Sustainability in Thailand

Semester in Chiang Mai: Society and Culture of Thailand
Short Name: Sustainability in Thailand
Credits: 4
Contact hours: 56 total
Lecture Hours: 33
Directed Field Studies: 23 (46 hours at 2:1 ratio)

Course Description

Thailand's rich biodiversity and natural resources are under increasing pressure from deforestation, climate change, industrial agriculture, and urban expansion. This course explores the challenges and solutions related to environmental sustainability in Thailand, with a focus on forest conservation, sustainable agriculture, water management, renewable energy, and eco-tourism.

Students will examine government policies, corporate initiatives, and grassroots environmental movements that aim to balance economic development with ecological resilience. The course will also investigate how Thailand is addressing climate change, waste management, and energy transitions, with case studies on carbon offset programs, plastic waste reduction, and sustainable urban planning.

Field studies include visits to organic farms, sustainable coffee plantations, protected forests, and national parks, as well as discussions with environmental activists, conservationists, policymakers, and local farmers working toward sustainability. This hands-on approach allows students to critically assess Thailand's successes and ongoing challenges in building a more sustainable future.

Course Objectives

The objectives for this course are to:

- Analyze Thailand's most pressing environmental challenges, including climate change, deforestation, water scarcity, and biodiversity loss.
- Examine national and regional conservation policies, including Thailand's commitments to climate action and ASEAN environmental agreements.
- Evaluate sustainable agricultural practices, such as organic farming, agroforestry, and permaculture, and their role in reducing environmental degradation.
- Investigate Thailand's approach to waste management and plastic reduction, including government and private sector initiatives.
- Explore the role of eco-tourism and community-based conservation in supporting both local economies and environmental protection.
- Assess Thailand's renewable energy transition, including the expansion of solar, wind, and hydropower projects.
- Engage with farmers, conservationists, policymakers, and scientists to understand real-world sustainability efforts.
- Critically reflect on Thailand's successes and limitations in achieving environmental sustainability and resilience.

Methodology

The course will integrate course lectures and readings with group discussions and seminars. Experiential field studies will be an important component of the course, both formal and informal. Guest lecturers will be a part of the course to share their experiences and perspective with students. Keeping up with readings, materials presented in class, and assignments is critical for success during this course.

Grading and Assessment

Course Component Details	Total
Participation	**15**
In class participation: This means being an active participant in classes, contributing meaningfully to the discussions, questions, and ongoing learning.	5
Field Studies: Participating in field studies outside of the classroom, both through asking questions in the field, engaging in activities, and being an active and engaged learner during field studies.	10
Writing	**45**
Seminar Notes: An important component of learning to observe and analyze the issues during this course is taking notes in class. Include questions and analysis as you go along.	5
Observation Notes: Keeping an on-going journal of observations outside the classroom. This means writing daily in your journal, even if only for brief or signifiant observations. This is NOT a daily diary, but your field observations, questions, and analysis.	5
Field Study Assignments: Each course will assign work to do during some of the field studies. You need to take notes and answer questions that you are assigned to observe and answer.	15
Essays: For this course essays are longer reflections and analysis. There are four essays during the course. Essays should be 2-3 A4 pages, and cover the following points: • How this issue or topic links to the overall topic of the course. • Why you are interested in this specific issue or topic? • An analysis of a specific issue observed or learned about during that week — describe this and why it is important. • Reference to a reading either from the course readings or outside sources. • Other questions that this issue raises for you to explore further.	20
Independent Field Research Project/Focused Inquiry	**30**
Each student will choose an issue related to the course to study independently. This should be a combination of research, observations, and analysis of a topic that the student is interested in. The **emphasis is primarily on field observations** broadly defined, drawing on both class related field studies as well as independent observations in Thailand on your own time.	
Proposal: The IFRP proposal will be a 1 page written description explaining what you are interested in studying, how data will be gathered, the feasibility of studying this during the course, and any potential challenges you may anticipate running into.	5
Progress update: This part of the IFRP is a short update during the course delivered orally on what the student has discovered about their topic so far, what further questions this raises, any challenges they have faced and how they have overcome them, as well as further information they will be looking for during the second half of the field study.	10
Final Presentation: On the last day of the course each student will give a presentation on their topic, focusing on the initial question, methods, challenges, and the outcome of their focused inquiry. This should be presented with supporting slides. This will be followed by questions and comments from fellow students and instructors. **Rubric for final presentation** 1. Clarity and organization — is the issue clearly explained, linked to the topic and readings of the course, and well organized? 2. Experiential learning/field studies/observations — does the presentation link to specific examples of observations? 3. Interviews — does the presentation reflect discussions, interviews, and talks with local people and community members? 4. Depth — is the issue analyzed and explained well and thoroughly?	15
Final Exam	**10**
Final: The final exam is a series of short answer questions drawn from the entire semester of the course.	10

