-Friday 8:00 AM - 5:00 PM EST** - phone support
**If you are calling outside these hours, press 3 for Emergency Tech Support and leave a voicemail.

Use this number and email to get help from a local Tech Support Specialist with:
- CAMS Student Portal Login Questions
- PaperCut—system used for printing and copying documents when on campus
- ExamSoft Examplify—student assessments on class material
- Additional software issues

If laptop has been purchased from HCN, you can also get help with
- Microsoft Office activation code
- Additional software provided on USB drive (given at orientation)

Clicking on the Information Technology help link will provide a list of frequently asked questions and their answers; these may provide the answer to your question.

Sakai—FOR HELP (learning management system for online classes)
Contact Sakai support by emailing sakaisupport@hondros.edu
Monday – Friday 6:00 AM to 10:00 PM
Saturday 8:00 AM to 10:00 PM
Sunday 7:00 AM to 12:00 Midnight

ALEKS (online math) support help— go to: https://mhedu.force.com/aleks/s/alekscontactsupport

Browsers to Use

A web browser, or simply "browser," is an application used to access and view websites. Common web browsers include Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, and Apple Safari. Some browsers don’t allow the full functionality of Hondros College of Nursing software; which one you use should be based on what software you’re working with. Please see the chart on the right to select the best one.

NOTE: The Microsoft Edge browser should be avoided.
Email

Your student email account will be the **only** email account the College, faculty, and staff **will use to communicate with you.** Because of this, it’s **important that you check it daily.**

You should have received an email from the Helpdesk with your specific account information and instructions when your account was created. **If you have not received an email by student orientation, please contact your admissions representative for assistance.** If you have lost or forgotten your password, please go to the end of this section (page 5) where you’ll find directions on how to get your password reset.

**Pop-up Blockers—Disabled them or add the sites to the pop-up blocker list/settings**

Before you can use the email system or the CAMS student portal, you need to make sure that you have disabled your pop-up blockers or added the site to your list of acceptable exceptions as both systems use pop-ups. **To change the Pop-up Blocker settings,** open your web browser (either Internet Explorer or Mozilla Firefox) and follow one of the options below.

One option is to **turn off the pop-up blocker** built into your web browser, like Internet Explorer or Mozilla Firefox, as well as any pop-up blockers contained within any web browsing toolbars you may have installed, like the Yahoo, MSN, Google or AOL toolbar. Here are the directions for doing so.

**For Internet Explorer:** Click on the **Tools** button on the tool bar, point to **Pop-up Blocker,** and then click **Pop-up Blocker Settings.** Make the changes that you would like, **Turn off Pop-up Blocker,** and then click **Close.**

**For Mozilla Firefox:** Click on the **Tools** button, click on **Options,** click on **Content,** and then uncheck the box that says **Block pop-up windows.**

**OR**

Another option is to **add the sites to the pop-up blocker settings.** Here are the directions for doing so.

**For Internet Explorer:** Click on **Tools,** click on the **Privacy** tab, click on the **Settings** button under the Pop-up Blocker section, **enter the website address** for example *.hondros.edu will cover the Hondros College of Nursing sites.

**NOTE:** HESI compatibility check will ask about adding the site to your Pop-up Blocker settings.

**For Mozilla Firefox:** Click on **Tools** button, click on **Options,** click on **Privacy and Security,** look under **Tracking Protection,** look under **Permissions,** click on **Exceptions,** enter *.hondros.edu and **Save** changes.

**Initial Account Information**

In most cases, your user name will consist of the first initial of your first name plus your last name. For example - if your name was Sally Sample, your user name would be ssample (and your full email address would be ssample@student.hondros.edu). The system typically sets your initial password to P@SSword. There are some exceptions, so make sure you verify your user name.

**Logging In**

The email system is reached via the student portal. Log in to your student portal (**http://my.hondros.edu**) and click on the **My Email** link located in the left hand column. A pop-up window will open with the login page to Google Mail. If the pop-up window doesn’t appear, you need to disable the pop-up blocker; you could have more than one pop-up blocker installed. Each tool bar (Google, Bing, Yahoo, MSN, etc.) has its own blocker and each must be disabled. (See instructions above.) **You can also go to https://accounts.google.com to access your mail.**

**NOTE:** if you have a personal Gmail or Google mail account and have used your computer previously to log into that account, you will need to click on the “Sign in with a different account” link located under the login box to continue.
Email (continued)

New Student Account Setup
• Enter your user name and password that was emailed to you, making sure to enter your password exactly as it is in the email that was sent to you, including any capitalization, and then click on the Sign In button.

• The next screen will prompt you to enter that password a second time and also enter the letter/number sequence in an image that will appear on the page.

Creating a New Password
• Once you enter both successfully, you’ll be taken to a new screen where you are prompted to change your password. This only happens the first time you login in. Enter your old password one last time if prompted to do so; then enter a new password in the first field and then re-enter it in the second field. Your password must be at least eight characters long and should contain at least one number.

  NOTE: Be sure that the password you choose is something you can easily remember. If you forget your password, the system will not send you a reminder. You must request a password reset from the helpdesk.

• If you forget your password, the helpdesk cannot tell you what it is, they can only reset it. Make sure it’s something you can easily remember but is something hard for someone else to guess. Click the Change Password button to complete the setup and log into your mailbox. The next time you log in, you’ll need to use your new password.

You’re In Your Inbox!
If you’ve followed along with the previous steps, you should now be at your Inbox and there may even be a message or two waiting for you.

Take a moment now to bookmark this page. If you ever lose your student portal password, you can use this bookmark to get to your mail and retrieve your portal password.

Questions?
Should you have any questions regarding logging into your new account, please click on the link for Student Help Desk on the Student Email page or email the Student Helpdesk at customercare@hondros.edu.

Forget Your Email Password?
If you forget or lose your email system password, you need to request a password reset from the helpdesk. Email the helpdesk at customercare@hondros.edu. Give your name and ask to have your email password reset.

PLEASE NOTE -- All future communications from the College will be sent to your new student account, so checking your student mail at least daily is critical to your success! It will be the only email account the College, faculty, and staff will use to communicate with you.

Email Etiquette — A Few Tips
• Use proper email etiquette when writing to your professor or another person in a professional capacity; it is a must and shows that you are professional and care about how you come across to others. For those that don’t know you already, this will be their first impression of you.

• Be nice and professional. Never send an email when you’re angry, and don’t use your email to argue or accuse. You want to be sure that you maintain a professional demeanor at all times and take ownership of your problem or issue if it’s being discussed in your email. Use “I may have missed your discussion about …” rather than “You didn’t tell us …”

• Check your grammar and spelling before sending your email, and be sure that you proofread your message. Professional email shouldn’t be written as though you’re texting a friend, so make sure you’ve used full sentences, proper grammar, and real (not informal or texting) spelling. Use “How are you?” rather than “How r u?” More formal writing is the acceptable professional style; it’s a sign of respect and shows the recipient that you can communicate at that level.
Academic Support Advisors

Each campus has an Academic Support Advisor (ASA) who is available to help you when you need academic, personal, and confidential help, advice, or services, or when you need some encouragement or someone to listen. Contact information for your ASA can be found in the library on the Academic Support & Advising tab, along with many academic support resources and student services available to help you be successful.
Computer Basics: Help for Those Inexperienced or Uncomfortable with Technology

Students who are not comfortable using computers and the technology needed to be successful will find links to some basic computer/technology information on the Tech Help tab in the library. Once on the page, click on the Computer Basics for Beginners tab in the box found on this library page (shown below).

Additionally, the librarian (email: library@hondros.edu) and your Academic Support Advisor are available by appointment to sit down with you to answer your questions about using the CAMS Student Portal, PaperCut, Sakai, and your student email, or they will direct you to someone on your campus that specializes in the assistance you need.

Each campus also has a Technical Support Specialist who can be reached via email — helpdesk@hondros.edu — who can help with computer hardware and software (HESI and ExamSoft Examplify) questions he or she can also set up appointments for local support.

Your instructors are also able to help you with the technology used in the course.
ExamSoft Examplify Testing

This software is used in your classes to take quizzes and tests, so it’s important to make sure it is loaded and working prior to your first test or quiz. The link to download the Examsoft Examplify software is [https://examsoft.force.com/etcommunity/s/article/Examplify-Downloading-for-Windows-Mac](https://examsoft.force.com/etcommunity/s/article/Examplify-Downloading-for-Windows-Mac). (NOTE: When resetting your password, you need to use the FireFox browser.)

There are links to the information below, as well as an Examplify Quick Start Guide, to help you use Examplify; the links can be found on the Tech Help tab in the library. Once on this library page, click on the ExamSoft Examplify tab in the box found on the Tech Help library page.

- Guide to Help Resolve Common Problems
- Contact ExamSoft Support
- Examplify Quick Start Guide: Using Examplify
- Examplify: Getting Started with Examplify
- Examplify: Downloading for Windows & Mac
- Examplify: Resolve a Black Screen, Missing Task Manager, or Missing Power Options
- Examplify: The Application’s Service is Unavailable Message
- Examplify: Running ESWinSR
- Examplify: Clearing Registration

This guide provides some solutions for resolving problems that exam takers may encounter when using ExamSoft.

- **The student’s computer freezes when installing or running Examplify.** This is caused by a conflict between the student’s anti-virus software and Examplify. **Resolution:** Restart the computer, and disable the anti-virus software before resuming work in Examplify.

- **The student’s screen goes black when running Examplify.** This generally occurs when Examplify is returning from Secure mode and is caused by interference with the anti-virus software. **Resolution:** Follow the steps here: [https://examsoft.force.com/etcommunity/s/article/Examplify-Resolve-a-Black-Screen-Missing-Task-Manager-or-Missing-Power-Options-on-Windows-8-10](https://examsoft.force.com/etcommunity/s/article/Examplify-Resolve-a-Black-Screen-Missing-Task-Manager-or-Missing-Power-Options-on-Windows-8-10). Disable the anti-virus software before resuming work in Examplify.

- **The student gets a message that says, “The Application’s Service Unavailable.”** This issue also occurs due to a conflict between the student’s anti-virus program and Examplify. **Resolution:** Follow the steps here: [https://examsoft.force.com/etcommunity/s/article/Examplify-The-Application-s-Service-is-Unavailable-Message](https://examsoft.force.com/etcommunity/s/article/Examplify-The-Application-s-Service-is-Unavailable-Message). Disable the anti-virus software before resuming work in Examplify.

- **The student needs to download an exam on a second computer.** If a student downloaded the exam to a personal laptop, but the laptop has problems during the testing period and the student needs to use a loaner laptop, they will be prevented from downloading the exam to a second computer. **NOTE:** The faculty proctoring the Examsoft exam will need to increase the download number in the exam’s Proctoring tab for that test.

- **The exam does not accept the password.** Occasionally, a student’s exam may not accept the appropriate password, even though the password works for other students in the class. **Resolution:** First, remove the exam ([https://examsoft.force.com/emcommunity/s/article/Examplify-Removing-an-Exam-Download](https://examsoft.force.com/emcommunity/s/article/Examplify-Removing-an-Exam-Download)).

If additional issues arise, please contact ExamSoft technical support. They are available 24/7 at 866-429-8889.
Microsoft Office Help—Word & PowerPoint

If you have Office 365 on your computer, there is help available to assist you with using these resources. Please copy and paste the URLs below into your browser (Firefox or Google Chrome) to access the information.

**Microsoft Office 365 Word**
Microsoft Office 365 Word help is available at [https://support.office.com/en-us/article/word-for-windows-training-7bcd85e6-2c3d-4c3c-a2a5-5ed8847eaee73](https://support.office.com/en-us/article/word-for-windows-training-7bcd85e6-2c3d-4c3c-a2a5-5ed8847eaee73). You will find below the types of help available to you on this link.

**Microsoft Office 365 PowerPoint**
Microsoft Office 365 PowerPoint help is available at [https://support.office.com/en-us/article/powerpoint-for-windows-training-40e8c930-cb0b-40d8-82c4-bd53d3398787](https://support.office.com/en-us/article/powerpoint-for-windows-training-40e8c930-cb0b-40d8-82c4-bd53d3398787). You will find below the types of help available to you on this link.

If you need help using earlier versions of Microsoft Office products, check out these links:

**Office 2016**


**Office 2010**

Assistive Technology Resources

If assistive technology is needed, please see the information below for some free and low cost resources.

Recommended Screen Readers
The HCN Student Catalog says that students using adaptive technology are recommended to use JAWS (version 10.0 or later) or Window-Eyes (version 7.0 or later) with Sakai.

JAWS is a screen reader, developed for computer users whose vision loss prevents them from seeing screen content or navigating with a mouse. JAWS provides speech and Braille output for the most popular computer applications on your PC. You will be able to navigate the Internet, write a document, read an email and create presentations from your office, remote desktop, or from home.

Window-Eyes enables individuals who are blind or visually impaired to be completely independent on a PC and be more successful and productive at school and in the workplace. It gives total control over what you hear and how you hear it. Plus, with its enhanced Braille support that control is extended to what you feel as well.

Free or Low Cost Assistive Technology Resources - [http://www.ohioaspire.org/SpecialNeeds](http://www.ohioaspire.org/SpecialNeeds)
This website provides a list of resources in these areas:

<table>
<thead>
<tr>
<th>Reading and literacy support</th>
<th>Vision</th>
<th>Time management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammar</td>
<td>Dictation/speech-to-text/speech recognition</td>
<td>Built-in accessibility</td>
</tr>
</tbody>
</table>

This website provides a list of resources in these areas:

<table>
<thead>
<tr>
<th>Reading</th>
<th>Visual</th>
<th>Fine motor/dexterity</th>
<th>Study tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing</td>
<td>Hearing</td>
<td>Communication</td>
<td>Organization &amp; time management</td>
</tr>
</tbody>
</table>

Free or Low Cost Assistive Technology for Everyone - [https://www.augsburg.edu/class/groves/assistive-technology/everyone/](https://www.augsburg.edu/class/groves/assistive-technology/everyone/)
This website provides a list of resources in these areas:

<table>
<thead>
<tr>
<th>Reading &amp; literacy support</th>
<th>Mind mapping &amp; brainstorming support</th>
<th>Research tools</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing support</td>
<td>Study skills &amp; aids</td>
<td>Stress management and relaxation</td>
<td>Built-in accessibility</td>
</tr>
<tr>
<td>Note taking support</td>
<td>Organization &amp; task management support</td>
<td>Vision</td>
<td></td>
</tr>
<tr>
<td>Dictation/speech-to-text/speech recognition</td>
<td>Time management &amp; distraction free support</td>
<td>Hearing and auditory support</td>
<td></td>
</tr>
</tbody>
</table>

Assistive Technology Resources Funding Guide - [https://www.atia.org/at-resources/what-is-at/resources-funding-guide/](https://www.atia.org/at-resources/what-is-at/resources-funding-guide/)
This Assistive Technology Industry Association (ATIA) Funding Resources Guide identifies various sources and resources that you can investigate and explore as prospective funding options. This list is not all-inclusive but can be a good place to begin or expand your funding research.
You can access Sakai by going directly to it at https://sakai.hondros.edu/portal/. There is a link to Sakai in the CAMS Student Portal as well. You'll use the same username and password as you do for the CAMS Student Portal. When you are on the Sakai site, you'll see a screen that looks like the one below. Enter your username and password, and then click on Login.
Once you’re logged in, you should see some of your classes at the top of the page. Click on My Sites to see all of them. Select your course.

How do I navigate my class?

After you enter your class, you’ll see the course description, announcements from your instructor, and if you scroll down, a calendar populated with the assignment due dates. On the left side, you’ll see links for various tools, including the Syllabus. These things are all important. But when it comes to navigating your class, it’s as simple as this: in Week 1, click on “Week 1.” Then, read through the page and do the stuff it says to do. In Week 2, do the same thing. Wash, rinse, repeat. Make sure to read ahead, identify your due dates, and manage your time appropriately to meet deadlines.

Sakai Support

For Sakai classroom technical support, email sakaisupport@hondros.edu

- Monday-Friday, 6:00 AM to 10:00 PM
- Saturday, 8:00 AM to 10:00 PM
- Sunday, 7:00 AM to 12:00 AM (Midnight)

For CAMS portal, campus and general support, email CustomerCare@hondros.edu

- Monday-Friday, 8:00 AM to 5:00 PM

For assistance by phone, call 855-90-NURSE (855-906-8773)
Monday-Friday, 8:00 AM to 5:00 PM
Sakai — Accessing McGraw-Hill CONNECT in the Online Classroom

Some of our online courses use the McGraw-Hill Connect site associated with your textbook to deliver some of its content, quizzes, and exams. Accessing Connect through the Sakai classroom is easy; simply follow the steps outlined below.


2. Click “My Sites,” then click the button for the course you are enrolled in to enter the course classroom. Then, click “MH Connect” in the left-hand navigation.

3. The MH Campus screen opens, and you are asked to agree to the terms of service. Click on the checkbox, and then click the “Get Started” button.

Next, you’ll see a screen with the available Connect courses. Click the “Connect” button underneath the textbook picture.

4. If prompted on the following screen, add your @student.hondros.edu email address as the “Contact email address” and click “Complete My Registration.”

5. On the following screen, click the “Go to Connect” button to enter the Connect classroom. From now on, you should only have to click the MH Connect link in your Sakai classroom, and then the “Connect” button on the following screen, to enter your course.

6. To complete the assignments in each week, click the dropdown for the week you’re in, and click the link to the quiz, exam, or homework assignment that appears.
Sakai — Using **TURNITIN** and Reading Originality Reports in the Online Classroom

Hondros College of Nursing uses Turnitin in its Sakai platform to help educate students about and prevent instances of plagiarism. Turnitin compares the work submitted by students against a database of other student papers, journal articles and ebooks, and websites, and produces an Originality Report that indicates where student work matches up word-for-word (or nearly so) with outside sources. Students have the opportunity to review the report, revise their work based on the results, and re-submit their work until the due date has passed.

To use Turnitin, follow the steps below.

1. Enter the Sakai classroom at [http://sakai.hondros.edu](http://sakai.hondros.edu). Log in using your CAMS Student Portal username and password. Then, navigate to your course.

2. Click on the weekly lesson, and then the title of the assignment that requires submission.

3. Using the submission box at the bottom of the page, click “Choose File,” locate the file on your computer, and then click the “Submit” button when you are ready to turn in your assignment. You will receive an email confirming that you successfully submitted the assignment, and a separate email (a few minutes later) confirming that the assignment was successfully submitted to Turnitin.

