# Course Syllabus MATH 1000 32: Problem Solving 3 Credit Hours, Spring 2016 Department of Mathematics

Instructor: Office: E-mail: Phone: Face to Face Office Hours: Online Office Hours:	Thor Gunderson GCMN 215 <u>Igunderson@sheridan.edu</u> 307-686-0254 Ext. 1308 MW 8:15-9:15am, TTH 9-10am (Students from my online class are welcome to meet me in my office or call me on the phone number listed above at these times for help over the phone). Friday's from noon-1pm on Blackboard Collaborate. Please log into collaborate for individual help at these times if you need help.
Method of Communication:	If you need an immediate answer or feedback, the best way to communicate is to email me at the above email address. Coming to Office Hours (online, or face to face if applicable) is the best way to get individual help. I will reply to emails as soon as possible (preferably within a few hours), but I will always reply within one business day unless circumstances beyond my control don't allow for this.
Course Format:	Online

*Texts and Materials: You do <u>NOT</u> need a hardcopy textbook. The online textbook will be available to you when you register for MyMathLab, which is required for this course (and explained below).* 1. Blitzer, Robert. *Thinking Mathematically*. 5th edition. Pearson Education Inc., 2010. (6<sup>th</sup> edition online)

- 2. Scientific Calculator or Graphing Calculator. (TI30X and TI84+ are an example of each).
- 3. Register for MyMathLab by logging into Blackboard and then clicking on the MyMathLab tab. Then click on any of the menu items, such as 'MyMathLab Homework'. You will then be asked to create an account and/or register. You can pay in one of three ways: 1) credit card or paypal, 2) by entering a code found in a MyMathLab kit which can be purchased at the bookstore in Sheridan or Gillette, or 3) if you are waiting for financial aid, choose the 14 day free trial period and then pay later (within 14 days).
- 4. Once you have completed your registration, you can access the online textbook and your online homework on Blackboard by clicking on the MyMathLab tab.

# Prerequisite:

Algebra placement score 40-65 within the last year, MATH 0920, (Elementary Algebra) with a grade of "C" or better, or ACT score in math of 21 or higher within the last 2 years.

# Co-requisite: None

# **Course Description:**

Math 1000 focuses on methods, processes, and strategies used to solve mathematical problems in a wide variety of contexts. It demonstrates the uses and structure of mathematics while developing diverse ways to approach mathematical problems. There will be an emphasis placed

on George Polya's four step procedure for problem-solving. Specific topics to be covered are number sequences and patterns, geometry and unit measurements, finance and consumer math, growth and decay models, proportional reasoning, counting principles, probability, and descriptive statistics.

### Grading:

Please refer to the Assessment Checklist in the Start Here section for a complete list of assignments that must be submitted for grading.

The semester grade will be figured by computing the following percentages from each category. 20% - Homework 20% - Activities 30% - Module Quizzes 30% - Midterm & Semester Exam

	А	В	С	D	F
Percent	90-100	80-89	70-79	60-69	0-59

### Turn-in Procedure:

Homework and module 1, 2, 4, and 5 quizzes and exams will be completed using Blackboard online. The mid-term exam (from Module 3) and the semester exam will be taken at the Gillette College testing center (if you live near Gillette), the Sheridan College testing center (if you live near Sheridan), or in a different proctored arrangement (if you live elsewhere). You will find a 'recommended' due date and also a 'final' due date for each homework assignment and test in the course assessment checklist. Other activities will be turned in as described in the directions for each activity, including some activities which will be posted to the discussion board. Once the 'final' due date has passed, you may not turn in that homework or test, unless you contact me with a legitimate reason (such as a death in the family, health emergency, etc.). There is simply too much material to cover if you fall behind, so that is the reason for due dates in this course.

### **Online Course Attendance Statement:**

Online courses require active participation. Your instructor is required to verify attendance for financial aid and other purposes. Attendance in online courses is first determined by login dates until the first engagement activity commences. Common engagement activities include discussion forum posts, live Collaborate sessions, and assignment submissions. Simply logging in periodically will, therefore, not count as attendance in this course.

### Purpose:

MATH 1000 Problem Solving meets the Basic Mathematics requirement for AA, AS or AFA degrees and some AAS degrees and certificate programs. MATH 1000 is not appropriate for students who wish to pursue an advanced degree in the sciences, business, or technical fields. MATH 1000 transfers to the University of Wyoming; students intending to transfer to other institutions should check the requirements of their school of choice.

### **Course Competencies:**

Upon completion of MATH 1000 Problem Solving, the student will:

- 1. solve problems using George Polya's four step procedure.
- 2. solve problems involving number sequences and patterns.
- 3. solve problems with algebra in areas of finance, exponential growth, proportions, and variation.
- 4. solve problems in the areas of geometry and measurement.
- 5. solve problems using various counting methods and probability theory.
- 6. examine data using various descriptive statistical methods.

# **Course Requirements:**

- 1. Participate in the learning activities for each unit (watch video lectures, read handouts, read text excerpts, etc)
- 2. Complete the homework assignments on MyMathLab for each unit.
- 3. Complete the unit tests at the conclusion of each unit.
- 4. Participate in the Collaborate sessions when possible, and watch the recordings when not.
- 5. Participate in the online discussions.