Seminar Schedule: Tuesday 1-4
Please note: An important part of this course happens outside of seminars, including field studies, extended field studies, and other experiential learning opportunities. Each of these field studies are an integral part of the course, and will include assignments for the course.

Field Studies
An important part of the course are experiential field studies outside of the classroom. Field studies will have assignments based on the topics of each course, and are an important part of the academic focus of the semester. Field studies may be re-scheduled based on community and organizational availability.

Weekly Schedule

Week 1: Introduction to Environmental Sustainability in Thailand: This seminar introduces Thailand's environmental landscape, providing an overview of major sustainability challenges and initiatives. We will explore key concepts of sustainability, conservation, and resource management, as well as the intersection of economic development and environmental policy in Thailand.

- What is sustainability? Definitions, frameworks, and global perspectives
- Overview of Thailand's ecosystems and biodiversity
- Major environmental challenges: Climate change, deforestation, pollution, and resource depletion
- Thailand's sustainability policies and commitments: National and ASEAN-level initiatives

Readings:

Marks, D. (2011). Climate change and Thailand: Impact and response. Contemporary Southeast Asia, 33(2), 229-258. https://muse.jhu.edu/article/448174

Lebel, L., & Garden, P. (2010). Deliberation, negotiation and scale in the governance of water resources in the Mekong region. Environmental Management, 46(1), 60-80. https://link.springer.com/article/10.1007/s00267-010-9510-0

Forsyth, T. (2004). Industrial pollution and social movements in Thailand. In Critical Political Ecology: The Politics of Environmental Science (pp. 137-158). Routledge. https://www.taylorfrancis.com/chapters/edit/10.4324/9780203643030-12

Puppim de Oliveira, J. A. (2008). Governing the environment in Thailand: Essays in honour of Professor Michio Umehara. Institute of Developing Economies. https://www.ide.go.jp/English/Publish/Download/Brc/11.html

Week 2: Deforestation and Forest Conservation in Thailand: Thailand has undergone significant deforestation due to agriculture, urbanization, and illegal logging, leading to biodiversity loss and environmental degradation. This seminar explores the causes and consequences of deforestation, the role of forest conservation policies, and community-based reforestation efforts. Students will critically assess government interventions, indigenous land rights, and sustainable forest management practices.

- Drivers of deforestation: Agriculture, logging, infrastructure, and tourism
- Impact of deforestation on biodiversity, climate, and local communities
- Government policies and forest conservation programs: Thailand's National Parks and Protected Areas
- Community forestry and indigenous land rights: Local solutions to forest degradation

Readings:

Poffenberger, M. (1999). Communities and forest management in Southeast Asia. IUCN. https://portals.iucn.org/library/sites/library/files/documents/1999-017.pdf

Johnson, A., & Forsyth, T. (2002). In the eyes of the state: Negotiating a 'rights-based approach' to forest conservation in Thailand. World Development, 30(9), 1591-1605. https://www.sciencedirect.com/science/article/pii/S0305750X0200065X

Phelps, J., Webb, E. L., & Agrawal, A. (2010). Does REDD+ threaten to recentralize forest governance? Science, 328(5976), 312-313. https://www.science.org/doi/10.1126/science.1187774

Warren, T. (2021). Community forestry in Thailand: Balancing conservation and livelihoods. Environmental Policy and Governance, 31(2), 127-142. https://doi.org/10.1002/eet.1917

Week 3: Sustainable Agriculture Practices in Thailand: Agriculture plays a critical role in Thailand's economy, but industrial farming has led to soil degradation, pesticide overuse, and water pollution. This seminar examines alternative models of agriculture, such as organic farming, agroforestry, and permaculture, that aim to balance food production with environmental sustainability. Students will explore the economic, social, and environmental benefits and challenges of transitioning to sustainable farming practices.