4. Click “Return to Lesson” at the top of the page, and then re-enter the assignment. Now, at the top of the page, you should see a colored icon next to “Turnitin Report.” (You may see a message that says “This attachment has been submitted and is pending review.” If you do, check back again in a few minutes; it takes about 10 minutes for the report to be generated.) Click on the “View Report” link to open the Originality Report.

5. The Originality Report opens in a new window. (You may have to agree to the Turnitin terms of service to proceed.) When the report opens, you’ll see your paper on the left, with any portions of the paper that are similar to the work of others highlighted in different colors. The color of the highlight corresponds to the list of sources on the right. **Make sure to review any highlighted areas to ensure that there is no plagiarism.** Remember that the words and phrases taken from another source should be cited, referenced, and quoted.

- For more information on plagiarism, citations, and references, see the [APA resources on the APA tab in the Hondros Library and linked to in the Sakai classroom](http://sakai.hondros.edu)

- For more information on reading an Originality Report, see the [Originality Report resources on the Turnitin website](http://sakai.hondros.edu)

6. Make any necessary revisions to your work, remove the paper you had previously submitted, and then resubmit the paper. You can do so until the deadline for the assignment passes. Subsequent Turnitin reports will take longer (about 24 hours) to generate.

7. Your instructor may use Turnitin to provide feedback after grading the assignment. To access the assignment, re-enter the assignment page, click the “View Report” link, and then click the “GradeMark” button at the top of the page.
Sakai — Validating and Accessing eBooks in the Online Classroom

In our online RN-BSN Completion Program, most textbooks are delivered as eBooks in VitalSource format. You can access your eBook in the Sakai platform by following these steps.


2. Click “My Sites,” then click the button for the course you are enrolled in to enter the course classroom. Then, click “eBook” in the left-hand navigation.

3. If this is the first time you’re accessing your eBook, you will be taken to the first of a series of screens that you will follow to validate your eBook. Click “Continue,” and then “Proceed to Checkout” on the following screen. Note: Although the language on the page suggests that you are placing an order, you will not be charged for the text; this cost is already built into the cost of your tuition.

4. On the following page, you will be asked to enter your address. Since there are no physical copies of texts being sent to your course, this is largely a formality; however, please enter and confirm your mailing address as part of this process.

5. On the next page, you will see your address, the textbook, and a button to “Place Order.” Click that button to proceed. On the following page, you’ll see a confirmation of your textbook validation.

6. Now, return to the main page of your course by clicking the “Home” link in the left navigation. Then, click the “eBook” button again. Check the box indicating that you accept the terms of using VitalSource, and then click “Continue.”

7. You should now see your eBook from within your course. From now on, whenever you click the “eBook” link in this course, you will be taken directly to your text. You will, however, have to repeat this process for other courses in which you are enrolled.

Last updated 7/1/15 by Adam Bulizak
PaperCut: How to Print a Document

The only way to print when on campus is through a service known as PaperCut. The link to PaperCut can be found in the CAMS Student Portal under the heading Campus Services in the navigation bar on the left. There is also a link further down the navigation bar to PaperCut Help under the heading Help if assistance is needed. Printing and copying costs are $0.10 per page.

New students (enrolled for the first time) who have purchased a technology package/computer from HCN will have a PaperCut account that has been set up by the College with a $10.00 credit in it. You will receive an email with your username and password via your student email account; use this to log in. **DO NOT SET UP AN ACCOUNT if you are a NEW student.** One has already been created for you with the credit. If you set up an account on your own, it will not have this credit.

Students using own computer (who have not purchased a technology package from HCN) will need to set up an account in PaperCut if they wish to print while on campus.

1. Whether you have an account already set up for you or you set one up yourself, you need to click on the PaperCut link in the CAMS student portal to print. When you see the screen below, click on your campus. By doing so, you are selecting the printer your document will print on.

   ![Click on your campus](image1)

   **NOTE:** When you’ve used the credit in your account you’ll need to add more money to it. You can do this by clicking on the PaperCut link on the homepage of the student portal. **You’ll need a credit or debit card to add money to this account.** There are directions on doing this in the next step.

   ![If you need instructions on how to set up an account, add credit to your account, or use PaperCut, click on one of these links.](image2)

   You’ll see the screen below (labeled 2).

   2. If you **HAVE purchased** the HCN technology package/computer, log in to your account using the username and password that was emailed to you. (Continue with step 3 below.)

   ![Click Web Print on the left, click the Submit a Job link, and locate your document to print. See the next steps on the next page.](image3)

   2.5. If you **HAVE NOT purchased** the HCN technology package/computer, you’ll need to create an account by clicking on Register as a New User and supplying the necessary information. A credit card is needed to add money to the account. Click the Register button to continue. Using the information you just entered, log in to the website. After entering your user name and password, click the Log In button. (Continue with step 3 below.)

   3. Click Web Print on the left, click the Submit a Job link, and locate your document to print. See the next steps on the next page.

   ![Submit a job](image4)
PaperCut: How to Print a Document

(Continued)

4. Your campus printer has already been selected, so on the next screen, click in the box that says “2. Print Options and Account Selection” in the bottom right hand corner of the screen.

5. Enter the number of copies you want, then click in the box that says “3. Upload Documents” in the bottom right hand corner of the screen.

6. Select and upload the document to print.

7. Once the status shows “Held in Queue”, click on the blue “Held in Queue” link.

8. Click on the blue Print link. Your document will immediately print at the printer you selected.

NOTE: You can also print your job by clicking on the Jobs Pending Release link in the column on the left and then click Print to the right.

Detailed instructions are available on the student portal under the Help section in the left hand column on the page.

PaperCut: Copying, Printing, and Scanning

1. Tap the Sign In button with your finger to enter your account information.

2. To prevent damage, do not use a pencil, pen or other sharp object to tap on the screen.

3. Touch “Sign In” to use the device.

4. Tap the Username field and use the on-screen keyboard to enter your PaperCut user name. Then tap the Password field and enter your PaperCut password.

5. Click the OK button to log in.
Printing Multiple PowerPoint Slides on a Single Page — Microsoft Office 2010

**Step 1:**
Open the PowerPoint whose slides you want to print. Click the **File** tab at the top left of the screen. Then, select **Send and Save** from the menu. You should see the following options:

**Step 2:**
Select the **Create Handouts** option under **File Types**. When you see the following, click the **Create Handouts** button.

**Step 3:**
After selecting the **Create Handouts** button, you should see the following menu. Pick the **format** that suits your needs and then hit **OK**.

**Step 4:**
On your Windows bar at the bottom of the screen, you should see the ‘Microsoft Word’ icon highlighted in orange, like this:

Click on the glowing orange document icon. This document has the slides from your PowerPoint presentation, in the format that you selected in Step 3.

Save the Word document.

Upload the document to PaperCut and print it.
PaperCut: Printing Multiple PowerPoint Slides on a Single Page — Office 365

1. Go to the **File** menu and choose **Print**.

2. In the bottom left of the Print window that opens, you will see a pull down menu under the words Print What. Choose **Handouts**.

3. The default setting is 6 slides per page, but we recommend changing it to less than 6. Printing 3 per page allows notes to be taken next to the slide.

4. Print to the **CutePDF Writer** which will save the file on a PDF format.

---

1. Click File->Save as->Browse.
2. In **Save as type** column, choose PDF and click Options.

   ![Options](image)
   
   In Options, choose Handouts in Publish what and select 3.

3. ![Options](image)

   4. Save this file and print it.
PaperCut: Printing Multiple PowerPoint Slides on a Single Page — Another Option

In PowerPoint 2013, you can print up to 9 slides on a single page, which will save paper and stretch your printing budget. To do so, please follow the steps below. Note: These instructions are written for students printing the slides using PaperCut; however, if you are using your own printer, simply choose the printer you wish to print to in Step 4 instead of CutePDF Writer, and your document will print out after you complete Step 7.

1. Open the PowerPoint presentation.

2. Click on the orange “File” tab in the top-left corner of the window.

3. On the following screen, select the “Print” option.

4. From here, click the button under “Printer,” and select “CutePDF Writer.” This should come pre-installed on your computer. (If it does not, you can download it from this page: http://www.cutepdf.com/products/CutePDF/writer.asp)

5. After selecting “CutePDF Writer,” you will need to update the settings. If you only want to print certain slides, adjust that setting by clicking the “Print All Slides” dropdown and choosing the appropriate option. For example, you can choose “Custom Range,” and then indicate the slide numbers you wish to print in the “Slides” box underneath the button.

   If you wish to print all of the slides in the presentation, make sure the button is set to “Print All Slides.”

6. Next, select how many slides you wish to print per page by changing the “Full Page Slides” button to the option you prefer.

   • We recommend that you print no more than 6 slides per page; printing more than 6 slides on a single page make the content difficult to read.

   • Clicking the “Scale to Fit Page” checkbox may increase the size of your slides slightly.

   • Choosing the “3 Slides” option prints each slide down the left column of the page, with room for your notes on the right column – you may find this useful for taking notes in class.

7. Click the “Print” button at the top of the screen. After a few moments, you will be prompted to save the file. Save the file in a place where you can find it later.

8. Login to PaperCut and print your slides by uploading and releasing the document that you just saved to your computer; it will be in PDF format.
Professionalism

Students sometimes wonder why they are required to wear scrubs to class, wear proper footwear in the lab, pull back and secure hair, and have nails short and natural. It’s because Hondros College of Nursing is the beginning of your life and role as a professional, and these requests have to do with safety, infection control, and professionalism.

Your profession, whether it is nursing or medical lab technology, requires education and specialized training. “But simply working in an identified profession does not automatically make one a professional. Professionalism involves much more than degrees and credentials. It includes a certain work ethic, attitude, code of conduct, appearance, communication style, among other matters” Cardillo (2009).

Some thoughts and ideas on professionalism relevant to today’s healthcare workers can be found below, along with some information about what it takes to be a true professional and what professional appearance, demeanor, and behavior look like.

Attitude Is Everything

The way you view your world and portray yourself to others is everything. A smile goes a long way, and personal issues should be left at home. There are always going to be things in our lives that threaten our positive outlook, so we need to try to be grateful for everything we have and convert “I have to” to “I get to” (Gokenbach, 2012).

Appearance Is Critical

Image and appearance matter more than many people realize, and unfortunately for some, people judge others by their personal appearance. If you look like you care about yourself, it’s easier for patients to feel that you will be able to care for them. You need to be aware that you communicate a great deal to them in the first few seconds of interaction, many times before you have had a chance to speak.

Cardillo (2009) emphasizes that you need to keep in mind that patients put their welfare in your hands, entrust you with their lives, and rely on you to advocate for them and make life-saving decisions on their behalf. This level of responsibility requires an appearance worthy of that trust. You have to inspire confidence in others by dressing in a manner that conveys maturity, seriousness of purpose, and conservative good taste. In other words, you have to create a professional image to reflect the professional person you are. Whether you’re wearing scrubs, uniforms, or street clothes, they should be clean, unwrinkled, in good repair, and conservative in appearance. This includes footwear and accessories (Cardillo, 2009).

While tattoos and piercings are very popular these days, not everyone is comfortable with them. They can be offensive and sometimes even frightening to some patients, and many employers prohibit them for these reasons. Keep in mind that your patients’ needs are more important than your desire for self-expression (Cardillo, 2009). Many work places require you to cover your tattoos and remove piercings, and Hondros College of Nursing requires this as well.

Professional Demeanor Is a Must

How you act in a situation tells a lot about your character and can either show your confidence and competence or destroy it. Learning the principles of conflict management and clear communication can help you stay calm and remain in control when faced with criticism or hostility. You should be aware of your body language and other non-verbal communication; it tells your patients a lot about you. Facial expressions and eye rolling when a physician or coworker says something you don’t agree with tells your patient that the healthcare team doesn’t work well together. Be mindful of conversations you have and comments you make where patients and their family can hear you. Criticizing a coworker or manager can make patients uneasy and question the quality of their care (Cardillo, 2009).

It’s important to always greet patients and their family members with a smile, eye contact, and a handshake or light touch. Be sure to maintain the utmost respect for your patients, and remember that he or she is not just an illness or a disease but a person with a life, a family, a culture, and a nationality. Patients are your clients; you serve them, so be caring as well as technically astute while remaining connected and focused on their care. If you concentrate exclusively on your work routine, you may overlook what your profession is all about (Cardillo, 2009).

Your Public Persona Is Part of Your Professional Persona

No matter what you do or where you go, you are always representing your chosen profession. People will judge the profession based on their encounter with you — whether in the healthcare setting or not. You have an obligation to act responsibly and within the law at all times (Cardillo,
2009). Emails and posts on social media sites should only include those things that you would want to see on the front page of the newspaper or explain to a loved one.

Professionalism Isn’t Just One Thing

Professionalism encompasses many things. How you look, act, speak, and what you say will determine how well you are received by patients, colleagues, and administrators. Finishing your program and passing your licensing exam allow you to become a professional. Understanding and practicing all aspects of professionalism as a student will put you ahead of the game and will help you develop self-respect, self-satisfaction, and confidence. It will also help you and your entire profession gain more recognition, respect, and opportunities. A professional attitude, appearance, demeanor, and behavior will help you to be the best at what you do.

Interacting with Peers

Hondros College of Nursing feels there needs to be an enforcement of good manners and respect for students and faculty. Therefore, good behavior is required of all students and faculty while on campus.

Good manners and basic etiquette help to create an environment where students and faculty can interact productively. The extent of expected manners depends upon if you’re in a classroom, where a more rigid atmosphere exists, or in a study room, where a more relaxed atmosphere occurs. Saying please and thank you are two basic and expected ways to make interactions pleasant.

TIPS FOR INTERACTING
1. Actively listen to what your peers are saying. Listen and concentrate on what they are saying and not just on how you will respond.
2. Avoid interrupting your peers. Wait until the person you are speaking with has stopped talking before you begin to speak.
3. Ask questions during conversations to clarify your understanding when appropriate.
4. Engage in polite behavior. Cussing, swearing, and inappropriate hand gestures are unacceptable.
5. Avoid cutting into conversations and changing subjects; this give the impression you’re not interested in what the other person has to say.
6. Give constructive criticism when appropriate regarding the subject material and not the person.

CONFLICT
Conflict is a disagreement between two students or a student and faculty member where at least one person perceives a threat to their personal well-being. This can lead to very disruptive behavior in a classroom setting. Conflict should be avoided at all cost.

APOLOGIES
If a breach in manners does occur, you can partially or fully repair the damage through a sincere apology appropriate for the situation.

HOW WE APPROACH SUBJECT MATERIAL
Faculty and students approach class material content from different perspectives, and explanations from peers can greatly benefit a student’s understanding. Faculty have a role to play in facilitating peer collaboration through the suggestion of study groups.

Studies have shown that students are more likely to ask a peer for help than ask for clarification from faculty. Struggling students may find it’s especially helpful to get more individualized help from a peer rather than from faculty. That is why student tutors were created and study groups are formed. Chances are that fellow students are interested in forming a study group, so don’t be afraid to ask other students to join one. Seek out a peer-tutor if you’re more comfortable doing so.
Time Management Can Ease Stress

Managing your time effectively helps you get more done each day. It has important health benefits, too. You can minimize stress and improve your quality of life by managing your time more wisely. To get started, the Mayo Clinic website suggests you choose one of these strategies, try it for two to four weeks and see if it helps. If it does, consider adding another one. If not, try a different one.

- **Plan each day.** Write a to-do list, putting the most important tasks at the top. Keep a schedule of your daily activities to minimize conflicts and last-minute rushing. Planning your day can help you accomplish more and feel more in control.

- **Prioritize your tasks.** Time-consuming but relatively unimportant tasks can take up a lot of your day. Prioritizing tasks will ensure that you spend your time and energy on those that are truly important to you.

- **Break large, time-consuming tasks into smaller tasks.** Work on them a few minutes at a time until you get them all done.

- **Practice the 10-minute rule.** Work on a dreaded task for 10 minutes each day. Once you get started, you may find you can finish it.

- **Learn to say no.** Consider your goals and schedule before agreeing to take on additional work.

- **Delegate.** Take a look at your to-do list and consider what you can pass on to someone else.

- **Take the time you need to do it right.** Doing your best the first time may take more time up front, but it takes even more to correct errors and make revisions.

- **Evaluate how you’re spending your time.** Look for time that can be used more wisely by keeping a diary of everything you do for three days. Revise your schedule to eliminate or cut back on activities that take up too much time and are nonproductive.

- **Limit distractions.** Block out time on your calendar for big projects. During that time, close your door and turn off your phone, computer, and email.

- **Get plenty of sleep, eat a healthy diet and exercise regularly.** A healthy lifestyle can improve your focus and concentration, which will help improve your efficiency so that you can complete your work in less time.

**Strategies to Help You Deal With Stress**

We all know what stress is and how it makes us feel. As nurses you know about the “fight or flight response” - the autonomic nervous system’s response to stress. Activated in emergency situations, it causes physiological changes to allow the body to combat stressful situations. However, “prolonged activation of the stress response causes wear and tear on the body – both physical and emotional” (Cleveland Clinic, 2015, para. 2). Adding tests, grades, and studying to your already busy schedules with work and/or children makes it necessary for you to add stress relief to your “To Do” list.

Nurses should also know that living with constant stress can lead to a negative stress reaction condition called distress. Distress can cause physical symptoms such as headaches, stomach problems, sleeplessness, changes in appetite, high blood pressure, chest pain, and sexual dysfunction. Emotional problems like depression, panic attacks, or other forms of anxiety and worry can also occur (“Thirteen tips,” 2014). So, it’s best not to get “stressed out.”
You need to make some changes when you feel like the stress in your life is out of control; stress management can teach you healthier ways to cope with stress. According to Robinson, Smith and Segal (2015) some stress management strategies you may want to try to help lessen your stress include:

#1 Avoid unnecessary stress
- Avoid people who stress you out.
- Learn how to say “no.”
- Trim your to-do list.

#2 Alter the situation
- Adjust your attitude.
- Manage your time better.
- Express your feelings instead of bottling them up inside.

#3 Adapt to the stressor
- Look at the big picture and ask yourself how important it will be in the long run.
- Focus on the positive.
- Adjust your standards; perfection is not possible.