# Minimum Computer Literacy Skill Requirements:

Expectations of participants in this course include a general knowledge of computers, file management, word processing, and the Internet. All students who are new to using Blackboard or are taking their first online class from NWCCD are expected to complete an <u>Orientation to Online</u> <u>Learning</u> prior to beginning this class. Students need to meet the <u>minimum computer literacy</u> <u>expectations</u> as well as the <u>minimum technology requirements</u>. Go to the Distance Learning website for more information (<u>www.sheridan.edu/distance/</u>).

# Minimum Technology Requirements:

Access to Pearson's MyMathLab and the World Wide Web are required. Course content will be delivered in multiple formats, including but not limited to: document, video, and audio media formats. You may need to <u>download and install plug-ins</u> for some content. One prominent format in this course is <u>Adobe Acrobat (PDF)</u>. Please refer to NWCCDs <u>minimum technical requirements</u> for online courses Web page for additional information.

# Code of Conduct:

Students are expected to be respectful of all participants in the discussion boards. There shouldn't be any topic in this course that would result in a flame war (politics or social issues); nevertheless, disagreements should be collegial and brief. E-mail should be used to effectively communicate solution-oriented questions or concerns and not be used to send unintelligible or anger-filled messages. Students are expected to use correct English including spelling and grammar in ALL assignments and correspondence. Texting-style writing is not appropriate for professional communication. Please refer to <u>Series 5075 (Student Conduct and Discipline)</u> of the NWCCD Policies and Procedures manual for additional conduct information.

# Copyright Statement:

This online course may contain copyrighted materials that are used in compliance with U.S. Copyright Law. Under that law, materials may not be saved to your computer, revised, copied, or distributed without permission. They are to be used in support of instructional activity as part of this course only and shall be limited to the duration of the course, unless otherwise specified by the instructor or owner of the material. You may only download or print materials at the direction of your instructor who knows which materials are copyrighted and which are not. Please refer to <u>Series 3013 (NWCCD Copyright Policy)</u> for institutional copyright information.

# Technical Support Resources:

Contact your instructor first. I may need to adjust Blackboard course settings. **The Student HelpZone** provides all NWCCD students, regardless of location, access to technical and information support on days and times that are convenient for our diverse student population. HelpZone staff are able to help students remotely and face-to-face.

# www.sheridan.edu/helpzone

Outside the HelpZone hours, the following support resources are available to you.

Distance Learning Office: http://www.sheridan.edu/site/distance/dis tance-learning-office/

The Distance Learning office assists students with Blackboard and online learning technology issues (e.g., Turnitin, Collaborate, Smarthinking, etc.).

Information Technology Services Office: http://www.sheridan.edu/site/department s/its/resources-information/

Please use the ITS office Help Desk request page for standard college technology issues (e.g., e-mail, MyNWCCD, connectivity, wireless, etc.). Distance Learning Office Hours

Mon - Fri --- 8:00AM - 5:00PM

**ITS Help Desk Hours** 

Mon - Thu -- 8:00AM – 9:00PM Friday – 8:00AM – 5:00PM

### Academic Support Resources:

Sheridan College and Gillette College each have a Student Success Center and Writing Center that provides tutoring and writing center assistance to enrolled students. We have partnered with Smarthinking to provide an additional layer of tutoring and writing center assistance for students. NWCCD has also partnered with Turnitin.com to assist students and faculty with plagiarism prevention. Each college has an on-campus library (Sheridan and Gillette) as well as online access to the library catalog and databases. Most online material may be accessed from any computer with internet access.

### Student Support Resources:

NWCCD has a series of Student Checklist Web pages where you can find <u>Financial Aid</u>, <u>Advising</u> and <u>Assessment</u>, <u>Registration</u>, <u>Business Office</u>, and <u>Bookstore</u> information.

<u>Click here</u> to view Blackboard's accessibility standards statement.

#### Withdrawing from Class:

The official withdrawal period will include the first 80% of the calendar days associated with the semester. The number of days will be prorated for courses shorter than a full semester. Students choosing to officially withdraw within the defined dates will be assigned a grade of "W."

Students may add or drop a class online in WebAdvisor or by completing the Add-Drop form which can be obtained from the Records and Registration Office. The student and advisor must sign and date the form. The completed form is then filed in the Records and Registration Office.

It is the responsibility of the students to withdraw themselves from class or initiate a status of incomplete by the withdraw date stated in the course schedule. If this is not done, the student will receive the grade earned for that class.

#### Academic Honesty:

Students are expected to maintain the highest standards of academic honesty and integrity. Academic honesty means performing all academic work without lying, cheating, deceit, plagiarism, misrepresentation, or unfairly gaining advantage over any other student. Violations of academic honesty are in violation of District standards for student conduct and shall result in disciplinary action. Refer to Series 6005 and 6005.1 in the college Policy and Procedures Handbook for more details.

# Disability Accommodations:

Students with disabilities who believe they may need accommodations in this class must contact the disabilities services coordinator on their campus as soon as possible to request such accommodations.