- Industrial agriculture vs. sustainable farming: Environmental and economic trade-offs
- Organic farming, agroforestry, and permaculture: Alternative models for sustainability
- Government policies and farmer-led initiatives: Thailand's support for sustainable agriculture
- The role of agribusiness, exports, and food security in shaping Thai agricultural policies

Readings:

Rigg, J. (2005). Living with transition in Laos: Market integration in Southeast Asia. Routledge. (Chapter 4: Agrarian Change in Thailand and the Mekong Region) https://www.taylorfrancis.com/books/mono/10.4324/9780203006361

Ganjanapan, A. (1998). The politics of conservation and the complexity of local control of forests in the Northern Thai highlands. Mountain Research and Development, 18(1), 71-82. https://bioone.org/journals/mountain-research-and-development/volume-18/issue-1/0276-4741(1998)018%5B0071:TPOCAT%5D2.3.CO;2

Rosset, P. M., & Altieri, M. A. (1997). Agroecology versus input substitution: A fundamental contradiction of sustainable agriculture. Society & Natural Resources, 10(3), 283-295. https://doi.org/10.1080/08941929709381027

Suthipradit, S., & Chinvanno, S. (2020). Climate-smart agriculture in Thailand: Adapting farming systems to climate variability. Journal of Southeast Asian Studies, 51(2), 213-232. https://doi.org/10.1017/S0022463420000244

Week 4: Extended Excursion and Field Study in Mae Taa Organic Farming Community

Week 5: Water Resources and Management in Thailand: Water is a crucial yet increasingly scarce resource in Thailand, with agriculture, urbanization, and climate changeputting significant stress on rivers, reservoirs, and groundwater supplies. This seminar explores water management strategies, the role of hydropower and irrigation systems, and the impact of floods and droughts on Thai communities. We will also examine water governance issues, including conflicts over the Mekong River and the role of local, national, and international stakeholders in shaping Thailand's water policies.

- Thailand's major water sources and hydrological challenges: The Mekong River, Chao Phraya River, reservoirs, and groundwater
- Floods, droughts, and climate change: How Thailand is responding to extreme weather patterns
- Irrigation, hydropower, and water governance: Competing uses of water in agriculture, industry, and energy production
- Water conflicts and transboundary management: Mekong River disputes and ASEAN cooperation

Readings:

Lebel, L., Garden, P., & Imamura, M. (2005). The politics of scale, position, and place in the governance of water resources in the Mekong region. Ecology and Society, 10(2), 18.https://www.ecologyandsociety.org/vol10/iss2/art18/

Sneddon, C., & Fox, C. (2006). Rethinking transboundary waters: A critical hydropolitics of the Mekong basin. Political Geography, 25(2), 181-202. https://doi.org/10.1016/j.polgeo.2005.11.002

Manuta, J. B., & Khrutmuang, S. (2007). Water-related disasters and climate change in Thailand: Community vulnerability and risk reduction. Journal of Environmental Management, 85(4), 927-936. https://doi.org/10.1016/j.jenvman.2006.11.007

Foran, T. (2010). Making hydropower more sustainable? A sustainability measurement approach applied to Thailand and Laos. The Geographical Journal, 176(3), 214-223.https://doi.org/10.1111/j.1475-4959.2010.00355.x

Week 6: Climate Change and Its Impact on Thailand: Climate change is one of the most pressing environmental challenges for Thailand, affecting agriculture, coastal communities, biodiversity, and urban infrastructure. This seminar explores the effects of rising temperatures, changing precipitation patterns, and extreme weather events on Thailand's ecosystems and economy. We will also analyze national and regional policies, adaptation strategies, and Thailand's role in global climate negotiations.