#4 Accept the things you can’t change
- Don’t try to control the uncontrollable.
- Try to look at major challenges as opportunities for personal growth.
- Share your feelings; express what you’re going through even if there’s nothing you can do to change the situation.

#5 Make time for fun and relaxation
- Set aside time for relaxation.
- Spend time with positive, supportive people.
- Do something you enjoy every day.
- Keep your sense of humor—laughter is the best medicine.

#6 Adopt a healthy lifestyle
- Reduce caffeine and sugar intake.
- Avoid alcohol, cigarettes, and drugs.
- Get enough sleep.
- Exercise regularly.
- Eat a healthy diet.

Planning Will Help Reduce Stress

To be successful, you should have a plan and a back-up plan for some of life’s emergencies, so you can adjust and adapt without any major setbacks. While each of us has to find what works for us, some things to consider include:

- Failing to plan is planning to fail. Have a plan ready in case unexpected events occur.
- Get things done early just in case something comes up that you didn’t plan on. You don’t have the luxury of procrastinating.
- Break the big tasks into smaller ones, so you can accomplish your goal one step at a time with more frequent successes.
- Learn to prioritize based on long-term goals.
- Do whatever you have to do to complete your education. Pace yourself and stay focused.
- Utilize your time appropriately. Decide what’s really important to get done.
- Try not to overload your schedule with difficult or demanding classes or full-time work if at all possible.
- Communicate your goals with your family. Be sure your family understands what you are doing and how important it is to you to continue your education. You need their support to succeed.

Back-up plans are critical to your success. They can help keep you calm in stressful times and make you more flexible and adaptable. Back-up plans are important; that’s why we buy insurance. It’s a back-up plan in case we get sick, have a car accident, or a house fire, because our health, car, and home are important to us. If we have a back-up plan for all of these important things in life, why wouldn’t we have one to make sure we can get to class and work on time every day? School and work should be just as important.

A short list of things you need a Plan A, Plan B, and maybe even a Plan C and D for include transportation, child care, and illness of a child or loved one for whom you are responsible. You need to have and know your options!

Planning ahead is critical for success in school. If you wait until the last minute, you reduce your options and increase your stress. While juggling all that life throws at you, remember that you are not a superhero and perfection is unattainable. You can do many different things with mediocrity or do two or three things with excellence.
There are many sources that provide information and tips on getting the most out of studying, reading your textbook, and taking notes in lecture. To be successful, you need to find what works best for you. Whether you are listening, reading, or studying, you need to be aware of your physical environment as well as your state of mind. Distractions will affect your studying and the amount of information you retain. Here's some information that can help you be more successful and efficient while attending class and when studying for quizzes and exams.

**Studying**

Many agree that the most effective studying happens in short, manageable “chunks of time” – 45 to 60 minutes at a time; studying for several hours without breaks is not an effective study strategy for retaining information. Your brain becomes full of information and struggles to absorb and process any more after an hour or so. When you can’t remember what you just read or feel you can’t concentrate another minute, it’s time to take a break, one that involves getting up and doing another activity for at least 10-15 minutes.

You should also vary your study method. You can read, do flashcard review, complete the textbook’s chapter quiz, discuss the material with a classmate, or ask someone to quiz you on the material you read. If there are review questions at the end of the chapter, take the time to write the answers out. You’re more likely to remember the material if you vary the study materials and methods that you use.

Many nursing students find that forming study groups is a very effective way to study. They force you to be disciplined, as everyone is responsible for being up-to-date on the material. When there are concepts that you’re not quite getting, your fellow students can help explain them to you. These groups are also a great place for brainstorming and creating mnemonics and associations that assist you in remembering. You’ll spend lots of time memorizing things, so the more help you have with that, the better.

You may find that study strategies used in the past aren’t the best strategies for your nursing classes, so you’ll need to try different methods to retain the information. Whenever possible, watch or participate in a demonstration of material you need to know, and take the lead on setting up discussion groups with other classmates to talk about and quiz each other over material covered in the classroom, lab, or clinical site. Doing so will help with retention.

**Reading Textbooks**

Your classes will require the use of textbooks and sometimes supplemental texts or web resources. Before the quarter begins, you should review them. Once the quarter starts, it’s important to refer to your syllabi and confirm with your instructor which book(s) will be the primary text for the quarter and concentrate your efforts on those course materials. Ask your instructor if you are expected to read the primary nursing textbook from cover to cover. Some instructors may want you to think of your nursing textbook as a reference, a source to review when you do not understand the material addressed in lecture or covered in the clinical. Other instructors will rely heavily on the material in the textbook. It’s critical to know what material you are responsible for and what each of your instructor’s expectation is.

There are a number of textbook reading strategies that you may adopt to get the most out of your reading. Two of them are the PARROT system and the SQ3R method. PARROT is an acronym that stands for Preview, Ask & Activate, Read, Recite, Organize, and Test. SQ3R is a reading strategy formed from its letters: Survey, Question, Read, Recite, and Review. Both help you to see how much time and effort you need to invest in your reading assignments. It’s vital for you to adopt a reading strategy to make sure that your time is spent productively, especially if the amount of your assigned reading seems daunting. One of these may help.
PARROT System—Preview, Ask & Activate, Read, Recite, Organize, Test

Preview: This step involves looking over the entire reading assignment to familiarize yourself with the concepts that will be covered and the length of the reading assignment. Previewing involves skimming the major headings, illustrations, charts, figures and anything else that stands out from the text. If there is a summary, you should read it. This helps you prepare for what's to come and understand how concepts relate to one another. As you preview, you'll begin to determine how many pages you can read in 45-60 minutes and how familiar you are with the topics.

Ask & Activate: As you preview the material and prepare to read, it's important to formulate questions based on the topics and subheadings. Ask yourself if anything is familiar based on your prior knowledge on the subject. Ask yourself what you can expect to learn or what you need to find out. This creates a purpose for you to begin reading. Determine the number of pages you hope to cover within the 45-60 minute time frame and where you'll stop reading for your break. You may decide to skim sections of material that you already know.

Read: When you read the section that you've selected, do so without a highlighter or pen in hand. Don't take notes or highlight on your first reading because everything seems important the first time you read it. There is a tendency to over highlight or take notes on information that is not important or that you already know.

Recite: Reciting involves stopping to check your comprehension by saying aloud, if possible, a summary of the material you have just read, preferably in your own words. The objective of this step is to help you make personal connections to the information in the textbook. As you recite or explain the material you read to yourself, you should be taking note of how the information is organized.

Organize: At this step, you should organize the information in a format that will help you better comprehend and study. This may involve creating an outline, developing study or flash cards, constructing a concept map, taking Cornell notes, or some other method. It's suggested that you don't take notes on material you already know as it's not necessary. Focus on devising ways to remember complex information and materials or concepts that you'll need to know.

Test: You don't know what you know until you actually test yourself. Use the study questions and/or quiz questions at the end of the chapter, or go on-line to complete the chapter quiz to determine what information you have retained. You can also create your own questions by forming the headings, subheadings, italicized, and bolded words into questions. If you are able to answer all the questions successfully, you're ready to move on to the next reading assignment. If you get some answers wrong, you only have to go back to the section of the chapter that you got wrong. Don't read information you already know!

SQ3R Reading Method—Survey, Question, Read, Recite, Review

Survey or Scan the chapter before you read: Take a look at the title, headings, subheadings, captions under pictures, charts, graphs and maps. Review the chapter questions or teacher-made study guides. Look at the introductory and concluding paragraphs in each section and the chapter summary. Doing this will give you an idea of the information you'll find in the chapter.

Question while you are surveying: Turn the title, headings, and/or subheadings into questions and see if you can answer any of them. Read questions at the end of the chapters or after each subheading to see what you already know. Ask yourself, "What did my instructor say about this chapter or subject when it was assigned?" and "What do I already know about this subject?"

Read: Look for answers to the questions you raised, and answer the questions at the beginning or end of chapters. Take the time to reread the captions under pictures, graphs, etc., and note all the underlined, italicized, bold printed words or phrases. Stop and reread parts which are not clear or are difficult to understand. Read only a section at a time and recite after each section. Take notes, highlight, and make notes in the margins as you read using one of these effective note-taking methods: charts - which allow visual learners to see relationships and differences; key words – help define terminology, phrases, names and people; outlines – organize information into clusters or under separate headings; and flash cards.

Recite after you've read a section: Orally ask yourself questions about what you have just read, or summarize what you read in your own words and say it out loud. Find a classmate who is willing to ask you questions, discuss the main points of the chapter with you, or to whom you can verbally explain the information. The more senses you use, the more likely you are to remember what you read; quadruple strength learning involves seeing, saying, hearing, and writing!

Review: an ongoing process

After you have read and recited the entire chapter, write questions in the margins for those points you have highlighted or underlined. If you took notes while reciting, write questions for the notes you've taken in the left hand margins of your notebook. When you have time to study, page through the text and/or your notebook to re-acquaint yourself with the important points. Cover the right hand column of your text/notebook and orally ask yourself the questions in the left hand margins. Orally recite or write the answers from memory.

(Continued on next page)
Other ways to review include developing mnemonic devices for material which needs to be memorized, and making flash cards for material or questions you find difficult to remember. After you have done so, alternate between your flash cards and notes and test yourself (orally or in writing) on the questions you formulated. If you skim through the material or use your flashcards throughout the week, you’ll be ready for your exams when they are given. You can also try randomly selecting a previous chapter to review throughout the semester on a weekly basis by taking the chapter quiz. This will help you keep information from the beginning of the semester fresh and lessen the amount of review for your final exam.

Your Lectures

You should try to complete your weekly reading assignments prior to your lecture. If you don’t make it through all of the assigned pages, anything you can read prior to class will help. Make note of concepts you don’t understand in the textbook, and ask your instructor for clarification of the textbook material in the next class. Even if you don’t understand the reading assignment, by doing the reading prior to your lecture, you’ll have had exposure to the content. Subsequently, the content of the lecture may be easier for you to understand or be more meaningful since the lecture isn’t the first time you’ve heard or seen the material.

Concentration in Lectures

If your lectures are long and you’re having trouble concentrating, take an unofficial break. While you may not want to miss important information, it may be more beneficial for you to leave a lecture for a few minutes. If you’re fighting sleep during a lecture or are unable to concentrate, you are already missing the lecture! Leaving the room for a few minutes to get energized is more advantageous for you than fighting to stay awake.

Taking Notes During Lecture

The PowerPoint slides that the nursing faculty produces can be large in number, and the complexity of the information may be great. If you print them out, print the handouts two slides per page so the images are larger and easier to read. There will also be more white space for your notes.

Don’t take notes on information you already know. If the content of the lecture is material that you are comfortable with, sit back and listen to the lecture. There might be a point or two that the instructor makes that you may want to note, but you should not be attempting to write down everything that is said. That activity is not one that you will benefit from.

As a student in lecture, your notes should clarify a point you did not understand in the textbook, or explain a nursing process concept that you struggled with during clinical. Ask questions if you are confused. Be a proactive learner and listen to the lecture.

There are a number of note taking methods you can use. One option is the Cornell Method shown below. Notes are taken in class, and the cues and summary are done after class when you are reviewing the material.
Two more note-taking methods you can try are mind mapping and the concept mapping method. Mind mapping allows you to quickly identify and understand the structure of a subject. You can see the way that pieces of information fit together, as well as record the raw facts contained in normal notes.

The concept map is similar to the mind map in that it shows the relationships among the pieces of information. It differs from mind mapping, however, in that it uses a linear style rather than a random style. This note-taking method is ideal for those who like to see both the big picture as well as the structure of the information pieces.

Note-taking methods help you organize the material you have to learn. Good note-taking takes practice, and you have to find a method that works for you. You might find that a combination of 2 or more of these work for you. Once you figure out what works for you, stick with it!

### Getting the Most From Your Studying

It’s important to understand and be honest with yourself about your strengths and weaknesses as a student. You’ll need to put into practice academic and life behaviors that will increase your success in earning a passing grade each semester. The objective of studying is to retain information, and your ability to remember is affected by many factors such as distractions, stress, interest in the material, level of motivation, and time of day. To ensure your success, be sure to know yourself and what is best for you!

Here are some tips to help you get the most from your studying:

- Don’t study in a place that has distractions for you. This could be a person, technology (iPod, texting, etc.), or a place! Select a study location that will not distract you from your task.

- Know your high energy and low energy time of day. If you’re not a morning person, don’t try to study first thing in the morning.

- Eat well and get some exercise. Practice the healthy lifestyle your future profession encourages others to do!

- Do not skimp on sleep. You should be getting on average at least 6 hours of sleep each day. Lack of sleep worsens your emotional state, your ability to concentrate, and feelings of anxiety.

- Don’t sweat the small stuff. Accept that during the semester you may not be able to maintain the same level of commitment to life’s daily chores. The house can stay messy and dinner can be a sandwich. Don’t let yourself get distracted by busywork instead of meaningful study and preparation for your class or clinical.

- Ask for help! Your instructors are the first people you need to speak with if you are struggling. Find out what additional resources are available to help you and take advantage of them!

- Attempt to maintain balance in your life. All work and studying is not healthy, so try to set aside time each day for doing something for you.
Test Taking Strategies

Test taking strategies are skills and approaches, unrelated to the traits a test is intended to measure, which may increase the test takers' scores and may include the effects of coaching or experience in taking tests. Consider:

The Parts of the Question
- The case (sometimes called scenario) – the description of the client and what is happening to him/her
- The stem – the part of the question that asks the question
- The correct response
- Distracters – incorrect but feasible choices

Some additional strategies include:

POW—Put the question into your own words
- Reword the question to gain understanding and to determine what the question is really asking

Look for KEY WORDS like the ones below in the question; these are priority questions. This means that all options are actions the nurse will do. Sequence the options based on priority, and choose the #1 answer.

<table>
<thead>
<tr>
<th>first</th>
<th>initial</th>
<th>vital</th>
<th>primary</th>
<th>most</th>
<th>essential</th>
<th>highest priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>next</td>
<td>immediate</td>
<td>best</td>
<td>most important</td>
<td>least</td>
<td>primary</td>
<td>new</td>
</tr>
</tbody>
</table>

TIME FRAME KEY WORDS like these:
- early
- late
- preoperative
- postoperative
- day of surgery

Use the PHAN pathway for priority questions
- Priority
- Hierarchy
- ABC’s
- Nursing process (ADPIE)

Eliminating Answer Choices
- Take out the two answers that you know are not correct; anxiety decreases with a 50% chance of picking the right response
- Use this strategy for use in multiple choice questions, not priority questions

Predicting Answers
- Do not pick the answer that jumps out at you
- Make sure to carefully consider each answer choice
- Eliminate the wrong answers to derive the correct answer
- Make sure the ENTIRE answer is correct
Test Taking Strategies ...

Continued

Elimination Example:

When doing a physical assessment of a 17-year-old primigravid who is at 30 weeks of gestation, a nurse should expect which finding is related to mild preeclampsia?

1. Epigastric discomfort
2. Trace proteinuria
3. Dyspnea
4. Blood pressure of 150/100 mm Hg

- You need to choose the best answer from the four you are given
- This is where your practice of eliminating answer choices will really pay off
- What if every answer choice is correct? You need to use critical thinking
- Is it acute vs. chronic or Maslow's
- If you see the words: most, first, best, initial in a question, this means you must establish priorities and pick the answer with the highest priority

ADPIE—the Nursing Process

Assess

- Always assess before you act
- When you see a question regarding care that includes both assessments and implementations in the answer choices, ask yourself, "Is there enough information given to take action?"
- If there is not, you must assess first

Assessment Question Example—USE ADPIE:

The night after an exploratory laparotomy, a patient who has a nasogastric tube attached to low suction reports nausea. A nurse should take which of the following actions first?

1. Administer the prescribed antiemetic to the patient
2. Determine the patency of the patient’s nasogastric tube
3. Instruct the patient to take deep breaths
4. Assess the patient for pain

Determine the patency of the patient’s nasogastric tube

- Two of the choices require you to take action and are therefore implementations (1 and 3)
- Choice 4 is tempting because you see the word “assess”
- Think further, is pain an issue for this patient? No, nausea

Assessment versus Implementation

- When faced with both assessments and implementations, eliminate the implementations first unless you are certain the question gives you enough information to take action
- If the question does not give you enough information to act, you must assess
- Eliminate the answer choices involving unnecessary assessment

Example:

A nurse enters a client’s room and finds that the wastebasket is on fire. The nurse immediately assists the client out of the room. The next nursing action would be to:

1. Call for help
2. Extinguish the fire
3. Activate the fire alarm
4. Confine the fire by closing the room door

Activate the fire alarm

- The order of priority in the event of a fire is to rescue the clients who are in immediate danger
- The next step is to activate the fire alarm
- The fire is then confined by closing all doors
- Finally, the fire is extinguished
- Remember RACE(rescue, activate, contain, extinguish)
**Test Taking Strategies... Continued**

**ABCs—Airway—Breathing—Circulation**
- Should be used after Maslow for priority questions
- Must be relevant to the question, not all responses are the airway
- Airway breathing and circulation are essential to life
- Although Maslow lists excretion as a physiological need, it will not be important if the patient cannot breathe!

