ADVANCED OPTICAL NETWORKING
Catalog #10-451-206 & Class #23319

Starts: March 21st, 2024   Ends: May 14th, 2024

INSTRUCTOR INFORMATION & RESPONSIBILITIES

Instructor	Joel Mikulsky
Office	EE103
Telephone	(920) 498-6253
Email	joel.mikulsky@nwtc.edu
Availability	By appointment or per office hours listed in the Learning Management System

As a NWTC instructor, I am expected to:
- Maintain a professional, safe learning environment while adhering to the policies of the college.
- Provide open and frequent communication with learners regarding their progress in this class.
- Reply to communications within 48 business hours.
- Grade assignments and post scores in Canvas regularly.
- Provide feedback to guide learners toward improvement of their coursework.
- Post information about assignments in Canvas Modules and Grade Center.
- (In the event of a college level cancellation) Communicate with learners a detailed plan regarding expectations for responding to the cancellation within 24-hours.

CLASS INFORMATION

Class Schedule & Class Meeting Location: This class meets on the following days/times:

GREAT LAKES ENERGY AND EDUCATION CENTER

(Separate Building North of Main Campus)

ROOM #: EE203

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
	12:30 PM to 3:20 PM		12:30 PM to 3:20 PM			

Class Delivery Mode & How to Participate: This class meets in person in an 8 week format. For a definition of this delivery mode, please see information on the Ways of Learning page. For a detailed explanation of class participation and expectations, please see the Attendance & Participation section.

Course Description: 10-451-206 ADVANCED OPTICAL NETWORKING...covers Microprocessor logic, instruction, and clocked sequential circuits; memory devices; data acquisition, manipulation and transfer circuitry; machine and assembly languages; and microprocessor support devices.

Credits: 2.0

Pre-requisites/Corequisites: None

Textbooks: This class will use Open Educational Resources and text book materials will be presented and provided to the students.

Supplies/Technology:

1. Computer or access to a computer (preferably Windows Operating System)
2. Mobile access to Canvas (iOS or Android compatible) is strongly encouraged for important commuications about the class
3. Access to the internet and NWTC Email
4. Clothing to work in all weather conditions
5. Work boots
6. Headphones / Ear buds

Please reach out to the NWTC Library or Reference the Student Resources if you need to borrow equipment from NWTC such as a laptop and/or internet hotspot. Find out how to Download Office 365 for Free and access Off-Campus Software.

Course Competencies: Upon successful completion of this course, you will be able to:

1. Design Fiber to the "X" (FTTX) networks.
2. Design Dense Wave Division (DWDM) networks
3. Create individual strand mapping and splicing diagrams
4. Carry out project estimating and budgeting
5. Create bidding documents and specifications for a fiber optic network project
6. Recognize the process to successfully manage a fiber optic project

Employability Skills: In addition to specific job-related training, NWTC has identified the following transferrable employability skills reaching beyond the context of a specific course:

1. Communicate Effectively
2. Work Cooperatively and Professionally
3. Think Critically and Creatively
4. Solve Problems Effectively
5. Value Individual Differences and Abilities
6. Demonstrate Personal Accountability
7. Demonstrate Community and Global Accountability

Student Services to Support You:

Being in college is an exciting time to develop skills, further your career path, and build community. We don't want financial challenges to get in your way! Our team is ready to support basic needs such as groceries, housing assistance, transportation assistance, and more. Our goal is to keep you on track with your studies and educational goals. If you are experiencing a financial emergency or an unexpected event in your life, let us help. Support services are available at all NWTC locations. Our main office is located on the Green Bay campus in SC133. We can be reached by phone (920) 498-6258, email supportservices@nwtc.edu or in-person. For more information, please visit us at www.nwtc.edu/student-experience/student-support-services.

Additionally, NWTC provides many services and support networks to assist our students. Descriptions of these services can be found in the NWTC Student Handbook or at www.nwtc.edu/students. We encourage you to learn about the resources available to you, ranging from student involvement and personal counseling to academic, financial aid, or career advising. When you are looking for services, please contact your instructor or academic advisor via Starfish, or by calling (920) 498-5444.

Academic Coaching (Tutoring) at NWTC: Academic Coaching provides an additional layer of support to ensure students achieve their academic goals. Academic Coaching is committed to serving all students as an academic resource to promote student growth and success. Students who use Academic Coaching receive content help, but also gain study skills, organization skills, time management, and confidence. We understand that school can be challenging; let us help you reach your academic goals at **www.nwtc.edu/academiccoaching**

NWTC ALL-COLLEGE POLICIES
These policies are in effect for all classes at NWTC.

This syllabus is a learning contract between you and your instructor. In addition to your syllabus, there are policies and procedures listed in the NWTC Student Handbook that all students must uphold. Please refer to the NWTC Student Handbook to raise your awareness and understanding of the College's expectations. NWTC Student Handbook

- Academic Integrity (includes Plagiarism, cheating and collusion)
- Drop from a Class or Program
- Student Academic Grievance
- **Discrimination and Harassment Prevention**: NWTC is committed to embracing the worth of every individual and promoting a respectful environment. Discrimination and harassment of protected categories in its employment and educational programs is prohibited. For questions or concerns contact, Kelly Schumacher, Disability & Student Care Case Manager at kelly.schumacher@nwtc.edu or (920) 498-6390.

- **Disability Act Statement:** NWTC is committed to creating a learning environment that meets the needs of its diverse student body. NWTC complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. If you have a disability, please call Disability Services at (920) 498-6904 to begin a conversation regarding the support services available to you or to request an official accommodation.
  - Accessibility & Data Privacy

Student Academic Calendar: Visit [Academic Calendar page](#) for important College dates you should add to your personal calendar.

