MED 334- Technology Tools for Mathematics Teachers

Important Note: This syllabus, along with course assignments and due dates, are subject to change. It is the student's responsibility to check Canvas for corrections or updates to the syllabus. Any changes will be clearly noted in a course announcement or through email.

Course Information

Instructor Information

Instructor: Kimberly Sirin Budak

Virtual Class Hours: Thursday 3-3:50 pm **Virtual Office Hours:** *Wednesday 9-10 am*

E-mail: sbudak@uwsp.edu

Course Information

Course Description: Focus on development of familiarity and facility with technologies used in K-12 teaching. Highlighted hardware and software include but not limited to graphing calculators; algebraic system, function plotting, and geometry construction software; and modeling, simulation software.

Credits: 4

Prerequisite: MATH 95 or suitable placement test score

Expected Instructor Response Times

- I will attempt to respond to student emails within 24 hours. If you have not received a reply from me within 24 hours please resend your email.
 - ***If you have a general course question (not confidential or personal in nature), please post it to the Course Q&A Discussion Forum found on the course homepage. I will post answers to all general questions there so that all students can view them. Students are encouraged to answer each other's questions too.
- I will attempt to reply to and assess student discussion posts within 48 hours of discussions closing.
- I will attempt to grade written work within 72 hours, however longer written assignments may take me longer to read and assess.

Textbook & Course Materials

Required Text: No textbook required for this course. Related course materials will be available on Canvas.

Course Learning Outcomes

- Students will be able to use some of the technological tools including but not limited to dynamic geometry programs, office tools (excel, ppt etc.), graphing calculators, interactive white boards, online games/apps.
- Students will be able to create lesson plans with the use of those technological tools mentioned above.
- Students will be able to critique the effective use of technology in the mathematics classrooms.

Topic Outline/Schedule

Important Note: Refer to the Canvas course home page for pertinent information. Activity and assignment details will be explained in detail within each week's corresponding Module. As tasks come due, they will appear in your "to do" list. If you have any questions, please contact your instructor.

- Unit 1 (Week 1 and 2): Dynamic Mathematics Software
- Unit 2 (Week 3 and 4): The Online Landscape
- Unit 3 (Week 5 and 6): Engaging Students through technology
- Unit 4 (Week 7 and 8): Problem Solving with Technology: Excel
- Unit 5 (Week 9 and 10): Graphic Calculators and Desmos
- Unit 6 (Week 11 and 12): Virtual Manipulatives
- Unit 7 (Week 13 and 14): Use of Kahoot, Plickers etc.
- Unit 8 (Week 15): Project Week

Student Expectations

In this course you will be expected to complete the following types of tasks.

- communicate via email
- complete basic internet searches
- download and upload documents to the LMS
- read documents online
- view online videos
- participate in online discussions
- complete quizzes/tests online
- upload documents to Canvas to submit an assignment
- participate in synchronous online discussions

Course Structure

This course will be delivered entirely online through the course management

system Canvas. You will use your UWSP account to login to the course from the <u>Canvas Login Page</u>. If you have not activated your UWSP account, please visit the <u>Manage Your Account</u> page to do so.

Technology

Protecting your Data and Privacy

UW-System approved tools meet security, privacy, and data protection standards. For a list of approved tools, visit this website. https://www.wisconsin.edu/dle/external-application-integration-requests/

Tools not listed on the website linked above may not meet security, privacy, and data protection standards. If you have questions about tools, contact the UWSP IT Service Desk at 715-346-4357.

Here are steps you can take to protect your data and privacy.

- Use different usernames and passwords for each service you use
- Do not use your UWSP username and password for any other services
- Use secure versions of websites whenever possible (HTTPS instead of HTTP)
- Have updated antivirus software installed on your devices

This course requires posting of work on line that is viewable only by your classmates. None of the work submitted online will be shared publicly. Some assignments require account creation for on line programs. The instructor of this course will not share your academic records (grades, student IDs). Confidentiality of student work is imperative, so you should not share the work of your peers publicly without their permission. By participating in these assignments, you are giving consent to sharing of your work with others in this class and you recognize there is a small risk of your work being shared online beyond the purposes of this course. Examples of additional risks include data mining by the company providing the service, selling of your email to third parties, and release of ownership of data shared through the tool. If you elect to not participate in these online assignments due to confidentiality concerns, then an alternate assignment will be offered to you. [UWSP Handbook Chapter 9 Section 5