**EXAMPLE:**
A patient who is one day postoperative after gall bladder surgery reports pain at the surgical site. Before giving a narcotic analgesic medication to the patient, it is essential for a nurse to take which of the following actions?
1. Measure the drainage from the patient’s T-tube
2. Record the patient’s report on the chart
3. Take the patient’s pulse rate, respiratory rate, and blood pressure
4. Determine if the patient has voided

**Take the patient’s pulse rate, respiratory rate, and blood pressure**
- All of the choices are assessments
- Remember Maslow’s first, examine the patient’s physiological needs
- Pain is considered a psychological need unless it is extreme and or points to a physiological problem
- If the patient’s other needs are met, the nurse would take action to try to alleviate the pain

**Maslow’s Hierarchy of Needs Assessment**
- Dictates priorities in care
- Needs must be met on the lower levels prior to addressing higher levels
- Physiological needs always come before psychosocial needs (safety, security)
- Pain is considered a psychosocial need unless:
  - it is extreme (kidney stones)
  - interferes with the ability to render care (changing dressing on a burn patient)
- Safety and security involve emotional needs
  - Example: Mastectomy patient needs to communicate loss
- When you find questions regarding human needs—use Maslow’s Hierarchy
- **Think Safety First**
  - If there are physiological needs in some choices and psychosocial needs in others you can eliminate the psychosocial answers
  - After that...keep Maslow’s second rung, safety in mind

**EXAMPLE:**
A nurse is performing an admission assessment on a patient scheduled for possible gallbladder surgery. The patient is scheduled the following day for an oral cholecystography. Which of the following would be most important for the nurse to include in the initial assessment?
1. Any allergies the patient might have
2. Specific location of any pain
3. Family history of gallbladder disease
4. Review of any medications the patient has been taking

**Any allergies the patient may have**
- All choices are assessments
- All of these assessments should be included in the initial interview
- The potential for an allergic reaction is specific to safety
Test Taking Strategies... Continued

Repeated Words
- Words from the question are often repeated in the answer
- Frequently the same word or a synonym will be in both the question and the answer

Opposites
- When two answers are opposite (such as high blood pressure and low blood pressure or increase the drip rate and stop the IV, or turn on the right side and turn on the left side), the answer is usually one of the two

Same Answers
- If two or three answers say the same thing in different words, none can be correct
- If the answers are too alike, then neither one is correct

Umbrella Answers
- One answer includes the others
- There may be more than one correct answer
- One answer is better than all the others because it includes them
- Also known as global option or comprehensive option

A nurse from the emergency room receives a telephone call from the emergency medical services and is told that several victims who survived a plane crash and are suffering from cold exposure will be transported to the hospital. The initial nursing action of the emergency nurse is which of the following?

1. Supply the trauma room with bottles of sterile water and normal saline.
2. Call the laundry department and ask the department to send as many warm blankets as possible to the emergency room.
3. Call the nursing supervisor to activate the agency disaster plan.
4. Call the intensive care unit to request that nurses be sent to the emergency room.

Call the nursing supervisor to activate the disaster plan

Activating the agency disaster plan will ensure that the interventions in options 1, 2, and 4 will occur
Test-Taking Tips… Continued

Odd Answer Wins
- The answer that is different from the others is apt to be the correct answer
- It may be the longest or the shortest or simply very different in content or style

Absolutes
- Answers containing universal or absolute words are very apt to be incorrect
- Very little in life or nursing is always correct or incorrect
- Answers stated in absolute terms should be looked at with great caution

Test Item Check List — DID YOU CAREFULLY…
- Read the stem?
- Read all of the options?
- Read the stem again?
- Look for key words?
- Eliminate obviously incorrect options?

“Select All That Apply” Test Question Tips

Tests and quizzes can be stressful. Typical types of questions like multiple choice, true-false, matching, and fill-in the blank are bad enough, but the “select all that apply” (SATA) questions seem really terrifying. Have no fear—there is a way to attack these types of questions.

Nursing instructors will tell you that SATA format questions are very much like a “True & False” quiz and that there is no short cut to preparing for the SATA questions; you just have to know enough content. The test writers at the National Council of State Boards of Nursing (NCSBN) “love adding SATA questions to the NCLEX test bank because in one question, a comprehensive evaluation of how well the candidate knows the topic can be tested” (Ocampo, 2013, para. 2). This is why they’re developed and used.

Here are some tips to help you answer the SATA questions you encounter in class and on the NCLEX:

- **Isolate topic & stem**: You need to first understand what the question is asking by identifying the topic and stem. What about the topic does the question want you to illustrate? Spend more time looking and processing the question than looking over the options. There may be clues in the stem—a key word or phrase in the stem may provide a hint for choosing the correct answer (Ocampo, 2013).

- **Identify key words in the stem that set a priority**: Read the stem carefully while looking for key words such as first, initially, best, priority, safest, and most. These words modify what is being asked. This type of question requires you to put a value on each option and then place them in rank order.

- **Consider them one-by-one**: SATA questions are a “true or false,” “yes or no” type of question; compare the options with your formulated topic and stem one at a time. Go straight down the list, and respond with “yes” or “no,” “applies,” or “doesn’t apply.” Pay attention to every detail of the option like frequency (qd, bid, q4 hrs., q2 hrs., q shift, etc.); length of time (2-3 days, 4-6 months); and absolutes or extremes (at all times, complete restriction). And, if you cannot recall the information or it doesn’t make sense, it’s probably wrong (Ocampo, 2013).
• **Look at the specific words:** Sometimes they are a key to a wrong answer. The sentence can be 90 percent right, but one little word can make it a wrong choice. If any part of the answer is false, then the whole answer is false. That’s why reading the answer and all choices completely and independently is so important.

• **DO NOT CHANGE YOUR ANSWER!** Don’t overthink and go back to change your answer. SATA questions are typically not application or analysis level questions so usually it does not need you to factor in anything and modify your response. Unless there is something obvious you overlooked (like they were looking for negative responses, or “what is wrong,” vs. “what is right”), do not go back and change the answer. You either know the information or you don’t (Ocampo, 2013). Your first instinct is almost always right.

• **Prepare mentally:** Anticipate SATA questions on all of your tests. Knowing that there will be some may help minimize your test anxiety (Ocampo, 2013).

• **Positive/Negative Worded Questions:** If the question is a positive question, then you would want to select a statement(s) that is (are) true. Such as “you know your patient understands their diet when they reply (look for a true statement)” For a negative question, you would want to look for a false statement. Such as “you know your patient requires additional teaching when they say” (look for a false statement)

Keep in mind that to be successful when answering SATA questions, there is no substitute for knowing the material. If you know the material, you can narrow down your choices. Start by analyzing the question and determine what is really being asked. Eliminate the extraneous or non-essential information from the question. Once you feel you have a good handle on what the question is, think about potential answers before looking at the options, and then look at the answer choices. If your answer is there, choose it. Don’t second-guess yourself. Practicing the retrieval of learned information is another key for success, so do it often.

**SATA QUESTION EXAMPLES:**

A nurse is assisting with planning care for a client with an internal radiation implant. Which of the following should be included in the plan of care? **Select all that apply.**

1. Wearing gloves when emptying the client’s bedpan
2. Keeping all linens in the room until the implant is removed
3. Wearing a film (dosimeter) badge when in the client’s room
4. Wearing a lead apron when providing direct care to the client
5. Placing the client in a semiprivate room at the end of the hallway

Wearing gloves when emptying the client’s bedpan

Keeping all linens in the room until the implant is removed

Wearing a film (dosimeter) badge when in the client’s room

Wearing a lead apron when providing direct care to the client

- A private room with a private bath is essential if a client has an internal radiation implant.
- This is necessary to prevent the accidental exposure of other clients to radiation.
- The remaining options identify interventions that are necessary for a client with a radiation device.

A community health nurse is conducting a teaching session about terrorism with members of the community and discussing information regarding anthrax. The nurse tells those attending that anthrax can be transmitted via which route(s)? **Select all that apply.**

1. Skin
2. Kissing
3. Inhalation
4. Gastrointestinal
5. Direct contact with an infected individual
6. Sexual contact with an infected individual

Skin

Inhalation

Gastrointestinal

- Anthrax is caused by *Bacillus anthracis*, and it can be contracted through the digestive system, abrasions in the skin, or inhalation. It cannot be spread from person to person.
General Test-Taking Tips

Exam time can be stressful, but knowing some test-taking strategies can help. Some general tips include:

- Read and understand all of the directions before starting.
- Don’t change your answer unless you are completely sure you made a mistake. Your first hunch is usually the right one.
- Manage the allotted time. Pace yourself.
- Concentrate on one question at a time.
- Concentrate on the simple questions before the complex ones.
- Pick the most complete answer and always answer all of the questions.
- Make educated guesses; use logic and common sense.
- Read every line; don’t just scan the questions.

Tips for Answering Multiple Choice Test Questions

- Try to construct the correct answer before you look at the options.
- Identify patient-centered options.
- Identify opposite answers first and closely; they may be distracters.
- Identify specific determiners in options such as always, never, all, none, etc.
- When any part of an option is wrong, the entire answer is wrong.
- Identify equally plausible or unique options.
- Identify options that deny the patient’s feelings, concerns, or needs.
- Some questions will have a false response; the question may ask you which action is contradicted so you should look for the wrong nursing action.

Tips for Answering True/False Questions

- Watch for key words such as always, never, all or none. Statements including words like these are probably false.
- If any part of the statement is false, then the entire statement is false.
- There are usually more true than false answers.
- Most true statements come right out of a textbook or lecture.
- Make yourself work quickly; don’t pause to analyze too much.

Tips for Answering Matching Questions

- Match the items you are sure of first. Then match the others by a process of elimination.
- Read directions. Find out whether you are supposed to use each answer only once or any number of times.
- If each phrase can only be used once, confine your search to the matches you have not used. In multiple use tests, give first priority to unused choices.
- Find out which column has the longest phrases. Work your way down that column, which means you’ll be re-reading terms in the column with the shortest entries.

Tips for Answering Short Questions

- Don’t look too hard for hidden meaning. This type of question usually expects accurate recall of key words and phrases.
- Watch the blanks to determine the length of expected answers.
- Answer the question completely.

Tips for Answering Essay/Discussion Questions

- Become familiar with exam direction words, and do what the directions tell you to do.
- Predict the questions most likely to be asked and practice answering them.
- Plan before you answer. Make notes on the back of the exam sheet or in the margin. Outline your answer.
- Check your outline against the question to make sure that you are answering the question asked.
Tips to Minimize Test Anxiety

Most students suffer some anxiety both before and during a test. For some of these students, anxiety can cause them to do poorly. Fortunately there are many different ways to gain control of test anxiety and keep it at a manageable level. According to Georgetown University (n.d.) and the University of Cincinnati (2012), these valuable tips and techniques can help you take control of your anxiety.

- **Be well prepared for the test** - study hard and long!

- **Create sample exams** and **take several practice exams** if possible. If you time yourself, you’ll know you can finish in the time given on test day.

- **Get enough sleep** for at least two nights before your exam so that you are not tired, irritable, and distracted the day of the exam. Don’t try to stay up all night the night before the exam by taking caffeine or drugs.

- **Eat a moderate meal before the test**, but avoid drinks with caffeine.

- **Don’t talk to friends about the exam material** just before going into the exam, and steer clear of fellow students who get tense. Panic is contagious.

- **Learn to recognize the underlying causes of your anxiety.** Think about why you become anxious, and recognize that some thoughts are negative and self-defeating. For each emotional, frightening thought, come up with a rational counter-thought.

- **Get to the exam room a few minutes early** so you’ll have a chance to familiarize yourself with the surroundings. You’ll feel more comfortable.

- Before taking your test, take a few moments to sit and **write out exactly how you are feeling and why**. You can do this on scratch paper once the test starts if it’s ok with your instructor or in the hallway right before class starts. *Studies have shown that a majority of college students who did this simple exercise experienced a significant decrease in their amount of anxiety while taking their test!*

- **Don’t create disastrous scenarios** or put your whole future on the line with a single test. It’s unlikely that one test will “make or break” your chances for a happy or successful future. Learn to imagine yourself remaining calm and in control.

- **Circle or underline significant words** in the question. Read carefully to avoid misinterpreting what is being asked.

- **When working out a problem, write down whatever you know.** It might help you to figure out the problem, and some teachers even give partial credit in recognition for what you know.

- **If you feel very anxious or even panicky in the test, take a few minutes time out and calm yourself down.** Stretch your arms and legs and then relax them again. Do this a couple of times. Take a few slow deep breaths. Do some positive internal self-talk; say to yourself, “I will be OK. I can do this.” Then take your time and get back into the questions.

- **Practice relaxation techniques.** If your mind is blocked by tension during an exam, close your eyes, take a long, deep breath, and then let it out slowly. Don’t panic! Concentrate on your breathing and actually feel or hear yourself breathe. Don’t allow yourself to worry about the time, test, or tension. Repeat this twice, and then return to the test.

- **Some students may find muscle tension-relaxation exercises helpful.** If before or during a test you start to panic, stretch as hard as you can, tensing the muscles in your arms and legs, and then suddenly relax all of them. This will help relieve tension. If you have more time, tighten and then relax the different muscle groups and then relax those muscles for 10-20 seconds. Follow the same procedure for muscles in your shoulders, neck, chest, abdomen, legs, feet, etc. Remember to breathe deeply and slowly.

- **Budget your time.** Estimate how much time you have to answer each question. If some questions are worth more points than others, plan to spend more time answering them.

---

**The Palming Method**

1. Close and cover eyes using palms of hands
2. Think of some real or imaginary relaxing scene
3. Visualize this relaxing scene for one to two minutes
4. Open eyes and repeat
5. Add sounds or smells to enhance the scene

---

Last update — March 2019
Tips to Help You Be Successful in Online Classes

Online courses can be very rewarding, as long as you approach them with the right frame of mind. Adam Bulizak, Hondros College of Nursing’s Dean of Academic Affairs, has some tips to help students be successful in online classes.

According to Mr. Bulizak, taking an online course requires a high level of engagement and commitment. With the convenience of the online atmosphere comes the temptation to get a little lazy; it’s easy to drift away from online coursework when there are so many fun sites just a click away. Without regular in-class meetings to keep you on track, some students find it difficult to keep up the self-motivation required to really succeed in an online environment. Furthermore, online courses can be scary, and even frustrating, especially for people who aren’t used to the technology.

Mr. Bulizak says that just remembering these few simple tips can help make an online class manageable, effective, and maybe even enjoyable.

1. Become Familiar with the Online Learning Environment
   While learning online can be frustrating at times, becoming familiar with the online learning environment alleviates most of those headaches.

   There are several pieces of software that you absolutely must become familiar with during your time at Hondros College of Nursing (HCN): your HCN student email, Sakai (the online learning platform and your “classroom” for your online courses), CAMS (our online student management portal), and Microsoft Word and PowerPoint. In addition to these, some online courses deliver content through McGraw-Hill Connect and some instructors do tutoring in an Adobe Connect “classroom.” These are the tools necessary to survive your online classes.

   According to Mr. Bulizak, you should explore these platforms and tools. Check your email every day. Browse every section of your online courses to see assignments, course documents, forum discussions, and quizzes. Learn how to navigate the Sakai learning environment. Open the course materials and look through them. Read the tutorials for accessing and using McGraw-Hill Connect as well as the other resources posted in your online course room.

   If problems and frustration arise, make sure to notify your instructor and the technical support team, who will work to fix the issue as soon as possible. Additionally, remember to save your work frequently, because sometimes programs crash, and you don’t want to lose a document you’ve been writing all night. Finally, make backups! A computer crash isn’t an acceptable excuse for missing work; you need to make sure that your files are safe and secure, and the best way to do this is to save them both on your computer and on another drive, as well.

   Learning the skills to operate common software like Microsoft Word and PowerPoint will certainly benefit you now and beyond your time at HCN. Being comfortable with technology can help you immensely with your personal, academic, and career-related pursuits.

2. Do the Work
   When you’re taking an on-ground class, you have a course schedule with deadlines for assignments, and you need to work hard to stay on top of that schedule. The same is true for an online class, but in an online class, you don’t have an instructor standing in front of you to remind you to complete your assignments. Because of this, taking an online course requires a good amount of self-motivation to stay on top of your coursework.
Students in online courses have a great advantage over students in traditional courses, however: extreme scheduling flexibility. You can complete the course material at your own convenience (as long as you keep meeting deadlines, of course!), without having to worry about preparing for in-class meetings.

The best method for a successful online learning experience is to harness that scheduling flexibility and set aside specific, convenient times to work on course materials – maybe an hour or two every night. Write down your schedule on a calendar to keep yourself on track. Make sure to allot enough time to look at course materials, read the textbook, and complete all of the assignments on schedule (and even ahead of deadlines, so that you can ask questions and get some feedback in advance). Try to find times throughout the week when you can enjoy some quiet and comfort to complete your coursework.

3. Communicate
When you take a course online and you want to ask your instructor a question, you will likely email that question to your instructor or post it in the online classroom. Just as you shouldn’t be intimidated to raise your hand and ask a question in class or visit your instructor’s office hours, you also shouldn’t be intimidated to message your instructor. Asking questions not only helps you learn about what you need to accomplish in the class, or better understand the subject matter – it also helps the instructor understand how to make the course more clear, and more successful, for everyone. This leads to a better educational experience for you, your peers, and future students. Just remember to treat your instructors with politeness and respect; read your emails over before sending them to make sure that they actually say what you mean, without any unintentional anger or condescension.

Talk to the other students in the course, as well. For our PN and ADN students, there’s a good chance that you’re also taking in-person courses with the students in your online class. Sharing information, ideas and questions with your fellow students will help you to make sense of the material. For the same reason, take advantage of online discussion forum assignments, and offer your fellow students detailed and thoughtful posts and responses.

But the most important reason for communication in your online course is that it helps you to feel connected and engaged with the course and the material. Reaching out to your instructor and classmates helps them feel that engagement as well. And if you’re engaged, it makes doing all of the work and using all of the technology feel much more accessible and normal. It makes the instructor feel like a person, and not a grading robot. Sharing in an engaged relationship helps to achieve a real and effective learning experience for everyone involved.

The bottom line is that online educators are aware of the fact that taking online courses can sometimes be difficult, and they require some students to move outside of their comfort zones. However, honestly following these tips will aid your online learning experience, hopefully transforming the daunting effort of learning in a new way into a rewarding new experience with lasting benefits.