- Thailand's vulnerability to climate change: Rising temperatures, sea level rise, and changing monsoons
- Impact on agriculture, coastal cities, and biodiversity
- Climate adaptation and mitigation strategies: National policies, disaster preparedness, and renewable energy
- Thailand's role in global climate agreements: ASEAN initiatives and COP commitments

Readings:

Marks, D. (2011). Climate change and Thailand: Impact and response. Contemporary Southeast Asia, 33(2), 229-258. https://muse.jhu.edu/article/448174

Fuchs, R., Conran, M., & Louis, E. (2011). Climate change and Asia's coastal urban cities: Can they meet the challenge? Environment and Urbanization Asia, 2(1), 13-28. https://doi.org/10.1177/097542531100200103

Chinvanno, S. (2010). Future climate projection for Thailand and surrounding countries. Southeast Asia START Regional Center Report. http://www.start.or.th/publications/ClimateChange/

Chindapol, K., & Takagi, H. (2021). Sea level rise and climate change adaptation in Thailand: A case study of Bangkok. Journal of Coastal Research, 37(1), 121-133. https://doi.org/10.2112/JCOASTRES-D-20-00033.1

Week 7: Urban Sustainability and Green Cities in Thailand: With rapid urbanization, Thailand's cities face growing challenges related to air pollution, traffic congestion, flooding, and waste management. This seminar examines how Bangkok, Chiang Mai, and other urban centers are implementing green infrastructure, sustainable transportation, and climate resilience initiatives. We will explore policies and projects aimed at creating more sustainable, livable cities, such as public transport expansion, urban greening, and energy-efficient building design.

- Challenges of urbanization in Thailand: Pollution, flooding, congestion, and waste
- Green infrastructure and urban planning: Parks, green roofs, and sustainable building codes
- Sustainable transportation: Public transit, walkability, and electric vehicles
- Climate resilience in cities: How Thai cities are adapting to climate change

Readings:

Marks, D. (2019). Bangkok: Sustainable city or air pollution crisis? Asian Cities and the Environment, 12(2), 115-132. https://doi.org/10.1017/S0022463420000244

Pojani, D., & Stead, D. (2017). Sustainable urban transport in the developing world: Beyond megacities. Transport Policy, 60, 1-9. https://doi.org/10.1016/j.tranpol.2017.08.001

Tingsanchali, T. (2012). Urban flood disaster management in Thailand. Water Resources Management, 26(10), 2905-2918. https://doi.org/10.1007/s11269-012-0067-0

Chen, C., & Lees, C. (2021). Green urbanism in Thailand: A review of sustainable city planning initiatives. Journal of Urban Planning and Development, 147(3), 04021033. https://doi.org/10.1061/(ASCE)UP.1943-5444.0000702

Week 8: Extended Field Study and Excursion to Karen Village on Doi Inthanon

Week 9: Semester Break (no classes)

Week 10: Eco-Tourism and Sustainable Travel in Thailand: Tourism is one of Thailand's largest industries, contributing significantly to the economy but also causing environmental degradation, resource depletion, and cultural disruption. This seminar explores the tensions between mass tourism and sustainability, examining eco-tourism models, national park conservation efforts, and community-based tourism initiatives. Students will assess whether eco-tourism truly mitigates environmental impacts or whether it is a form of "greenwashing."

- Mass tourism vs. eco-tourism: Environmental costs of Thailand's booming tourism industry
- National parks and conservation efforts: Managing visitor impact in Thailand's protected areas
- Community-based tourism: Can tourism benefit both local economies and conservation?
- Sustainability challenges: Over-tourism, carbon footprints, and ethical travel practices

Readings:

Kontogeorgopoulos, N. (2005). Ecotourism and mass tourism in Southern Thailand: Spatial interdependence, structural connections, and staged authenticity. Geographical Journal, 171(3), 200-212. https://doi.org/10.1111/j.1475-4959.2005.00162.x

Cohen, E. (2018). Thai tourism: Hill tribes, islands, and open-ended prostitution. Annals of Tourism Research, 28(4), 977-997. https://doi.org/10.1016/S0160-7383(01)00003-3

Dolezal, C., & Burns, P. (2015). Community-based tourism in Thailand: (Dis)Illusions of authenticity and the necessity for dynamic approaches. Current Issues in Tourism, 18(9), 805-825. https://doi.org/10.1080/13683500.2013.810612