Course Technology Requirements

- View this website to see <u>minimum recommended computer and internet</u> configurations for Canvas.
- You will also need access to the following tools to participate in this course.
 - o webcam
 - o microphone
 - o printer
 - o a stable internet connection (don't rely on cellular)

UWSP Technology Support

- Visit with a <u>Student Technology Tutor</u>
- Seek assistance from the <a>IT Service Desk (Formerly HELP Desk)

o IT Service Desk Phone: 715-346-4357 (HELP)

o IT Service Desk Email: <u>techhelp@uwsp.edu</u>

Canvas Support



button in the global (left) navigation menu and note the

options that appear:

| Support Options | Explanations |
|---|---|
| Ask Your Instructor a Question Submit a question to your instructor | Use Ask Your Instructor a Question sparingly; technical questions are best reserved for Canvas personnel and help as detailed below. |
| Chat with Canvas Support (Student) Live Chat with Canvas Support 24x7! | Chatting with Canvas Support (Student) will initiate a <i>text chat</i> with Canvas support. Response can be qualified with severity level. |
| Contact Canvas Support via email Canvas support will email a response | Contacting Canvas Support via email will allow you to explain in detail or even upload a screenshot to show your particular difficulty. |
| Contact Canvas Support via phone Find the phone number for your institution | Calling the Canvas number will let Canvas know that you're from UWSP; phone option is available 24/7. |

| Search the Canvas Guides Find answers to common questions | Searching the <u>Canvas guides</u> connects you to documents that are searchable by issue. You may also opt for <u>Canvas video</u> guides. |
|---|---|
| Submit a Feature Idea | If you have an idea for Canvas that might |
| Have an idea to improve Canvas? | make instructions or navigation easier, feel free to offer your thoughts through this Submit a Feature Idea avenue. |

All options are available 24/7; however, if you opt to email your instructor, s/he may not be available immediately.

 Self-train on Canvas through the <u>Self-enrolling/paced Canvas training</u> course

Grading Policies

Graded Course Activities

Click the **Assignments** link in Canvas to access assignment listing, categories and weights as applicable. Click the **Syllabus** link to see a chronological listing of assignments. Click the **Grades** link to see current grades. Overall assignments and accompanying points are listed below:

| Description | Weight of Items |
|----------------------------------|-----------------|
| Discussion Items | 20% |
| Reflections | 20% |
| Activity/Lesson Plan Assignments | 30% |
| Shared Files Completion | 10% |
| Final Project | 20% |
| Total | 100% |

Participation

Students are expected to participate in all online activities as listed on the course calendar.

Complete Assignments

All assignments for this course will be submitted electronically through Canvas unless otherwise instructed. Assignments must be submitted by the given deadline or special permission must be requested from instructor *before the due date*. Extensions will not be given beyond the next assignment except under extreme circumstances.

All discussion assignments must be completed by the assignment due date

and time. Late or missing discussion assignments will affect the student's grade.

Signature Assignment: Students will create a lesson plan on problem solving by using spreadsheet. The assignment will be around a challenging real- life word math problem and the solution will involve the use of spreadsheet. Students will pick the topic based on the intended grade levels for teaching. To pass this course, students have to earn 80 points out of 100 in this assignment.

Late Work Policy

Be sure to pay close attention to deadlines—there will be no make-up assignments or quizzes, or late work accepted without a serious and compelling reason and instructor approval.

Viewing Grades in Canvas

Points you receive for graded activities will be posted to Grades. Click on the Grades link to view your points.

I will update the online grades each time a grading session has been complete—typically 7 days following the completion of an activity. You will see a visual indication of new grades posted on your Canvas home page under the link to this course.

Letter Grade Assignment

Final grades assigned for this course will be based on the percentage of total points earned and are assigned as follows:

| Letter Grade | Percentage |
|--------------|------------|
| Α | 93-100% |
| A- | 90-92% |
| B+ | 87-89% |
| В | 83-86% |
| B- | 80-82% |
| C+ | 77-79% |
| С | 73-76% |
| C- | 70-72% |
| D+ | 67-69% |
| D | 60-66% |
| F | 0-59% |

Course Policies

Netiquette Guidelines

Netiquette is a set of rules for behaving properly online. Your instructor and fellow students wish to foster a safe online learning environment. All opinions and experiences, no matter how different or controversial they may be perceived, must be respected in the tolerant spirit of academic discourse. You are encouraged to comment, question, or critique an idea but you are not to attack an individual. Working as a community of learners, we can build a polite and respectful course community.