More Important Information

Two additional topics which are critical to your online class success are online student expectations and discussion forums. They will be discussed next. Make sure you understand the information which follows as it’s absolutely critical to your success.
Online Student Expectations

As an online student, you are expected to engage in your online course; act respectfully, ethically, and responsibly; and meet technical requirements and demonstrate basic computer skills. You should:

Engage in Your Online Course
You are expected to be active and present in your online course. This consists of:

- Reading, watching, or listening to all course materials and resources during or before the week they are assigned
- Completing all assignments on time, according to the instructions, and to the best of your ability
- Checking the course classroom and your email every day
- Reading all messages, posts, and emails from your instructor
- Engaging with your fellow students in discussion forums

Your engagement will be reflected in your grade and your attendance record. Attendance in an online course is defined as “participating” by completing a minimum of one academically related activity within a Monday-to-Sunday calendar week. An academically related activity includes, but is not limited to,

1. Submitting an assignment
2. Participating in a threaded discussion
3. Completing a quiz/exam
4. Completing a tutorial/computer assisted instructions

Act Respectfully, Ethically, and Responsibly
You are expected to act respectfully, ethically, and responsibly. This consists of:

- Following Netiquette guidelines: demonstrate respect, consider your tone, avoid privacy concerns, and re-read your writing before sending or posting
- Acting in an academically honest way according to the policies in the Student Catalog, including the Student Code of Conduct and the Plagiarism/Cheating policy
  - Note that the consequences of plagiarism and cheating range from a zero on the assignment to dismissal from the program
  - All written assignments must follow the 6th edition of APA Style. All work from outside sources must be cited and referenced appropriately
- Taking independent initiative to complete your work on time and to the best of your ability, to contact your instructor if you need assistance, and to schedule your time appropriately to meet the expectations of the course and program

Meet Technical Requirements and Demonstrate Basic Computer Skills
You are expected to have the proper technology to complete your online course, and to demonstrate basic computer competency. This consists of:

- Meeting the technical requirements for enrollment in Hondros College Nursing Programs, according to the Student Catalog
- Being able to use basic software, including, but not limited to, Microsoft Office (including Word, PowerPoint, and Excel), Adobe Reader, and a web browser

Discussion Forums

Online classroom discussion in asynchronous discussion forums where you are writing a response that then gets responded to is a vital learning activity that enhances writing, critical thinking, and scholarly development. The successful student engages faculty and other students in substantive or sizeable conversations, reflecting on others’ perspectives while articulating his or her own views. More importantly, students demonstrate the ability to critically and reflectively consider new information, facts, and perspectives in the enhancement of their own knowledge and development. The discussion forum activity has two components: the learner’s original response to the discussion question/prompt, and the learner’s ongoing participation and contribution to the discussion. Each component is graded separately.

Substantive participation in discussion posts includes full participation in the discussion and is a key component of the learning experience. It enriches group interaction and enhances the learning environment.
To be considered substantive, a discussion post (including initial posts or reply posts) should include appropriate foundation knowledge, be factual, contain supporting examples, and enhance the ongoing dialogue. However, rather than just reporting what someone else has stated, the learner should demonstrate application and/or reflection of knowledge such that the learner enhances the meaning of the material. Additionally, posts should contain examples and citations when appropriate. Citations and references must adhere to APA Style.

Contributing reply posts to the discussion should promote an exciting, vibrant, shared learning community that accomplishes the following:
• Expands on a classmate’s comments in a value-adding, topic-related way that indicates critical thinking.
• Promotes a collaborative, supportive community.
• Advances the dialogue through follow-up questions.

“One-liners,” off-topic posts, vague statements, unsupported opinions, and inadequate explanations or posts do not meet the substantive participation requirements listed above. However, respectful disagreement, with support for your perspective, is encouraged.

Participation in the class discussion provides the learner an unparalleled opportunity to develop and grow as a student. Please take maximum advantage of this unique learning experience.

To have successful online learning experiences, you need to get comfortable with the technology you’ll be using, do the work that is assigned, communicate with instructors and other classmates, know what is required of you, participate in discussion forums, and make the commitment to succeed.

If you need help with using the Sakai for your online courses, please complete the Successful Online Learning course, and see the resources in the Course Overview section of your course for further information. Additionally, contact your instructor and technical support should you run into issues with your online learning experience.

**Discussion Forum Posts & APA Formatting**

You know that an online discussion forum replaces a discussion within the classroom. The purpose of the forum is to not only establish and build on a sense of a classroom community but to also share knowledge and make others think and respond to your ideas and thoughts as happens in the classroom.

Your instructors expect your posts to be in APA format, but what does this mean? It means that you need to include (1) an in text citation which indicates that information preceding it has been taken from another sources and is not your own and (2) a complete reference for the source cited in your in text citation.

Here is an example of a discussion forum post using APA format:

Social contracts are created by humans for cooperative reasons, but also for individual benefit (Waller, 2011). One example of this is the regulation of using a car. If we had not made rules which tell us how to drive on public roads, we would probably have a lot more accidents, and I would probably not get to class on time. So obeying those rules benefits society, but I also obey them because the results benefit me.

We also trust that others will abide by the social contract as well. we trust that others will obey traffic laws (the social contract), and that benefits us all in the long run. “Thus, a system of morality in which we honor agreements and cooperate with others is beneficial for each of us, and it is in my long term self interest to honor it” (Waller, 2011 p. 136).


NOTE: The in text citations SHOULD NOT be bolded in your post and should be in black.

For more information about in text citations and references, please go to the APA tab in the online library and click on the References and In Text Citations link or go to http://hondros.libguides.com/home/References.
Discussion Forum Netiquette

“Netiquette” is network etiquette, the do's and don'ts of online communication. Netiquette covers both common courtesy online and the informal “rules of the road” of cyberspace (Shea, 1997).

When posting to a discussion forum, you need to consider how you come across in a forum post, because for those that don’t know you already, this will be their first impression of you.

There are many sources with information on this topic, and some common themes can be found in them. When communicating in a discussion forum, just as you would in face-to-face discussions, you should consider the following things:

Pay Attention to Tone and Courtesy
Your “tone” is a very important part of electronic communication. You should read your message out loud to make sure it sounds the way you would speak to another student or an instructor in the classroom. The University of Wisconsin-Stout (2014) recommends you consider these points:

- It is easy for messages to be misinterpreted since there are no nonverbal clues, like facial expressions and body language, nor voice inflections that accompany the text. Humor can be difficult to express in written text, so make sure everyone realizes when you are trying to be funny.
- Be sure to think through and re-read your comments before posting them.
- Be nice. DO NOT use inappropriate, offensive or insulting language and refrain from personal attacks. Everyone has the right to their own opinion, and you need to respect this.
- If you disagree with someone’s ideas, challenge the idea, not the person.
- Do not demean, harass or embarrass others. Avoid challenges that may be interpreted as a personal attack.
- Be open to being challenged or confronted on your own ideas or prejudices.

Check Previous Postings Before You Post
Some additional things to remember according to the University of Wisconsin-Stout (2014) are:

- Read previous posts made by others to avoid repeating comments.
- Make sure you are posting under the appropriate heading or thread.
- Stick to the topic. If you have personal or unrelated comments or ideas communicate them via email. DO NOT include personal, inflammatory comments in a post.
- Acknowledge the points made with which you agree and suggest alternatives for those with which you don’t (Connor, n.d.).

Give Credit Where Credit is Due
Cite your sources. Use in text citations and provide a reference for your source at the end of your post if your contribution to the conversation includes the intellectual property of others, whether found online or in print.

Proper Writing Style: Grammar, Spelling, and Fonts
Social networking and text messaging have created linguistic shortcuts that should not be a part of academic dialogue. Since the discussion forum is part of a college course, your writing should conform to the rules of standard English and include correct spelling, grammatical construction, and sentence structure. This is expected in every other writing activity associated with scholarship and academic engagement, and online discussions are no different (Connor, n.d.). Here are some guidelines:

- Don’t use profanity. Not only is it unprofessional and inappropriate, it’s offensive to some of your classmates. Bad language is always unacceptable.
- Use standard spelling—you (not u); are (not r); to or too (not 2); you’re (not ure); and I (not i).
- Do NOT use emoticons and texting shortcuts like :-) faces and c u l8r.
- Avoid using slang (e.g., “Wassup?”, “Yo,”, “Hey” and so forth).
- Use the spell check! Mistakes in spelling and grammar reflect poorly on you, and they’re not acceptable.
- Stick to standard fonts (Times New Roman, Arial, 12 or 14 pt.) and colors (black or blue.)
- No YELLING! DON’T WRITE THE ENTIRE POSTING WITH YOUR CAPS LOCK ON. IT’S REALLY ANNOYING.
Be Polite and Assume Good Intentions
The discussion board is a learning forum. The topic may be difficult or controversial, and people may disagree. It's best to assume that no one is trying to be argumentative or upsetting, but are honestly expressing their ideas. Even if you disagree, answer seriously and politely. People learn from respectful dialogue more than from sarcasm or name calling. If a post produces a passionate response from you, take a few minutes to slow down and decide whether posting it will be helpful and illuminate the topic (Kessler, 2014).

Consider Saying This to the Person's Face
Shea (1997) suggests that before you post or email ask yourself, "Would I say this to the person's face?" If the answer is no, reconsider and rewrite what you have to say. Repeat the process till you feel sure that you'd feel as comfortable saying these words to the actual person as you do sending them through cyberspace. Shea (1997) also points out that when you communicate via discussion forums or email your words are written. Any message you send could be saved or forwarded by its recipient and can come back to haunt you. You have no control over where it goes once you post or send it.

Participate
Discussion forums are a shared learning environment. It’s not enough to login and read the discussion thread of others. For the maximum benefit to all and to get the best grade possible, everyone must contribute (Connor, n.d.). In order to keep the discussion going, consider using one of the following response starters:

1. Judy, I like the way you…  
2. Sam, I agree with you…  
3. I wonder why…  
4. Mia, do you think…  
5. Alyssa, I appreciate how you…  
6. Mary, it is interesting the way you...

Report Glitches
If for any reason you experience difficulty participating, please call, email, or otherwise inform your instructor of the issue. Chances are others are having problems as well (Connor, n.d.).

Help Others
If you’ve written online posts before and have more experience with online discussion forums than the person next to you, give them a hand. Be the first to post and show others it’s not so hard (Connor, n.d.).

Respect Diversity
We live in an ethnically diverse, multi-cultural world, so DO NOT use language that is—or that could be taken to be—offensive toward others. Racists, sexist, and heterosexist comments and jokes are unacceptable, as are derogatory and sarcastic comments and jokes directed at religious beliefs, disabilities, and age (Connor, n.d.).

No Ranting or Tantrums
Criticism must be constructive, well-meaning, and well-articulated. Rage directed at any other student or instructor is simply unacceptable and will not be tolerated. The same goes for profanity (Connor, n.d.).

Once You’ve Hit Send You Can’t Take It Back
Language is your only tool in an online environment, so be mindful. How others perceive you will be largely—as always—up to you. Once you've hit the send button, you can't take back what's been said. Review your written posts and responses to ensure that you've conveyed exactly what you intended. Use this as an opportunity to practice your proofreading, revision, and rewriting skills—valuable assets in the professional world for which you are now preparing (Connor, n.d.).

According to Connor (n.d.), “unregulated, an online discussion can quickly disintegrate into a tangled web of extraneous verbiage, rude language, and inconsiderate behavior guaranteed to derail the conversation.” The basic premise is that the etiquette expected of you in an online discussion is the same as that which is expected in the classroom. “The absence of visual and auditory clues, which contribute a lot of nonverbal nuances of meaning carrying an intangible amount of weight, used in face-to-face discussions are impossible to replicate in an online environment” (Connor, n.d.).

When communicating online, keep in mind the points discussed above. You should be particularly careful not to write and spell the way you do when you text or email a friend, and you should always read what you’ve written before you post it to make sure it says what you want it to say. Remember that what you say may not be heard the way you thought you said it. Using proper netiquette shows that you are a professional and care about how you present yourself to others.
Research Paper and Essay Format

The Three Parts of an Essay

If you’re asked to write an essay and don’t know where to start, here’s some help. The short or 5-paragraph essay will have three main parts:

1. **Introduction:** The introduction should be one paragraph, and it should introduce the topic and main idea and preview the rest of your essay. The introduction will also include your thesis statement. The other sentences should present your topic, create interest, and provide necessary background information. Your thesis statement should go at the end of the paragraph.

2. **Body:** The body is generally made up of three paragraphs. Each paragraph supports, develops or adds detail to your main idea. Each body paragraph should begin with a clear topic sentence. The topic sentence, which is typically near the beginning of your paragraph, serves as the thesis statement for the paragraph, and the rest of the sentences provide supporting details for your paragraph’s main idea.

3. **Conclusion:** The conclusion is one paragraph. It summarizes the body paragraphs and concludes the essay. The first sentence restates the thesis using different words. The second and third sentences summarize the essay’s subpoints. Finally, the fourth sentence leaves the reader with an interesting final impression.

Making an outline for the paper will make writing it easier. An outline for this type of essay will look like this:

I. Introduction: states the main idea
II. Body Paragraph: first detail
III. Body Paragraph: second detail
IV. Body Paragraph: third detail
V. Conclusion: summary

What Is a Thesis Statement?

The thesis statement is a sentence that summarizes the main point of your essay and previews your supporting points. The thesis statement is important because it guides your readers from the beginning of your essay by telling them the main idea and the points you will be making.

Generally, the thesis statement is the final sentence of your introduction. Sometimes, it’s a good idea to use two sentences. For example, you might identify your main point in one sentence and then identify your supporting points in a second sentence. Other times, your thesis statement will only be one sentence. Either is acceptable, but remember that you need a clear thesis statement at the end of your introduction so that your reader understands your main point and knows what to expect from the rest of your essay. An example of a thesis statement would be, Most first-year students face many challenges, such as managing their time, maintaining a healthy lifestyle, and making new friends.

What Is a Paragraph?

A paragraph is a collection of related sentences dealing with a single topic. Some things to keep in mind when writing a paragraph include:

- Put only one main idea per paragraph.
- Aim for three to five or more sentences per paragraph.
- Include on each page about two handwritten or three typed paragraphs.
- Make your paragraphs proportional to your paper. Since paragraphs do less work in short papers, have short paragraphs for short papers and longer paragraphs for longer papers.
- If you have a few very short paragraphs, think about whether they are really parts of a larger paragraph—and can be combined—or whether you can add details to support each point and thus make each into a more fully developed paragraph.

Understanding the structure and parts of an essay helps you write better papers. And, while a longer essay will have more body paragraphs, it should still begin with an introductory paragraph and end with a concluding paragraph. Please ask your instructor, a tutor, or the librarian for help if you need it.
Developing an Outline

1. Outline for Writing a Research Paper

When you need to write a longer paper, you can use this outline as a guide to help you organize the information you’ll be writing about. NOTE: The outline above can be found at http://www.professays.com/custom-essays-term-papers/research-paper-

Outline for Writing a Research Paper

I. Introduction- begin with Thesis Statement: In one clear sentence state the focus of your paper.
   A. Key points (have at least three, but no more than five)
      1. state each main point that you’ll be making in the paper
      2. main point
      3. main point
      4. main point
      5. main point

II. Body of paper- outline the topic sentence and supporting research for each point you’ll be covering in the paper, beginning with point #1 stated in the introduction.
   A. Point 1- topic sentence idea
      1. research concept
         a. supporting idea(s)
         b. connect to next concept
      2. research concept
         a. supporting idea(s)
         b. connect to next concept
      3. research concept
         a. supporting idea(s)
         b. connect to next topic idea
   B. Point 2- topic sentence idea
      1. research concept
         a. supporting idea(s)
         b. connect to next concept
      2. research concept CONTINUE FORMAT
      3. " "
   C. Point 3- topic sentence idea and CONTINUE FORMAT
   D. Point 4- topic sentence idea and CONTINUE FORMAT
   E. Point 5- topic sentence idea and CONTINUE FORMAT
      1. 
      2. 
      3. after last point is made and supported, create a transition to summary and conclusion

III. Summary paragraph- create a key summary sentence that declares a wrap-up of concepts to begin this paragraph
   A. Follow the summary sentence with clear sentences that summarize each of the main ideas that have been discussed in the body of the paper
      1. summary of point 1
      2. summary of point 2
      3. summary of point 3
      4. summary of point 4
      5. summary of point 5

IV. Conclusion- transition to the ending of your paper and final thoughts in a paragraph
V. Reference page– lists all sources cited in the paper that have an in-text citation. They should be in alphabetical order by the author’s last name or the first word in the title if there is no author. There are APA links on the Online Learning Library page for help with formatting a References page as well as help with in-text citations.

2. Outline for Developing a Speech

A template for creating an outline for your speech can be found on the COM200 Course Help page in the library at https://hondros.libguides.com/home/COM200.
Steps in the Research and Writing Process

The following list of steps will help guide you through the research and writing process and allow you to cross off tasks you have completed. Doing so will help you keep track of your progress and see what you've accomplished. You'll find that breaking the task into smaller steps makes it more manageable.

GETTING STARTED

1. **Determine your research topic/question.**
   In some classes, students are told to find a topic, and in other classes there is a required or assigned topic. If your topic is assigned, make sure you clarify your topic with your instructor if it's not clear and know what aspect(s) you are required to cover.

   If you are choosing your own topic, you will need to brainstorm possible topic ideas. You can do this by looking at class readings and discussions, having conversations with other classmates, formulating questions that you have regarding the topic, or choosing aspects you may want to know more about. Selecting a topic that interests you will make the task more appealing.

2. **Determine your scope and timeline.**
   Determine how much total time you have for the work required and make a rough work schedule. Decide whether you are covering one big topic or a smaller one in more detail. You may find as you go along that there is too much information, so you'll need to narrow your topic. If you can't find much information, you will need to broaden your topic.

3. **Locate possible sources.**
   You will need to find material on your topic or question as background reading for you to learn more about it. Doing so will provide some direction for your research and generate ideas and aspects of the topic you might not have considered and may be interested in researching.

4. **Develop a research question/thesis statement.**
   You need to write a question that will guide you in your reading and writing. A good thesis statement answers the research question, and in doing so, states the purpose of the paper and helps structure your entire argument. It determines what you want to find, read and discuss.

DOING RESEARCH

5. **Search for information and evaluate information sources.**
   Learning how to find useful sources is the foundation of doing research. With the Internet, there is more useful (and useless) information available than ever. Using library resources takes the guesswork out of determining the credibility of a source and is the best place to start. If you aren't sure which library resources you should use, ask your librarian.

   If you are not using library resources, you'll need to carefully evaluate the information to see if it's current, accurate, authoritative, and appropriate. Anyone can create a website, so you need to be able to verify that the information is trustworthy. Whether in print or on the Internet, there are criteria that can help you evaluate the accuracy and credibility of the information presented.

   Many universities suggest using the **CRAAP Test** to help you evaluate the information you find. The CRAAP Test is a list of questions that help you determine if the sources you found are accurate and reliable. You'll need to determine the **currency, reliability, relevance, authority, accuracy and purpose** of the information. Not all of these will apply equally to every article, but asking the following questions will give you a good idea if the source you are evaluating is a reputable one.
5. Search for information and evaluate information sources... Continued

The **CRAAP Test** looks at the following:

**Currency:** The timeliness of the information is important; medical information may become outdated quickly.
- When was the information published or posted? In general, medical information older than five years is too old.
- Has the information been revised or updated?
- Is the information current or out-of-date for your topic?
- Are the links functional? Many broken links may indicate poor website maintenance.