Pongpattananurak, N. (2020). Sustainable tourism management in Thai national parks: Challenges and policy recommendations. Tourism Geographies, 22(1), 65-86. https://doi.org/10.1080/14616688.2019.1571096

Week 11: Biodiversity Conservation and Wildlife Protection in Thailand: Thailand is home to rich biodiversity, including endangered species such as Asian elephants, tigers, and gibbons. However, deforestation, poaching, habitat destruction, and illegal wildlife trade threaten the survival of many species. This seminar explores Thailand's conservation efforts, including protected areas, wildlife sanctuaries, anti-poaching policies, and the role of NGOs. Students will critically evaluate successes and challenges in biodiversity protection and discuss the ethical issues of wildlife tourism.

- Thailand's biodiversity hotspots: National parks, wildlife corridors, and marine reserves
- Threats to wildlife: Deforestation, habitat loss, and illegal wildlife trade
- Conservation policies and enforcement: Protected areas, anti-poaching laws, and international agreements
- Ethical wildlife tourism: Elephant sanctuaries, tiger tourism, and ecotourism's role in conservation

Readings:

Gilhooly, D. J. (2020). The role of conservation NGOs in protecting biodiversity in Thailand. Conservation & Society, 18(4), 421-437. https://doi.org/10.4103/cs.cs_36_20

Laohachaiboon, S. (2019). Elephant tourism in Thailand: A review of ethical considerations and sustainable practices. Journal of Sustainable Tourism, 27(9), 1324-1342. https://doi.org/10.1080/09669582.2019.1621880

Steinmetz, R., Chutipong, W., & Seuaturien, N. (2006). Collaborating to conserve large mammals in Southeast Asia. Biological Conservation, 130(3), 400-411. https://doi.org/10.1016/j.biocon.2006.01.009

Nijman, V. (2010). An overview of international wildlife trade from Southeast Asia. Biodiversity and Conservation, 19(4), 1101-1114. https://doi.org/10.1007/s10531-009-9758-4

Week 12: Extended Field Study and Excursion: Coastal Community

Week 13: Thailand's Renewable Energy Transition: As Thailand faces increasing energy demands and environmental challenges, the country is making strides toward renewable energy adoption. This seminar examines Thailand's energy mix, its shift from fossil fuels to solar, wind, and hydro power, and the role of government policies, international investments, and local initiatives in shaping its renewable energy future. Students will evaluate the challenges of transitioning to clean energy, including grid reliability, economic feasibility, and political interests.

- Thailand's energy landscape: Current reliance on fossil fuels and efforts to reduce carbon emissions
- Renewable energy sources: Solar, wind, hydropower, and biofuels in Thailand's energy transition
- Government policies and private sector initiatives: National Energy Plan and green investment incentives
- Challenges and controversies: Energy security, land-use conflicts, and the social impacts of renewable energy projects

Readings:

Kumar, S., Shrestha, R. M., & Abdul Salam, P. (2013). A review of Thailand's energy policy and renewable energy development. Renewable and Sustainable Energy Reviews, 21, 365-375. https://doi.org/10.1016/j.rser.2012.12.046

Chaianong, A., & Pharino, C. (2015). Outlook and challenges of renewable energy development in Thailand. Renewable Energy, 83, 163-174. https://doi.org/10.1016/j.renene.2015.04.040

Pongthanaisawan, J., & Sorapipatana, C. (2013). Greenhouse gas emissions from Thailand's electricity sector: Current status and mitigation options. Energy Policy, 61, 872-882. https://doi.org/10.1016/j.enpol.2013.06.065

Sirasoontorn, P., & Sahakij, P. (2020). The future of energy transitions in Thailand: Policies and challenges. Energy Strategy Reviews, 30, 100512. https://doi.org/10.1016/j.esr.2020.100512

Week 14: Community-Based Conservation and Local Sustainability Initiatives: Many of Thailand's most effective conservation efforts are led by local communities who integrate traditional knowledge, grassroots activism, and sustainable resource management. This seminar explores how community-led conservation initiatives contribute to forest preservation, marine protection, and sustainable livelihoods. Students will assess the role of NGOs, indigenous groups, and local cooperatives in promoting environmental stewardship and discuss how community-based approaches compare to government-led conservation policies.