TELECOMMUNICATIONS PROGRAM POLICIES
In addition to the college policies referenced above, the following policies also apply.

Email Communication:

When communicating to your instructor via email, the following requirements must be followed when sending an email:

1. Do not reply to an email from any "Canvas Announcement".
2. Use your NWTC email.
3. Provide a concise direct subject line (i.e., Class, Learning Plan, Homework Assignment)
4. A proper greeting.
5. Proper grammar, correct spelling and only detailed relevant information.
6. A clear closing with your name and Student ID number.

Safety:

Each student is required follow the safety rules throughout the course. Each student is required to have read all safety rules and sign an affidavit stating so. Report all accidents immediately to the instructor. Food and beverages are not allowed in laboratories or in computer labs.

Lab Equipment: We will be working specialized laboratory equipment routinely. Each student is responsible for the equipment that is in their care. Equipment that goes missing or is broken will be charged to the responsible party's NWTC account.

Attendance and Participation:

Most of the program classes have hands-on learning components working in groups using laboratory and surveying equipment. It is required to show up on time to laboratory sessions and participate like workforce requirements. An email must be sent to the instructor, prior to the scheduled meeting time of the class or lab, informing of an absence. Otherwise, laboratories, assignments, quizzes and/or exams cannot be made up and credit will not be given.

Academic Integrity:

It is the student's responsibility to review and understand the academic integrity policy located in your student handbook. Telecommunications does not tolerate plagiarism, cheating or collusion. All alleged cases of academic integrity violations will result in the creation of a NWTC Academic Integrity Incident Report. Depending upon the circumstances and severity of the case, the sanctions indicated in the student handbook may be imposed.

Grade Point Average: All required courses must be completed and you must maintain an overall grade point average of 2.00 (C) to graduate from the Telecommunications Program.

CLASS SPECIFIC POLICIES
In addition to the college policies referenced, the following instructor policies also apply to this course.

Attendance and Participation:

Estimated number of hours required to be successful in the class, (class hours and outside hours for homework, readings, etc.)

Per Week			
Credits	Contact	Outside Effort	Total Effort

2	6.0	2.0	8.0

*The amount of time you spend on reading, completing course assignments and activities will differ. Typically students spend 2.0 hours per week outside of the course studying.

Technology Skills & Assistance: Technology is a large component to your success in this course. You are required to have a basic understanding of computers, copiers and printers. Any specialized technology will be taught as part of this course and available for your use while on the Green Bay Campus. If technology is available to be download on a student's own device, links or details will be provided in Canvas under the software resources tab. It is the responsibility of the student to understand the computer requirements and capability of their own device. The student will be required to troubleshot any issues they have with their own device Technology Help.

Get technical assistance by calling the Student Help Desk at (920) 498-6900 or 1-866-235-5037.

Learn more about the technology skills needed to be successful at NWTC (such as sending email, using software for assignments, submitting online work, and using test monitors) by watching the Technology 101 video series or visiting the Ask a Librarian FAQ site.

Find out how to Download Office 365 for Free and access Off-Campus Software. Learn how to borrow equipment from NWTC.

Appropriate Use of Technology in Class: Mobile phones, iPads, laptops, and other similar devices that distract you, those around you, or the instructor are not allowed to be used in the classroom and lab and shall always be turned off (this includes texting). You may use them during breaks outside of the classroom if needed. If you must have your phone on due to some emergency, please inform the instructor prior to the start of class and take the call outside of classroom to avoid disruption of the class.

Laboratory computers are to only be used for educational purposes and shall not be used for personal gaming or social media.

It is recommended that students maintain professional conduct when using social media. Employers will check social media sites when conducting background checks which can affect employment.

It is important that everyone understands how to use online course tools and etiquette in a way where ALL students feel safe and supported.

Campus Closure Day(s) Procedure: In the event of a campus closure, there are two emergency closure dates built into the end of each 8-week session. Within 24-hours of a college cancellation, Instructor will provide detailed information regarding expectations for students. Virtual lectures and assignments maybe used to supplement in-person learning during these events.

Syllabus Changes: Instructors retain the right to make changes based on the timeline of the class, feedback from learners and/or logistical issues. Students will be informed as soon as a change is made. A current copy of the course syllabus will be maintained by the division office.

Grading Policy: You will earn points by completing assignments, Discussion Boards and Quizzes on time and completely.

1. Assignments
    a. All assignments must be completed by the due dates shown in Canvas
    b. All assignments must be completed per instructions indicated in Canvas
    c. Late assignments will receive the following deductions
        i. 10%-point deduction per 24 hours past due date and time.
2. Labs
    a. All labs must be completed in person.
    b. All labs must be completed per instructions indicated in Canvas.
    c. If group lab is missed due to an excused absences (At the discretion of the instructor) you may make up the lab, but are required to ask assistance of your classmates to assist you.
    d. Any make up labs must be completed within two weeks of an excused absence.
3. Tests
    a. Tests MUST be completed by the posted due date and time in Canvas.
    b. No late attempts will be allowed without prior approved.
4. Employablity Skills
    a. On page two of this document you can review the employability skills that NWTC and the Telecommunications Program have adopted. These skills are required to be assessed by each course.
    b. These skills are essential to you time here at NWTC as well as your future career.
    c. The points associated with employability skills are lost not earned. There will be a maximum deduction of 64 points or two points per course meeting.

Grading Scale:

Percentage	Grade
90% to 100%	A
80% to 89.99%	B
70% to 79.99%	C
65% to 69.99%	D*
Below 64.99%	F

* D is the minimum passing grade for this class.

**C is the minimum passing grade for program degrees, diplomas, and certificate.

See note in program policies.

Course Calendar:

Course Calendar and Modules (Lesson plans) can be found in Canvas.