**Relevance:** The importance of the information for your needs.
- Does the information relate to your topic or answer your question?
- Who is the intended audience?
- Is the information at an appropriate level (i.e. not too elementary or advanced for your needs)?
- Have you looked at a variety of sources before determining this is one you will use?
- Would you be comfortable using this source for your research paper?

**Authority:** The source of the information.
- Who is the author/publisher/source/sponsor?
- Are the author's credentials or organizational affiliations given?
- What are the author's qualifications to write on the topic?
- Is there contact information, such as a publisher or email address?
- Does the URL reveal anything about the author or source?
  Examples: .com (commercial), .edu (educational institution), .gov (government site), .org (organizational site), .net (network)

**Accuracy:** The reliability, truthfulness, and correctness of the informational content.
- Where does the information come from?
- Is the information supported by evidence?
- Has the information been reviewed or refereed?
- Can you verify any of the information in another source or from personal knowledge?
- Does the language or tone seem biased and free of emotion?
- Are there spelling, grammar, or other typographical errors?

**Purpose:** The reason the information exists.
- What is the purpose of the information? to inform? teach? sell? entertain? persuade?
- Do the authors/sponsors make their intentions or purpose clear?
- Is the information fact? opinion? propaganda? Does the point of view appear objective and impartial?
- Are there political, ideological, cultural, religious, institutional, or personal biases?

Asking these questions about the material you’ve found is important to the success of your paper and to your credibility.

**Primary vs. secondary research**
To evaluate research, you need to know the difference between primary and secondary research. Primary research involves original ideas and the research done to answer the questions posed by the researcher. It includes information about the medical or scientific experiments that were conducted, and it’s being published for the first time.

Secondary research includes other experts’ published papers on their review of someone else’s primary research. The authors of these types of articles are discussing, analyzing, and evaluating others’ research, not reporting on their own research. When using secondary research, you may want to go back to the primary research to look at the references the author has used to get additional supporting information.
ORGANIZING YOUR THOUGHTS & INFORMATION  (More information on outlining can be found on page 45)

6. **Make an outline.**
   The purpose of an outline is to help you think through your topic carefully and organize it logically before you start writing. A good outline is the most important step in writing a good paper. Check your outline to make sure that the points covered flow logically from one to the other. Include an introduction, a body, and a conclusion in your outline. Your outline should be revised as needed.

   **INTRODUCTION** - State your thesis and the purpose of your research paper clearly. Explain the main reason you are writing the paper. Explain briefly the major points you plan to cover in your paper and why readers should be interested in your topic.

   **BODY** - This is where you present your arguments to support your thesis statement. Be sure to use strong supporting arguments for each position you take.

   **CONCLUSION** - Restate or reword your thesis. Summarize your arguments and explain why you have come to this particular conclusion.

7. **Read and take notes.**
   Focus on your research question and find information that explains, describes, analyzes, contrasts, or gives expert opinion and viewpoints on it. You need to form your own opinion, based on what you read from your sources. Don’t just copy and paste. All you’ll have is bits and pieces of information, and you may not know where the information and/or quotes came from. Read the information, think about it, and then write about it.

8. **Add new sources.**
   While you’re reading, you might find new information or questions on a topic that you need to read up on. You might have to broaden your research to expand your topic or to get more detail or specific information.

9. **Keep your research question in mind.**
   This is what you will analyze in your paper. Your source material must help you establish your thesis or statement of opinion on the topic. What you have read might require you to change your thesis to fit what you are actually finding. Or you might change your opinion after doing your reading. For example, if your research question is, Is euthanasia good or bad? and you start your research thinking you’re against it but change your mind, it’s the thesis statement that’s changed.

**WRITING YOUR PAPER**  (More information on this topic can be found on page 44)

10. **Write your tentative thesis.**
    This is a short statement, usually one sentence, that summarizes the main point of your essay or research paper. It is a single statement about your viewpoint on your research question, and it’s developed, supported, and explained in your paper by examples and evidence.

11. **Write your first draft.**
    Your first draft is where you start writing what you have learned, what you feel about your topic and thesis. First give the background and set the context for the topic, then explain, describe, give reasons, state causes or effects, or analyze parts of the topic.

12. **Add quotes, paraphrases, or summaries into your writing.**
    These should be added into your paragraphs where they will highlight or help explain what you are saying. Be sure to introduce sourced materials in the correct way using the *Publication Manual of the American Psychological Association*, 6th edition.

13. **Finish writing your first draft, and then revise it.**
    Once you have a rough draft, re-read and revise it. Re-read it again for grammatical and spelling errors. Correct all errors that you can spot and improve the overall quality of the paper to the best of your ability. Get someone else to read it over. Sometimes a second pair of eyes can see mistakes that you missed.

    *A Research Guide for Students* (n.d.) suggests you ask yourself these questions:
    1. Is my thesis statement concise and clear?
    2. Did I follow my outline? Did I miss anything?
    3. Are my arguments presented in a logical sequence?
    4. Have I proven my thesis with strong, clear supporting arguments?
    5. Did I begin each paragraph with a proper topic sentence?

---

http://researchvoodoo.wordpress.com/2013/03/12/stages-of-writing/
6. Have I supported my arguments with documented proof or examples?
7. Are there run-on or unfinished sentences?
8. Are there any unnecessary or repetitious words?
9. Do sentences vary in length?
10. Does one paragraph or idea flow smoothly into the next?
11. Do I have any spelling or grammatical errors?
12. Have I made my points clear and interesting but remained objective?
13. Did I leave a sense of completion for my reader(s) at the end of the paper?

14. Prepare the final draft.
Check to be sure you are using APA format correctly. This includes: title page, page setup and numeration, in-text citations, reference list, inclusion of visuals, sections and titles, etc. If you are unsure, check the Publication Manual of the American Psychological Association, 6th edition. A Research Guide for Students (n.d.) suggests you also ask yourself these additional questions:

1. Are quotes accurate in source, spelling, and punctuation?
2. Are all in-text citations accurate and in the correct format?
3. Did I avoid using contractions?
4. Did I use third person as much as possible? Did I avoid using phrases such as "I think," "I guess"?
5. Are all my sources properly cited to ensure that I am not plagiarizing? Do I have a reference for every in-text citation? Did I use Turnitin if it was available? (online students only)
6. Are my wording and grammar correct? Did I use Spell Check**? (It’s located on the Review tab in Microsoft Word.)

**Spell Check—if you’re not familiar with the Spell Check feature of Microsoft Word, you may wonder why some of the words or sentences in your document have wavy red, blue, and green lines under them. If you have spell check or grammar check turned on, you may see them, but they don’t print when you print the document. These indicate possible spelling or grammar issues. If you right click on the underlined word(s), you’ll see some suggested options in a pop-up box. To replace the word(s) with one of the options, left click on it.

It’s important to remember that not all of the words you use are in the Microsoft dictionary, but you can add the word if it is one that you will be typing frequently. And, just because a word or grammar error shows up, it doesn’t mean that you have to change it.

Writing a research paper takes time, but it doesn’t have to be an overwhelming experience. Following the steps presented here will help you take control of the process. And, you just might learn something new.

**APA Style Resources Available in the Online Library**

If you need help formatting a paper in APA format, there are resources in the library to help you. Click on the Online Learning Library link in CAMS or Sakai, then click on the APA tab. There are links to information on Plagiarism and References and In Text Citations too. Two very useful resources also available are:

**Hondros College APA Style Guide**
All essays, papers, and other written assignments at Hondros College are expected to follow the standards defined in this document, in addition to any specific requirements of the instructor and/or the assignment.

**APA Formatting Template**
Use the template found on the library page to write your APA formatted papers. It’s been set up for you, so all you need to do is replace the information that’s in the document with your own! Read the document to get an explanation of formatting requirements and save a copy on your desktop so you have it when you need it!
APA Style Guide

APA is the abbreviation for the American Psychological Association. Writers in many scientific and medical-related fields use the APA style to present research they do. Because the method of presenting the research is standardized, readers easily know where to expect certain kinds of information. You’ll find here a few tips for writing in APA style.

Some Tips for Formal Writing Using APA Style

NOTE: This list is not comprehensive, so please consult the Hondros College APA Style Guide, which is available on the APA Help tab in the library, or the Publication Manual of the American Psychological Association, 6th edition, for clarification and additional information.

VOICE

• Use the past tense. When quoting research or a task you were given on an assignment, you already did it when you are writing about it, so past tense is appropriate. (The researchers examined NOT The researchers examine)
• Use an active voice & be direct. (The child jumped NOT The child was observed to be jumping.)
• Avoid pronouns- 1st, 2nd & 3rd person. (The researchers conducted… OR The patient responded… NOT I read… OR You would…)
• No contractions in formal writing (Scores were not significantly different. NOT Scores weren’t significantly different.)
• No jargon, slang, or colloquial expressions When in doubt, go for the more formal word. (The children… NOT The kids…)
• Science never PROVES anything. Science only falsifies hypotheses. (This research concludes, adds evidence for, supports the hypothesis. NOT The research proves …)

NUMBERS

• Spell out numbers zero through nine. (Participants averaged nine points. NOT Participants averaged 9 points.)
• If you start a sentence with a number, no matter what the number is, spell it out! (Thirty-Nine children participated. NOT 39 children participated.)
• No extensions on dates. (September 3, 2017 NOT September 3rd, 2017)

ABBREVIATIONS

• Introduce your abbreviation first, and then later you can use as a stand alone. (Intelligence Quotient (IQ) tests are … (Later in the text you can write: Therefore, IQ tests…) NOT IQ tests are… (when not previously spelled out))

ITALICS

• Italicize titles for books, magazines, journals, and media sources when they are in a sentence but not in an in text citation. (The video, A Journey through Schizophrenia, stated that … NOT The video, A Journey through Schizophrenia, stated that…)

USING QUOTATIONS

• If three or more words within a sentence are the same as the original, you need to quote it and you must provide the author, year, and specific page(s) in the text citation and include a complete entry in the reference list. The text states, “Intelligence is the capacity to acquire knowledge” (Wade & Tavris, 2008, p. 241). Notice that in the original text, the period comes at the end of the sentence. Here, it comes after the in text citation.
• If the quotation includes fewer than 40 words, incorporate it in text and enclose it with double quotation marks. If the quotation includes more than 40 words, it should be treated as a block quotation, meaning that it is displayed in a freestanding block of text without quotation marks.
• If material is paraphrased (i.e., restated in your own words), always provide the author and date in the in-text citation. It is not necessary to include the page number(s) in the citation, but it may be helpful, especially if the source is very long (e.g., a short passage from a whole book).

Why Sources Need to Be Cited

Citing your references acknowledges the origin of your information, and it adds credibility to your work by showing that you have researched your subject using reliable sources. Good in-text citation and a well-formatted and complete reference page demonstrate the accuracy of your information and enables your reader to locate your sources. This includes all types of information you use, including but not limited to: web pages, books (both print and electronic), articles (from online journal databases or print sources), government documents, non-print media (pictures, images, DVDs), and software or any digital format — any source from which you’ve taken and used information.
When you use information from a source that you’ve put in your own words or use a direct, word-for-word quote from an outside source in your paper, you must acknowledge that source with an in-text citation. Here are some common situations where writers of papers need to include in-text citations, followed by examples as to how this should be done. This document also has a sample page of a research paper with in-text citations for your review.

When using **paraphrased or summarized** information from your source:

- **If you use the author’s name in the sentence**, include only the date in parentheses immediately after the author's name. The punctuation comes at the end of the sentence.
  
  Bernstein (2018) described college students’ increased use of dorm room networking capacities.

- **If you do not name the author in your sentence**, the author’s last name must be included in the in-citation followed by the year of publication, with a comma between the two. The sentence ending punctuation comes after the in-text citation, not at the end of the sentence. If there is no date on the material, use the abbreviation “n.d.” instead to indicate this.
  
  One student used the campus network to find out whether the cafeteria was serving breakfast or not (Burns, 2018).  
  One student used the campus network to find out whether the cafeteria was serving breakfast or not (Burns, n.d.).

- **If there are two authors**, include them both every time you cite information from the source in the in-text citation.
  
  One student used the campus network to find out whether the cafeteria was serving breakfast (Burns & Doe, 2017).

- **Three to five authors? List all of them the first time you cite the source:**
  
  One student used the campus network to find out whether the cafeteria was serving breakfast (Burns, Doe, Cook, & Katz, 2017).  
  **NOTE:** After that, only use the first author's last name followed by "et al," like this: (Burns et al., 2017).

When using a **direct, word-for-word quotation** from your source:

When you include a direct quote from your source, the in-text citation must include the author's last name, the year of publication, and the page number on which the quote is found. Use “p.” before the page number. When including a direct quote from a **source without page numbers**, like webpages, count down from the top paragraph to the one the information is found in, and use the abbreviation "para." followed by the paragraph number. If there is no date on the material, use the abbreviation “n.d.” instead to indicate this.

“The MIT computer server has been running off and on since 1998” (Harrison, 2019, p. 102).

“Hand hygiene is the best way to prevent the spread of infection” (Smith, n.d., para. 3).

**NOTE:** If the document includes headings, provide the appropriate heading and specify the paragraph under that heading:  
(Hall, 2019, “Mind Over Matter,” para. 6).

- **If you identified the author and date in the text of your paper, include only the page number in the in-text citation:**
  
  Harrison (2016) reported that "The MIT computer server has been running off and on since 1998" (p. 102).

- **If no author is identified**, use a shortened version of the title instead, followed by the date. Use quotation marks around article or chapter titles, and underline book, periodical, brochure, and report titles:
  
  The use of Customer Relationship Management systems has grown substantially over the past five years as companies attempt to adapt to customer needs and to improve their profitability ("Making CRM Work," 2018).

**Citing Indirect Sources**

If you are including information found in a document you are reading that the author took from another source and referenced with an in-text citation in his or her paper, you are citing an indirect source. Unless you actually read the original source too (in addition to the document you found it in), you should cite the original author in the sentence, and cite the source you have read in parenthesis as the in-text citation. In the example below, information from Melena (which you didn’t read) that was cited in the document you have read by Smith, so you should use the original source (Melena) in your signal phrase, and list the source you read by Smith in your reference list and include it in the parentheses as an in text citation like this:

Melena argued that “Following a concept based curriculum is the best approach...” (as cited in Smith, 2016, p. 35).

**Note:** You will provide a reference to Smith's article on your reference page; **do not** include a reference for the Melena document on your reference page **unless you have actually read the document t**. If you did, you would use a regular in text citation for the information you have gotten from the document by Melena and cite his document on the reference page.
Reference Format

Your reference page should begin on a new page and should be the last page of your paper. It should be double-spaced, and each line under the first one in a reference should be indented 1/2” (hanging indent). Alphabetize your sources by the first word in the reference—it could be an author’s last name or the first word in a title if there is no author. When a hyperlink is included in the reference, it should not be active—it should have a black font color and not be underlined, like normal text. To remove a hyperlink, right mouse click on it and select “Remove Hyperlink” from the drop-down menu that appears.

**Article from a print journal or magazine:**


**Article from a library database:**


**Article from an online journal with a DOI (digital object identifier):**


**Information from a web site:**


**Information from a web site without a named author or date:**

If there is no author, move the title to the place where you would normally include the author. If there is no date, put (n.d.) where the date would normally go. The title is not italicized when in the “author” position. Include descriptive information if needed in square brackets.  


**Article from a newspaper:**


**Book (print) with one author:**


**Book with no author (print version):**


**Book (anthology or collection of short stories or poems):**


**eBook (electronic version):**

If the online version refers to a print edition, include the edition number after the title.  


**eBook (electronic book) not available in print:**

If the work is not directly available online or must be purchased, use "Available from," rather than "Retrieved from," and point readers to where they can find it. For books available in print form and electronic form, include the publish date in parentheses after the author’s name. For references to e-book editions, be sure to include the type and version of e-book you are referencing (e.g., "[Kindle DX version]").


Last update — March 2019
Hondros College APA Paper Standards

1. All written assignments must be typed in Microsoft Word and saved in .doc or .docx format.
2. All written assignments must be double-spaced unless noted otherwise.
3. The font standard for the body of the written assignment is Times New Roman, 12 pt.
4. Papers should have 1 inch margins on all sides and paragraphs should be indented 1/2 inch from the margin.
5. For every in-text citation there should be a reference for the source on the References page, and every reference listed on the References page must have an in-text citation.
6. Students must reference external sources as applicable and must use the American Psychological Association (APA) referencing system.
When assigned a paper or project requiring research, the first thing most students do is panic. The second is to go to Google to look for information. But there’s a better plan, and it involves using the resources available via the Online Learning Library!

The library provides access to peer-reviewed, evidence-based, scholarly information from trustworthy sources of all types. If you use them, you won’t have to spend time evaluating the credibility of the retrieved information as you do when using Google.

The Hondros College of Nursing library isn’t a physical library; however, it has all the resources of a physical library, available online 24/7/365. The library includes links to a wide variety of materials and a number of different databases. The databases give you access to ejournals, ebooks, newspapers, magazines, and reference materials; individual links provide access to thousands of additional resources too. Don’t Google when you have access to these great resources; your instructors are expecting you to use them.

The Library can be accessed through the CAMS Student Portal, by the link in the upper right corner and through the Sakai platform, by the link on the left side of the course.

The Online Library

You’ll see the library website homepage below. It has a number of blue tabs running across the top of the page where the arrows are below. Some tabs have drop-down menus and some do not; clicking on a tab will link you to key library resources. Many of the resources can be found on a number of tabs to make sure they are easily found.
Tabs at the Top of the Library's Pages: What You’ll Find on Them

The online library gives you access to many useful resources to help you become the nurse you dream to be. It provides links and guidance to help you with your research, write a well-formatted APA paper, access databases, and much more. The blue tabs at the top of every page will help you find what you need; the description of the tabs below will highlight the types of resources available on each tab.

Academic Support & Advising Tab
This tab links to many student and academic support resources to help you be successful. It also provides links to your Academic Support Advisor (ASA) who is available to help you when you need academic, personal, and confidential help, advice, or services, or when you need some encouragement or someone to listen.