- Community-led conservation models: How local groups manage forests, fisheries, and water resources
- Indigenous knowledge and sustainability: Traditional ecological management and its relevance today
- Challenges and opportunities: Land rights, government partnerships, and funding for local initiatives
- Case studies: Successful community-led conservation projects in Thailand

Readings:

Ruttanadakul, N., & Kangwansaichol, K. (2017). Community forestry in Thailand: Challenges and success stories. Journal of Environmental Policy & Planning, 19(2), 210-228. https://doi.org/10.1080/1523908X.2016.1264659

Pretty, J., & Smith, D. (2004). Social capital in biodiversity conservation and management. Conservation Biology, 18(3), 631-638. https://doi.org/10.1111/j.1523-1739.2004.00126.x

Chotchaiwong, R., & Maekaeo, S. (2018). The role of indigenous knowledge in forest conservation in Northern Thailand. Ecological Economics, 148, 95-104. https://doi.org/10.1016/j.ecolecon.2018.02.017

Ganjanapan, A. (2016). The politics of participatory conservation in Thailand: A case study of community forest management. World Development, 78, 305-317. https://doi.org/10.1016/j.worlddev.2015.10.022

Week 15: The Future of Sustainability in Thailand: As Thailand continues to develop economically and urbanize rapidly, the future of environmental sustainability remains uncertain. This seminar examines emerging trends, policy shifts, and technological innovations that may shape Thailand's environmental future. We will discuss Thailand's role in ASEAN's sustainability agenda, the country's ability to meet global climate targets, and the challenges of balancing economic growth with ecological resilience.

- Thailand's long-term sustainability goals: Net-zero targets, carbon reduction strategies, and biodiversity conservation
- Technology and innovation in sustainability: Smart cities, green infrastructure, and clean energy breakthroughs
- The role of youth activism and civil society in shaping environmental policy
- Thailand's global role: ASEAN partnerships, international agreements, and regional cooperation

Readings:

Marks, D. (2021). The politics of sustainability transitions in Thailand: Renewable energy, green policies, and economic challenges. Energy Research & Social Science, 72, 101876. https://doi.org/10.1016/j.erss.2021.101876

Kumar, R., & Shrestha, S. (2020). Thailand's commitment to carbon neutrality: Policies, progress, and barriers. Journal of Climate Policy, 20(3), 312-328. https://doi.org/10.1080/14693062.2020.1716423

ASEAN Centre for Energy. (2022). Thailand's energy transition: An ASEAN perspective. ASEAN Energy Reports, 7(1), 1-20. https://www.aseanenergy.org/publications/thailand-energy-transition/

Foran, T., & Lebel, L. (2018). Environmental governance in Thailand: Prospects for sustainability and resilience. Environmental Policy & Governance, 28(4), 251-265. https://doi.org/10.1002/eet.1814

Week 16: Final Classes and Wrap-Up
Final Exam and Presentations

Attendance Policy
Students are expected to be on time and attend all classes. If you are ill or otherwise need to miss a class, please inform your instructor or teaching assistant.

Academic Integrity
Academic integrity is essential to a positive teaching and learning environment. All students enrolled in ISDSI courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own can result in disciplinary action.

Scholastic Dishonesty
Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering forging, or misusing an academic record; or fabricating or falsifying data, research procedures, or data analysis. Within this course, a student responsible for scholastic dishonesty can be assigned a penalty up to and including an "F" or "N" for the course. If you have any questions regarding the expectations for a specific assignment or exam, ask.

Grading Standards

Letter grade	Score or percentage	Description
A	93–100	Achievement that is outstanding relative to the level necessary to meet course requirements.
A-	90–92	Achievement that is significantly above the level necessary to meet course requirements.
B+	87–89	Achievement that is significantly above the level necessary to meet course requirements.
B	83–86	Achievement that is significantly above the level necessary to meet course requirements.
B-	80–82	Achievement that meets the course requirements in every respect.
C+	77–79	Achievement that meets the course requirements in every respect.
C	73–76	Achievement that meets the course requirements in every respect.
C-	70-72	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
D+	67-69	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
D	60-66	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
F	0-59	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an Incomplete.