The following netiquette tips will enhance the learning experience for everyone in the course:

- Do not dominate any discussion.
- Give other students the opportunity to join in the discussion.
- Do not use offensive language. Present ideas appropriately.
- Be cautious in using Internet language. For example, do not capitalize all letters since this suggests shouting.
- Popular emoticons such as or / can be helpful to convey your tone but do not overdo or overuse them.
- Avoid using vernacular and/or slang language. This could possibly lead to misinterpretation.
- Never make fun of someone's ability to read or write.
- Share tips with other students.
- Keep an "open-mind" and be willing to express even your minority opinion. Minority opinions have to be respected.
- Think and edit before you push the "Send" button.
- Do not hesitate to ask for feedback.
- Using humor is acceptable

Adapted from:

Mintu-Wimsatt, A., Kernek, C., & Lozada, H. R. (2010). *Netiquette: Make it part of your syllabus*. Journal of Online Learning and Teaching, 6(1). Retrieved from http://jolt.merlot.org/vol6no1/mintu-wimsatt 0310.htm

Shea, V. (1994). Netiquette. Albion.com. Retrieved from: http://www.albion.com/netiquette/book/.

Build Rapport

If you find that you have any trouble keeping up with assignments or other aspects of the course, make sure you let your instructor know as early as

possible. As you will find, building rapport and effective relationships are key to becoming an effective professional. Make sure that you are proactive in informing your instructor when difficulties arise during the semester so that we can help you find a solution.

Understand When You May Drop This Course

It is the student's responsibility to understand when they need to consider unenrolling from a course. Refer to the UWSP <u>Academic Calendar</u> for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons includes: (1) documented and significant change in work hours, leaving student unable to attend class, or (2) documented and severe physical/mental illness/injury to the student or student's family.

Incomplete Policy

Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if there is a serious health condition issue or family related issues (death etc.) All incomplete course assignments must be completed within two weeks after final grade submission.

Inform Your Instructor of Any Accommodations Needed

If you have a documented disability and verification from the <u>Disability and Assistive Technology Center</u> and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to Disability Services and meet with a Disability Services counselor to request special accommodation before classes start.

The Disability and Assistive Technology Center is located in 609 Albertson Hall and can be contacted by phone at (715) 346-3365 (Voice) (715) 346-3362 (TDD only) or via email at datctr@uwsp.edu.

Statement of Policy

UW-Stevens Point will modify academic program requirements as necessary to ensure that they do not discriminate against qualified applicants or students with disabilities. The modifications should not affect the substance of educational programs or compromise academic standards; nor should they intrude upon academic freedom. Examinations or other procedures used for evaluating students' academic achievements may be adapted. The results of such evaluation must demonstrate the student's achievement in the academic activity, rather than describe his/her disability.

If modifications are required due to a disability, please inform the instructor and contact the Disability and Assistive Technology Center in 609 ALB, or (715) 346-3365.

Commit to Integrity

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom.

UWSP Academic Honesty Policy & Procedures

Student Academic Disciplinary Procedures

UWSP 14.01 Statement of principles

The board of regents, administrators, faculty, academic staff and students of the university of Wisconsin system believe that academic honesty and integrity are fundamental to the mission of higher education and of the university of Wisconsin system. The university has a responsibility to promote academic honesty and integrity and to develop procedures to deal effectively with instances of academic dishonesty. Students are responsible for the honest completion and representation of their work, for the appropriate citation of sources, and for respect of others' academic endeavors. Students who violate these standards must be confronted and must accept the consequences of their actions.

UWSP 14.03 Academic misconduct subject to disciplinary action.

- (1) Academic misconduct is an act in which a student:
 - (a) Seeks to claim credit for the work or efforts of another without authorization or citation;
 - (b) Uses unauthorized materials or fabricated data in any academic exercise;
 - (c) Forges or falsifies academic documents or records;
 - (d) Intentionally impedes or damages the academic work of others;
 - (e) Engages in conduct aimed at making false representation of a student's academic performance; or
 - (f) Assists other students in any of these acts.
- (2) Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

Religious Beliefs

Relief from any academic requirement due to religious beliefs will be accommodated according to UWSP 22.03, with notification within the first three weeks of class.