APA Help Tab
If you need to write a paper in APA format and you're not sure what's required, this tab provides links to information and resources to help you. The additional links on the drop-down menu on the APA tab (listed below) provide information and resources to help you with these specific things:

1. APA Style page - includes the Hondros College APA Style Guide, a sample APA formatted paper, and an APA checklist along with additional information about APA
2. References & In-text Citations page – Explains the necessary information for proper in-text citations and references and provides examples
3. Plagiarism page – Provides information on plagiarism and ways to avoid it; additional information on plagiarism and its consequences can be found in the Student Catalog
4. APA & Discussion Forum Postings page—Explains the correct way give credit to sources in discussion forum posts
5. Citing a Cited (or Indirect) Source page – discusses how to give credit to a source found in a source
6. Paraphrase, Summary, & Quote page — explains the differences between them and how to cite them

Career Services Tab
This tab provides access to information supplied by the Career Services team; it includes current job postings, upcoming hiring events, Job Fair information, and tools and resources to help build a resume, write a cover letter, get prepared for an interview, and additional information to help you be successful when looking for employment.

College Preparedness Resources Tab
These resources were developed to help you be a successful college learner. You’ll find modules to help with college and English readiness, understanding Academic Misconduct, math resources, and a few additional resources as well.

Course Help Tab
The Course Help tab has specific information for course assignments, including suggested resources, directions on how to search these resources, and additional guidance to help you successfully complete an assigned paper or project. Courses without a specific assignment have links as well; generally, these include links to review materials.

Credible Resources Tab
The Credible Resources tab provides links to both nursing and general information websites as well as nursing, healthcare, and government organization and agency websites — credible resources which can be used for some course assignments. It provides a link to the eJournal Databases page as well.

Current Practice Updates Tab
These links provide access to recent articles and information from a few leading nursing journals and entities. They will help you keep up with the latest and best practices in your field.

Drug Information Tab
This tab provides links to credible sources of drug information as well as drug dosage and calculation quizzes.
eBooks Tab
This tab provides access to 30 nursing eBooks available through Stat!Ref, the NCBI Bookshelf, and other eBook collections. It also provides links to a number of medical and nursing encyclopedias and dictionaries. These resources can be used for some course assignments and to supplement course textbooks.

eJournal Databases Tab
This tab provides links and instructions for searching the library’s many research databases, such as CINAHL, OVID, PubMed, Medline, etc.; use them to locate research articles and other scholarly information. To search a database, click on the eJournal Databases tab, and then click on the link from the drop-down menu for the database you want to search. Since each database offers somewhat different content, the one you select should be based on your topic and the type of source you need. Some of the databases you can choose from on this tab are:

- **CINAHL** (Comprehensive Index of Nursing and Allied Health Literature) will be useful for your nursing coursework. This is generally the place to start when looking for journal articles related to nursing and allied health.

- **MEDLINE** provides access to scholarly, peer-reviewed, and research articles in over 2,400 journals in the fields of medicine, nursing, the health care system, pre-clinical sciences, and much more.

- **Nursing Reference Center** and the **Cochrane Databases** focus on evidence-based practice and provide information about health care interventions and their effectiveness.


- **Academic Search Premier** will be used primarily for your general education coursework, including science, English, psychology, and sociology.

eJournal Database Search Help Tab
Search help is available on this tab; the pages it links to provide tips on how to search more effectively, use the best search terms, and determine whether a source is a good one or not. Here is some additional information about these links.

**Search Help Link**
Searching for credible information is not as easy as one would think. It involves more than putting a few words or a question into Google and picking a link from the first page of results. While this may produce results quickly, the quality of the information will not be what it needs to be. The tips and information found on **Search Help** link on this tab will help you find quality, trustworthy information.

- **Limiting Your Search**
  Each database will have its own set of limiters or filters. Using them is easy; all you need to do is click on a box or a word or two and your search will be narrowed considerably. The more you limit or filter, the fewer and more specific the articles found will be.

  - If you know you want only articles that are available in full text, limit your search to **Full Text**.
  - If you need recent literature, limit your search to the most recent years by **publication date**; out-of-date information may be incorrect.
  - Limit to only **free articles**, if this option is available. Many search platforms’ articles cost money, but you will be able to find free ones if you use the library’s resources and limit your search to Full Text.
  - If you need peer-reviewed or evidence-based information, check to see if there is limit or filter for this. Some of the databases available through the library will allow you to do so.

Make sure you take the time to look at the search screen and select those limiters or filters that are important for your assignment. They will help narrow your search. Select your limiters before you enter your search terms into the search box so you don’t forget to do so.
Once you've decided on a topic and which database to search, you need to determine the best search term(s) to use. Choosing search terms can be tricky. To identify your key terms, start by identifying the primary nouns that capture what your topic is about or are contained in your research question, and then identify synonyms or similar terms to your original keywords. For example, if your research question involves youth, you might also try searching for words like adolescents, teenagers, and teens to ensure that you retrieve articles that discuss people in this age group using these terms as well.

Another way to find more specific search terms is to click on the titles of articles that seem particularly relevant. Along with the abstract, you'll see the subject terms and author-supplied keywords associated with the article. Use these as your search terms to find more similar articles.

It's also a good idea to use MeSH (Medical Subject Heading) terms when searching for medically related topics; information on what these are and how to find them is available on the Search Terms link on this tab.

You can also use the PICOT (Patient, Intervention, Comparison, Outcome, and Timeframe) method to help determine search terms. PICOT helps you formulate a clinical question and guides your search for evidence. Filling out a PICOT chart and using a combination of the information pieces will provide you with search terms and a search strategy that will help you do a better search. More information on the PICOT method can be found on the Search Terms link.

You may need to narrow or broaden your search depending on the number of results retrieved.

Once you’ve done your search, you need to evaluate your findings for relevance to your topic. You also need to evaluate the credibility of the sources you’ve decided to use. If you’ve used library resources, then the source evaluation has already been done for you. However, if you’ve used resources other than those found in the library, you will also need to evaluate the credibility and authority of the information found.

The Evaluating Sources link on the eJournal Database Searching Help tab discusses the CRAAP Test, a tool used to evaluate the currency, relevance, authority, accuracy, and purpose of a source to help you determine if it's a credible one. It also provides information on peer-reviewed articles and primary and secondary research.

For the most part, nursing courses will require you to use scholarly information and primary research. Non-nursing classes, like English and Psychology, may allow the use of popular magazines, newspapers and websites as sources. This link explains how to evaluate sources.

The resources on this tab have been compiled for our nursing students who may have some difficulties related to having a native language other than English.

This tab provides access to a number of resources with evidence-based practice information including Nursing Reference Center, Cochrane Databases, PubMed, Agency for Healthcare Research and Quality, National Guideline Clearinghouse, Trip Database, Unbound Medline, and National Quality Measures Clearinghouse (NQMC).

This tab is a work in progress, but check it out if you have a question; there may be an answer for yours here.

This tab provides links to games and websites that will make reviewing course materials more interactive and will reinforce what's being learned in the classroom; they provide alternative ways to learn nursing material.
Information Literacy Tab
This tab provides information literacy resources about the skills which allow us to recognize when information is needed and to find, evaluate, and use this information appropriately.

Medical Lab Technology Tab
The Medical Lab Technology Tab provides links for students in this program to resources for chemistry, hematology and immunochemistry, math, microbiology, and phlebotomy. There are also links to images and protocols, information about instrumentation and testing, journals and databases, and professional associations and organizations.

Mnemonics Tab
This tab provides mnemonics and acronyms to help remember facts or large amounts of information.

Mobile Apps & Podcasts Tab
This tab provides information about mobile apps and podcasts that can help you learn.

NCLEX & HESI / Test-Taking Strategies Tab
This tab includes links to the National Council of State Boards of Nursing (NCSBN) NCLEX test plans and access to free practice NCLEX test questions, additional review materials, and information about practice tests for HESI in Evolve.

Nursing Concepts & Topics Tab
The links on this library tab provide access to information on some of the many topics nurses encounter when providing safe, quality patient-centered care or when being educated to do so.

RN-BSN Program Tab
This tab provides links to RN-BSN Course Help pages and additional program specific links for students in this online program and links to RN-BSN Program Standards, practice experience requirements and information, specific course help pages, tutorials on many different topics, and evidence-based practice information.

Study Help & Review Resources Tab
This tab provides links to materials that can help students study more effectively and review course material.

Tech Help Tab
This tab provides information to help with and answer questions about: CAMS (student portal), SAKAI (online course management system), student email, Ed-Map (online bookstore), Registration, IT technical support, PaperCut printing, and Microsoft Office.

Tuesday’s Tidbits Tab
The Librarian’s weekly newsletter, Tuesday’s Tidbits, is sent out via email each week to provide resources, ideas, tips, or information on a variety of library, academic, and nursing topics.

Tutoring Tab
The Tutoring tab provides the tutoring, open lab, and boot camp schedules for each campus so students can take advantage of the free faculty and peer tutoring that is available.

Videos & Tutorials Tab
This tab provides links to tutorials and videos on many topics, including but not limited to, how to use the library, how to use different library databases, how to format in APA, nursing procedures, mental health issues, and much more.

Writing Tab
This tab provides links to help students with grammar, punctuation, paragraph writing, thesis statements, creating an outline, and essay writing as well as resources designed specifically for advanced writing and students for whom English is their second language. NOTE: APA formatting resources and information can be found on the APA tab.

The Pulse of Creativity
This tab provides students an opportunity to share their creative writing assignments.
I. Introduction

Periodically student nurses, from both the ADN and LPN programs, have questioned the rationale behind the need to be proficient at medication dosage calculations. The reasoning is quite simple: patient safety. Medication administration is one of the primary roles of all nurses. Although medication calculations errors are not the only concern, research over the last several decades has established incorrect dosage calculations as a major source of medication errors causing patient injury or death. This is why medication calculation questions are present on both the LPN and RN NCLEX exams.

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has had safe medication administration as a National Patient Safety Goal for many years. While there have been improvements in medication administration safety this goal continues to remain at the top of JCAHO’s list of a broad range of safety initiatives.

Currently, systems that scan the medication and the patient prior to medication administration have helped reduce the number of errors by indicating the drug, strength, and the amount to administer. But what if the scanning system is not functioning?

Most medical facilities provide unit dose medications specific for the patient. However, medication dosage orders may be written in one unit of measure while the pharmacy may dispense the prescription in a different unit of measure. The nurse must be able to calculate if the amount on the drug labeling is the same as what is ordered.

Most long-term care facilities provide pre-printed medication administration records (MAR). Each medication ordered indicates the amount of the medication in tablets, capsules, milliliters, and so on to be administered with each dose. But, what about medication orders written after change over each month?

Furthermore, though many facility computer systems have dose calculators available, there are circumstances when those resources may not be accessible.

Passing medication calculations exams may require getting only 90% of test problems correct, but coming up with the right answer only nine out of ten times is not good enough when real patients are at risk. The nurse is the patient’s last line of defense against receiving an inappropriate dose of medication. Thus, the ability to calculate the dosage of medications accurately is fundamental to safe nursing practice in any clinical setting.

This tutorial is written for the student nurse beginning the journey of nursing education and for those students who are already a member of the nursing profession and just need a review of how to calculate medications. What is contained in this tutorial comes from available resources and experience in clinical practice. It is meant to assist the student nurse in determining the correct dosage of medications. It is imperative this information be taken seriously and practiced until there is a complete understanding of how to calculate medication dosages accurately.
Medication calculations are simple math problems consisting, primarily, of addition, subtraction, multiplication, and division. Thus, this tutorial presumes the individual student’s ability to work simple mathematical calculations and contains practice problems at the end of each section in order to further familiarize the student with what was just presented in that section. But, before looking at how to calculate medication dosages there are several fundamental rules that are absolutely essential to know and follow when calculating medication dosages.

II. Medication Calculations Guidelines

a. **Find a formula comfort level with one formula and stick to it.**
   There are multiple formulas that can be utilized to reach the same answer. Become comfortable with one and stick to it.

b. **It is acceptable to use a calculator.**
   However, while in nursing school it is unacceptable to use a calculator on a phone device.

c. **It is always, always, always acceptable to utilize a colleague or a pharmacist to assist in double checking the calculation if unsure (except in class).**
   It is better to have someone check to make sure the calculation than place the patient in jeopardy, particularly if the medication calculation is complex.

d. **Does my answer make sense with the information provided?** If the answer is no, recheck the calculation. If still unsure ask a colleague or pharmacist for assistance.

e. **Always show your work and label everything in the appropriate units.** It is difficult to help if there is nothing to establish where possible miscalculations may be.

f. **Memorize equivalents and conversions**
   There is no way around it; memorize the equivalents and conversions.

g. **Always convert the desired dose to the available unit of measurement.** When doing calculations, it is essential that the calculations are done in the same unit of measurement.
   - Example: Ordered 0.5 grams. Medication available in mg strength. Convert 0.5 mg to 500 mg

h. **Per JCAHO medication safety guidelines.** When writing fractional decimal numbers always include a leading zero if the answer is less than a whole number.
   - Example: 0.2
     Do not leave any trailing zeros to the right.
   - Example: 0.20 is INCORRECT
     0.2 is correct

i. **Units of measure must be included in answers.** The answer informs the amount of what is being administered. But the units state the what; mg, mL, mcg. That information is just as important as the amount calculated.

III. Rounding Rules in Medication Calculations (These Rounding Rules are a requirement for you to know in testing and nursing practice.)

a. If the number to the right of the desired place is equal to or greater than 5, round up by adding 1 to the number in the desired place.
   Example: 3.56 rounds to 3.6.

b. If the number to the right of the desired place is less than 5, round down by dropping the number to the right of the desired place.
   Example: 3.54 rounds to 3.5

c. **Only round the final answer. Do not round in the middle of the calculation.** Rounding in the middle of the calculation can make a significant difference in the answer, particularly when working in small amounts. The only exception to this is when converting weights. Always convert weights and round as appropriate before performing the medication calculation.
d. Use whole numbers and/or fractions (i.e., ½ or ¼) with tablets. Use only whole numbers with capsules.
   - Examples: 1 tablet
     1½ tablet
     2 Capsules
   i. Only scored tablets may be divided. Otherwise round tablets to the nearest whole tablet.
   ii. Capsules must be administered intact unless formulated to be opened. An example is depakote sprinkles. They are capsules that can be given whole or opened. If unsure, always check with the pharmacist.

e. Weights - When converting body weight from pounds (lbs) to kilograms (kg), calculate to hundredths and round to tenths.
   - Examples: 8.27 kg = 8.3 kg
     9.96 kg = 10 kg
     14.22 kg = 14.2 kg

f. Fluid Volume
   i. If final volume is less than 1 mL, calculate to thousandths and round to hundredths
      - Use a Tuberculin syringe which is calibrated in hundredths
   ii. If the final volume is greater than 1 mL, round all fluid measurements to tenths
      - Use a 3cc or larger syringe which is calibrated in tenths

g. IV flow rates
   i. Using an IV pump (mL/hour)
      - Round to the whole number. Most maintenance and piggy back IV fluids are normally infused in whole number rate in mL/hour.
   ii. Using drip rate (gtt/min)
      - Round to the nearest whole number (Drops cannot be fractionated)

h. When calculating weight-based dosage (i.e., mg/kg or mcg/kg, etc.), round the weight (see III e) but do not round the dose calculation until the final result. Round only at the end of the calculations.

IV. Systems of Measurement
There exists in the United States three systems of measure used in medicine: metric, household, and apothecary. They have units of measure that are approximately related to each other, but not exactly equal. It is inherent upon the nursing student to understand how to work with and within each system accurately.

a. Metric system - the main system used for medication doses.
The metric system is the most commonly used, most accurate, and easiest to use of all the measuring systems. The metric system uses the gram as the basic unit of weight. The liter is the basic unit of volume, and the meter is the basic unit of length. All pharmaceutical companies use the metric system for labeling medications. The metric system is based on units of 10, 100, and 1000.
   - 1000 mg = 1 gram
   - 1 mg = 1000 mcg
   - 3 Liters = 3000 mL

b. Apothecary system - a system of units used chiefly in compounding and dispensing liquid drugs. The apothecary system has been almost completely phased out of use and replaced with the metric system. Per JCAHO patient safety guidelines the apothecary measurements of minimis and drams are not used in medication prescriptions. However, nurses need to distinguish the metric and apothecary systems in case a prescriber writes an order in the apothecary system. The basic unit of measurement in this system is the grain which is a unit of weight measurement. You will need to know the following conversion equivalents from apothecary to metric.
   - 1 grain (gr) = 60mg
   - 15drops (gtt) = 1mL
   - 1 ounce (oz) = 30 mL
   - 2 quart (qt) = 1 Liter (l)

Yes, many household measurements, such as ounce, pint, quart, and gallon are actually based on the apothecary system.
c. **Household system - used for some medications taken at home, primarily liquids.** The household system has generally been replaced with the metric system. Measuring volume using the household measure is less accurate than using other systems because the measuring utensils can vary in size (not all teaspoons are of equal size). Nevertheless, household volume measure may be used in community pharmacy practice when dispensing drugs that will be administered in the patient’s home because patients may not have other measuring devices at home. Labels instructing patients on how to take a medication often use household measure units for this reason. Nurses need to know the metric-household equivalents for patient and family teaching.

V. **Essential Equivalents**

It does not matter which system (metric, apothecary, household) one starts with. However, converting measurements from one system to another requires memorization of equivalents between and within systems, along with their unit abbreviations. Many errors on calculation exams and in medication administration are due to not knowing equivalents and unit abbreviations. The effort placed in learning the equivalents and abbreviations are essential in correct calculation for safe medication administration, not just exam questions.

a. **Weight Equivalents**

i. 1 grain (gr) = 60 milligrams (mg)

ii. 1 kilogram (kg) = 2.2 pounds (lbs)

iii. 1 lb = 16 ounces (oz)

iv. 1 gram (g) = 1000 mg

v. 1 kg = 1000 gm

vi. 750 mg = 10 milliequivalents (mEq) – often used in potassium and mineral replacement Therapy

b. **Length Equivalents**

i. 1 inch (in) = 2.54 centimeters (cm)

ii. 1 meter (m) = 100 cm

iii. 1 m = 1000 millimeters (mm)

iv. 10 mm = 1 cm

c. **Volume or Liquid Equivalents**

i. 1 liter (L) = 1000 mL – (Liter is always capitalized as L – as lower case L looks like a 1).

ii. 1 mL = 1 cubic centimeter (cc) – often used interchangeably

iii. 1 oz = 30 mL

iv. 1 teaspoon (tsp) = 5 mL

v. 3 tsp = 1 tablespoon (tbsp)

vi. 1 tbsp = 15 mL

vii. 2 tbsp = 30 mL

viii. 4 oz = 120 mL

ix. 8 oz = 1 cup = 240 mL

x. 2 cups = 1 pint (pt)

xi. 2 pt = 1 quart (qt)

xii. 2 qts = 1 L = 1 kg = 2.2 pounds

VI. **Converting Within the Metric System**

The metric system is the most widely used method around the world for measuring dosages of medications. Understanding how to convert within the metric system is important because it provides a uniform and standard structure for calculating medication dosages. The metric unit is based on multiples of 10. It is simply a matter of identifying the unit the student nurse has, the unit the student wants to convert to, and simply move the decimal place to the left or right.

Think about this mnemonic and memorize it.

**King Henry Died By Drinking Chocolate Milk . . Merrily**

Now look below.
a. Large to small → Move the decimal point to the right. Each movement of the decimal point is multiplication by 10

   Look at this equivalent – 1 g = 1000 mg
   Start at the base unit (Gram) and move the decimal right 3 places.
   1 g x 10 = 10 dg – first decimal
   10 dg x 10 = 100 cg – second decimal
   100 cg x 10 = 1000 mg – third decimal

b. Small to large ← Move the decimal point to the left. Each movement of the decimal point is division by 10

   Look at this equivalent – 1000 mg = 1 g
   Start at milligram and move the decimal 3 places to the left.
   1000 mg ÷ 10 = 100 cg – first decimal
   100 cg ÷ 10 = 10 dg – second decimal
   10 dg ÷ 10 = 1 g – third decimal

c. Most medications are prescribed, dispensed, and administered in just a few metric units – gram, liter, milligram, milliliter, and microgram. That means most conversions within the metric system occur to the right of the base units (See Below).
Look at this equivalent
3 mg = 0.003 g

Answer 0.003.0 = 0.003 g

The last decimal point is grams
Starting decimal point is milligrams
Next decimal point is decigrams
Next decimal point is centigrams

A point to remember - Always place a zero in front of the decimal when the quantity is less than a whole number. Never place a 0 at the end.

d. Converting to micro. Micro is a small number. It is 1000 times smaller than milli. That means if converting from gram to microgram move the decimal 3 places to the right to get to milligram and then another 3 places to the right to get to microgram. If going from microgram to gram move the decimal left 3 places to get to milligram. Then, another 3 places to get to gram.

\[
1.5 \text{ g} = 1,500,000 \text{ mcg}
\]

Start at the base unit (Gram) and move the decimal right 3 places.

\[
\begin{align*}
1.5 \text{ g} \times 10 &= 15 \text{ dg} - \text{first decimal} \\
15 \text{ dg} \times 10 &= 150 \text{ cg} - \text{second decimal} \\
150 \text{ cg} \times 10 &= 1500 \text{ mg} - \text{third decimal} \\
1500 \text{ mg} \times 1000 &= 1,500,000 - \text{fourth, fifth, and sixth decimal}
\end{align*}
\]

Practice with these conversions – answers are at the end of this tutorial

1) 3000 mg = _____g 
2) 15.6 g = _____mg 
3) 198 g = _____ mg 
4) 7.6 mg = _____mcg
5) 25 g = _____mg 
6) 1050 mL = ____ L 
7) 10 mg = ____ g 
8) 65 ml = ______L 
9) 19 g = _____mg 
10) 8.3 mg = _____g 
11) 500 g = ____mcg 
12) 7 L = ______mL

VII. Medication Calculation Equations

Drug calculation problems are simply story problems. You have to develop a mathematical problem from the information that is provided. As stated before there are several mathematical methods to reach the same answer. Find the formula you are comfortable with and stick to it.

a. Dimensional Analysis

Dimensional analysis is also referred to as the factor-label method. Dimensional analysis involves simple multiplication and division and is accomplished in three basic steps.

\[
\text{Equation: Starting factor } \times \frac{\text{equivant}}{\text{equivant}} = \text{answer}
\]

Example:
Your patient has an order for cephalaxin, one 500 mg capsule bid. The pharmacy has supplied you with 0.25 g capsules. How many capsules do you administer?
Step 1: Determine the starting factor, or amount ordered. This is the first item in the equation and its form is used in the answer (tablet, capsule, or mL).

500 mg capsules

Step 2: Identify equivalents in different units of measure. Remember the guideline: Always convert the desired dose to the available unit of measurement. In the equation note the dose on hand and the dose ordered are in different units of measurement. Convert 0.25 g (dose ordered) to mg (dose on hand or supplied) before going on to step 3.

0.25 g = 250 mg

Step 3: Solve the equation. First, cancel the same units of measurement and multiply.

\[
500 \text{ mg} \times \frac{1\text{ capsule}}{250 \text{ mg}} = \frac{500}{250} = x \text{ capsules}
\]

\[
\frac{2}{1} = x \text{ capsules}
\]

\[
x = 2 \text{ capsules}
\]

b. Ratio and Proportion

A ratio shows the relationship between numbers; a proportion contains two ratios. Ratio and proportion is the oldest method used for drug calculations. It involves four basic steps. When using ratio and proportion either a fraction or a colon format is utilized to set up the equation. The left side of the equation represents the known quantities. The right side of the equation represents the desired dose and the amount to be given.

i. Fraction equation format:

\[
H (\text{dose on hand}) = D (\text{dose ordered})
\]

\[
Q (\text{quantity on hand}) \times (\text{amount to administer})
\]

Example:

Your patient has an order for amoxicillin oral suspension 0.5 g. The pharmacy supplied you with amoxicillin oral suspension 250 mg/tsp. How many teaspoons do you administer?

Step 1: Determine the dose you have on hand

\[
\frac{250 \text{ mg}}{1 \text{ tsp}}
\]

Step 2: Determine the dose you have to administer (note the dose on hand and dose ordered are in different units of measurements. Convert 0.5 mg to mg before going to step 3.

0.5 g = 500 mg

Step 3: Drop the same units of measurement and cross multiply.

\[
\frac{250 \text{ mg}}{1 \text{ tsp}} \times \frac{500 \text{ mg}}{x} = 250x = 500 \text{ tsp}
\]

\[
x = \frac{500 \text{ tsp}}{250}
\]

\[
x = 2 \text{ tsp}
\]
ii. Colon Equation Format:

\[ H: Q = D: XH \] (dose on hand)

\[ Q \text{ (quantity on hand)} = D \text{ (dose desired)}: X \text{ (amount to administer)} \]

Example:

Your patient has an order for furosemide (Lasix) 180 mg PO. The pharmacy has supplied you with furosemide 40 mg tablets. How many tablets do you administer?

Step 1: Determine the dose you have on hand

40 mg tablets

Step 2: Determine the dose you have to administer

180 mg

Step 3: Multiply the means (two inner numbers) and extremes (two outer numbers) and drop the similar units of measurement.

\[ \frac{40 \text{ mg}}{1 \text{ tablet}} = \frac{180 \text{ mg}}{x} \]

\[ 40x = 180 \text{ tablet} \]

\[ x = \frac{180 \text{ tablet}}{40} \]

\[ x = 4 \frac{1}{2} \text{ tablets} \]

c. Formula Method or Basic Formula

This formula is often used and is a quick and easy way to perform dosage calculations. It uses four basic steps.

\[ \text{Equation:} \quad \frac{\text{Dose Ordered}}{\text{Dose On hand}} \times \text{Amount} = \text{Dose to administer} \]

Example: Your patient is rating his pain an 8 on a 0-to-10 scale. You received an order for morphine 2 mg IV STAT. The pharmacy has supplied you with morphine 10 mg/mL. How many mL do you administer?

Step 1: Determine the dose ordered.

2 mg

Step 2: Determine the dose on hand

10 mg

Step 3: Determine the unit or quantity of the medication that contains the dose on hand

1 mL
Step 4: Solve the equation

- Cancel similar units
\[
\frac{2 \text{ mg}}{10 \text{ mg}} \times 1 \text{ mL} = x
\]

- Reduce the numbers to their lowest terms
\[
\frac{2 \text{ mg}}{10 \text{ mg}} \times 1 \text{ mL} = x
\]

- Convert to a decimal by dividing the numerator (top number) by the denominator (bottom number) and multiply the result by the amount in the equation
\[
\frac{2}{10} \times 1 \text{ mL} = 0.2 \times 1 \text{ mL} = x \text{ mL}
\]

\[
x = 0.2 \text{ mL}
\]

Practice these calculations. Use any method you wish. Suggest you attempt each formula at least once before choosing which is best for you – answers are at the end of this tutorial.

1. Penicillin VK 137 mg po q 6 h ordered. Available is Penicillin VK 125 mg per 5 mL. How many mLs will be administered?

2. Vistaril 35 mg IM is ordered. Available is a vial labeled 25mg/mL. How many mL will be administered?

3. Phenobarbitol 120 mg po q 12 h ordered. Available is Phenobarbitol 60 mg tabs. How many tablets will be administered?

4. Ordered is Ancef 250 mg IM q8h. On hand is Ancef 1 g/3 mL vial. How many mL will be administered?

5. A nurse must administer 150 mg of a medication. The drug is available as 100 mg scored tablets. How many tablets will the nurse administer?

6. A provider prescribes heparin 8,000 units subcutaneously, Q12 hr. The amount available is 5,000 units/mL. How many mL should the nurse administer? Round to the nearest tenth.

VIII. Dosage By Weight

Medications may be prescribed in daily amounts per kg of body weight such as “5 mg/kg/day,” which is then divided into doses given throughout the day. The same process as for calculating oral dosages is used, but first the nurse must determine the client’s weight in kg, the total daily dose, and the amount per dose. Also incorporated in many weight-based calculations is the safe dosage range, which must be calculated to determine if the ordered dose is safe to administer. These types of calculations are a typical of pediatric dosage calculations and some adult medications.

a. Formula: Weight in kg x dose per kg = needed dose
b. Example: A doctor orders 200 mg of Rocephin to be taken by a 15.4 lb infant every 8 hours. Rocephin comes in 500mg/1.8 mL. The medication label shows that 75-150 mg/kg/day is the appropriate dosage range. Is this order within the desired range? How many mL will be administered?
Practice these calculations – answers are at the end of this tutorial.

1) Order: Keflex 125 mg p.o. q.6h for a 44 lb child. If the recommended dosage is 25 mg/kg/day in four divided doses, is this a dosage safe? Keflex is available in an oral suspension of 250 mg per 5 mL. If the dosage is safe, give ______ mL/dose.

2) If the safe dose range of fentanyl IV preoperatively is 1 to 2 mcg/kg/dose, how many milligrams of fentanyl could a child weighing 40 lb receive per dose (minimum and maximum)?

3) The physician orders tobramycin (Nebcin) 10 mg IM q8h. The neonate weighs 4,000 g. The recommended dosage of tobramycin is 2.5 mg/kg/dose IM q.8h. Is this dosage safe? Tobramycin is packaged in 40 mg/mL vials. How many mL is administered?

4) A 5-year-old child weighing 40 lb is ordered penicillin G (benzyl penicillin) to be given IV every 4 hours for the treatment of a severe respiratory infection. The recommended dose of penicillin G for a severe infection is 60 mg/kg/dose every 4 hours. How many mg would be administered?

IX. IV Flow Rates

Nurses are expected to be able to deliver I.V. fluids and medications accurately. Today, with an emphasis on patient safety nurses need to calculate I.V. drip rates themselves. There are several methods to administer IV fluids and medications: Electronic IV pumps and Manual Infusions.

   a. Electronic IV pumps

      i. Flow rates on IV infusion pumps are set in whole mL/hr. The pump regulates the number of gtt/min based on this mL/hr setting.

      ii. While IV infusion pumps are usually programmed for whole numbers, most pumps are able to accept decimal flow rates. This option is usually reserved for use in the critical care setting or for pediatric clients where precise dosing is essential.

      iii. When the time in hr is known, use the following formula:

         \[
         \text{flow rate per hour (mL/hr)} = \frac{\text{volume (mL)}}{\text{time (hour)}}
         \]

         \[
         \text{Example: If 200 mL is to be infused in 4 hours, the flow rate would be:}
         \]

         \[
         \frac{200 \text{ mL}}{4 \text{ hr}} = 50 \text{ mL/hr}
         \]

         \[
         \text{Example: If 3 mL must be infused in 5 minutes, the flow rate would be:}
         \]

         \[
         \frac{3 \text{ mL}}{\frac{5}{60} \text{ hr}} = 36 \text{ mL/hr}
         \]
Example: The provider prescribes dextrose 5% in water 500 mL IV to infuse over the next 4 hr. The nurse should set the IV infusion pump to deliver how many mL/hr?

**Step 1: What volume is to be infused?**
500 mL

**Step 2: What time frame is the infusion to ordered to run?**
4 hours

**Step 3: Set up the equation and solve**

\[
\frac{500 \text{ mL}}{4 \text{ hrs}} = 125 \text{ mL/hr} - \text{pump setting}
\]

Practice these calculations – answers are at the end of this tutorial

1) How many ml/hr would a patient receive if they were to have 500ml of fluid infused over 6 hours?

2) Order: 100 ml IV antibiotic to infuse in 30 min via infusion pump. What is the flow rate?

3) Order: Ampicillin 500 mg dissolved in 200 mL D5W IV to run for 2 h. What is the flow rate?

4) Order: 3 L 0.9% saline over 24 hours. What is the rate to set the pump?

b. Manual Infusions

When infusion pumps are not used, IV fluid flows via gravity. The flow rate for these infusions is set by counting the number of drops per minute in the drip chamber of the tubing. The flow rate is increased or decreased by adjusting the roller clamp on the tubing.

i. The flow rate for manual IVs is based on drops per minute.
   - Drops per minute is expressed as gtt/min

ii. Flow rate is calculated using “drop factors” found on each manufacturer’s IV tubing.
   - The drop factor is the number of drops per mL of liquid that an IV tubing set will drip into its drip chamber. Drops per mL is expressed as gtt/mL.

iii. Flow rates for manual IV rates can be expressed by using this formula:

   \[
   \text{flow rate (gtt/min)} = \frac{\text{volume to be infused} \times \text{tube drop factor (gtt/mL)}}{\text{time in minutes}}
   \]

Example: The provider prescribes Lactated Ringer’s 250 mL IV to infuse at 75 mL/hr. The drop factor on the manual IV tubing is 20 gtt/mL. The nurse should set the IV flow rate to deliver how many gtt/min.

**Step 1: What volume is to be infused?**
75 mL

**Step 2: How long is the infusion to run?**
1-hour = 60 minutes

**Step 3: What is the IV tubing drop factor?**
20 gtt/mL

**Step 4: Set up the equation and solve**

\[
\frac{75 \text{ mL} \times 20 \text{ gtt}}{60 \text{ min \times 1 mL}} - \text{cancel mL, leave gtt and min in equation and multiply across}
\]

\[
\frac{1500 \text{ gtt}}{60 \text{ min}} = 25 \text{ gtt/min}
\]
Practice these calculations – answers are at the end of this tutorial

1) The doctor orders an IV of 250 ml D5NS with 1 ampule of MVI to run in 3 hours. The drop factor on the tubing is 20 gtt per ml.

2) Order: 500 mL D5W 0.45% Saline IV to infuse @ 165 mL/h Drop factor: 10 gtt/mL. What is the drip rate?

3) A physician orders Ampicillin 500 mg. It is dissolved in 200 mL D5W IV and is to run over 2 h. Drop factor: 10 gtt/mL. What is the flow rate (gtt/min)?

4) The physician orders one 350 mL unit of PRBC to be infused over 4 h. The drip chamber is 10 gtt/mL. What is the infusion rate?

X. Conclusion

Unlike those days when the nurse was responsible only for answers on a piece of paper, nurses are responsible for the promotion of health, safety, and well-being of patients in all clinical settings. Consequently, in order to provide safe and appropriate medication administration, nursing students need to feel confident, and be competent in solving medication dosage problems during the medication administration process. The aim of this tutorial has been to set forth the fundamentals of medication calculations that every nursing student and practicing nurse need to know and follow. It is essential the nursing student practice using the formulas until there is a complete understanding of how to calculate medication dosages accurately.

XI. References


**PRACTICE ANSWERS**

<table>
<thead>
<tr>
<th>Answers Section V</th>
<th>Answers Section VII</th>
<th>Answers Section VIII</th>
<th>Answer Section IX-a</th>
<th>Answer Section IX-b</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) 3g</td>
<td>1) 5.48 mL = 5.5 mL</td>
<td>1) Yes, 2.5 mL</td>
<td>1) 83 mL/hr</td>
<td>1) 28 gtt/min</td>
</tr>
<tr>
<td>2) 15,600 mg</td>
<td>2) 1.4 mL</td>
<td>2) 18.2 mg to 36.4 mg</td>
<td>2) 200 mL/hr</td>
<td>2) 28 gtt/min</td>
</tr>
<tr>
<td>3) 198,000 mg</td>
<td>3) 2 tablets</td>
<td>3) Yes, 0/25 mL</td>
<td>3) 100 mL/hr</td>
<td>3) 17 gtt/min</td>
</tr>
<tr>
<td>4) 7,600 mcg</td>
<td>4) 0.75 mL</td>
<td>4) 1092 mg</td>
<td>4) 125 mL/hr</td>
<td>4) 15 gtt/min</td>
</tr>
<tr>
<td>5) 25,000 mg</td>
<td>5) 1½ tablets</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6) 1.05 L</td>
<td>6) 1.6 mL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7) 0.01 g</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8) 0.065 L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9) 19000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10) 0.0083 g</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11) 500,000,000 mcg</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12) 7000 mL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Last update — March 2019
Mission Statement

The mission of Hondros College of Nursing is to provide education through the baccalaureate level to a diverse and motivated population of students through traditional and non-traditional delivery methods. We will do this through providing high-quality education that is immediately applicable to our students’ career goals and the communities in which they serve, by faculty who have relevant and demonstrated experience.

There are many people interested in your success and available to help you! Please feel free to talk with any of the following people if you have questions or need help:

- Campus Director
- Director of Nursing
- Assistant Directors of Nursing
- Instructors
- Librarian
- Academic Support Advisors
- Student Services Representatives
- Career Services Team Members
- Technical Support Specialists
- Admissions Team Members
- Financial Aid Team Members

References


University of Wisconsin-Stout. (2014, May 2). Discussion board etiquette. Retrieved from https://www2.uwstout.edu/content/profdev/rubrics/discuss_etiquette.html

Last update — March 2019